



U.S. Department of Transportation
Federal Highway Administration

Notice of Funding Opportunity Number 693JJ320NF00003

“Work Zone Data Exchange Demonstration”

Issue Date: June 16, 2020

Application Due Date: August 3, 2020

TABLE OF CONTENTS

Section	Title	Page
N/A	SUMMARY INFORMATION	3
N/A	WEBINAR DETAILS	4
A	PROGRAM DESCRIPTION	5
B	FEDERAL AWARD INFORMATION	10
C	ELIGIBILITY INFORMATION	11
D	APPLICATION AND SUBMISSION INFORMATION	12
E	APPLICATION REVIEW INFORMATION	23
F	FEDERAL AWARD ADMINISTRATION INFORMATION	26
G	FEDERAL AWARDED AGENCY CONTACTS	32

The U.S. Department of Transportation is using www.grants.gov for issuance of this Notice of Funding Opportunity (NOFO) and for receipt of all applications. Applicants must register and use the system to submit applications electronically. Applicants are encouraged to register in advance of the submission deadline and to register to receive notifications of updates/amendments to this notice. Approval of user registrations for the site may take multiple weeks. It is the Applicant's responsibility to monitor for any updates to this notice.

SUMMARY INFORMATION

Funding Opportunity Summary:	Up to \$2,400,000 in Federal funding to provide grants to eligible infrastructure owners and operators for implementation of an open and consistent work zone data feed.
Federal Agency Name:	U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA) 1200 New Jersey Avenue, SE Mail Drop: E62-204 Washington, DC 20590 Attn: Ryan.Buck@dot.gov
Funding Opportunity Title:	Work Zone Data Exchange Demonstration
Announcement Type:	This is the initial announcement of this funding opportunity. This is not a follow-on notice.
Funding Opportunity Number:	693JJ320NF00003
Type of Award:	Multiple Grants
CFDA Number:	20.200 Highway Research & Development
Application Due Date:	August 3, 2020 at 11:59 PM Eastern Time through www.Grants.gov
Questions:	Please direct all questions to both of the following contacts: Todd.Peterson@dot.gov Ryan.Buck@dot.gov

Funding Opportunity Informational Webinar

The Federal Highway Administration (FHWA) will host a virtual Informational Session regarding this funding opportunity. This session will focus on specific topics to help potential applicants gather additional information and ask specific questions.

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

SESSION: Virtual Webcast: Background and Application Information for the Work Zone Data Exchange Demonstration

DATE: Thursday June 25, 2020

TIME: 1:00PM to 2:00PM Eastern Time

INFORMATION AND REGISTRATION: To Be Provided

SECTION A – PROGRAM DESCRIPTION

1. STATEMENT OF PURPOSE

The purpose of this research program is to increase the safety of the traveling public through the production of consistent public work zone data feeds across jurisdictions. The program provides one-time funding for public roadway operators to make unified work zone data feeds available for use by third parties and collaborate on specification development.

2. LEGISLATIVE AUTHORITY

Statutory authority supporting the WZDx Project is found in the Intelligent Transportation Systems Research Program in 23 United States Code (U.S.C.) § 516(a), which authorizes the Secretary of Transportation to “...carry out a comprehensive program of intelligent transportation system research and development, and operations tests of intelligent vehicles, intelligent infrastructure systems, and other similar activities that are necessary to carry out this chapter [23 U.S.C. Chapter 5].”

The authority to enter into a grant for this effort is found under 23 U.S.C. § 502 - Surface Transportation Research, Development, and Technology, paragraph (b)(3) which states:

“(3) cooperation, grants, and contracts. — The Secretary may carry out research, development, and technology transfer activities related to transportation—

- (A)** independently;
- (B)** in cooperation with other Federal departments, agencies, and instrumentalities and Federal laboratories; or
- (C)** by making grants to or entering into contracts and cooperative agreements with one or more of the following: the National Academy of Sciences, the American Association of State Highway and Transportation Officials, any Federal laboratory, Federal Agency, State agency, authority, association, institution, for-profit or nonprofit corporation, organization, foreign country, or any other person.”

3. BACKGROUND

Up-to-date information about dynamic conditions occurring on roads – such as construction events – can help automated driving systems (ADS) and human drivers navigate safely and efficiently while improving the safety of roadway workers. Many infrastructure owners and operators (IOOs) maintain data on work zone activity.

However, a lack of common data standards and convening mechanisms makes it difficult and costly for third parties – including original equipment manufacturers (OEMs) and navigation applications – to access and use these data sets across various jurisdictions.

Inspired by the General Transit Feed Specification (GTFS), in March 2018, DOT jumpstarted the voluntary development of a basic common core WZDx specification in collaboration with data producers and users. The WZDx builds on existing DOT¹² and third-party efforts to improve the management, availability, and use of work zone data to enable the safe integration of automated vehicles in the future and to improve road safety today. Version 2 of the WZDx specification³ is now available for IOOs at different levels of government to stand up data feeds. The Work Zone Data Working Group (WZDWG), established under the Federal Geographic Data Committee (FGDC) Transportation Subcommittee,⁴ will continue to convene and support data producers and users in collaboratively refining and extending the specification, with anticipated incremental updates approximately every 6 months. Participation in the WZDWG is open to all.

4. VISION AND GOALS

The purpose of this research program is to increase the safety of the traveling public through the production of consistent public work zone data feeds across jurisdictions. The program provides funding for public roadway operators to make unified work zone data feeds available for use by third parties and collaborate on specification development.

¹ The FHWA's Work Zone Data Initiative (WZDI) seeks to develop a recommended practice for managing work zone event data (WZED) throughout the project-delivery lifecycle and across the full spectrum of transportation management stakeholders, and to create a consistent language for doing so through the development of a data dictionary and supporting implementation documents. The WZDI promotes a stakeholder- and systems-driven perspective for WZED that allows for a better understanding of user needs from the practitioners' perspective and ultimately, a better approach to collecting and managing WZED at the local level to serve the collective benefit of work zone management stakeholders at the national level. The WZED data dictionary serves as a backlog of data elements to add to the WZDx specification over time. The WZDI stakeholder community includes construction and maintenance contractors, utilities, government agencies, academia, industry, and the private sector, among others who stand to benefit from broad adoption of the WZDx specification to inform planning, real-time operations, and performance measurement.

² The need for work zone data was featured in DOT's *Preparing for the Future of Transportation: Automated Vehicles 3.0 (AV 3.0)*, released in October 2018.

³ <https://github.com/usdot-jpo-ode/jpo-wzdx>

⁴ <https://communities.geoplatform.gov/ngda-transportation/work-zone-data-working-group/>

Agencies implementing public work zone data feeds face many potential technical and institutional barriers. Awardees under this research program will receive funds to address specific barriers that have to-date limited implementation of consistent work zone data feeds.

Data users (e.g., OEMs and map developers) need access to a certain number of data feeds to justify investment in use of WZDx data and participation in specification development. Making more WZDx data available – the goal of this research program – will lower barriers to private sector engagement, demonstrate the value of WZDx data, and help IOOs prioritize further investment in work zone activity data management and sharing.

The DOT also aims to support stakeholder participation in development of the WZDx specification and associated tools to make implementation easier for future deployers. Awardees will receive funds to participate in technical assistance, peer exchange, and specification development activities over the period of performance. Awardees will be expected to keep their data feeds updated to conform to the current version of the specification.

The DOT also recognizes the benefits of increased participation in the WZDx specification toward meeting objectives for improving transportation operations management outside of traditional “hot spots” and into rural areas. Attention to disproportionately high fatality rates on our rural transportation infrastructure is of critical interest to DOT, as rural transportation networks face unique challenges in safety, infrastructure condition, and passenger and freight usage of work zone activity. Consistent with the ROUTES Initiative,⁵ the Department encourages applicants to include considerations for the unique challenges faced by rural areas in addition to the other objectives of this program.

Ultimately, DOT’s goal for this research program is to get more work zone event data into vehicles -- primarily via consumer and high definition maps -- to increase worker safety while helping ADS and human drivers navigate safely and efficiently. Complementary programs within DOT offer technical assistance to help roadway operators improve their overall work zone activity management practices for a broader range of use cases.

5. WORK AREAS

Project Category

Awardees under this research program will receive funds to address specific barriers that have to-date limited implementation of WZDx-compliant data feeds. In order of priority, DOT intends to fund projects that will result in:

⁵ <https://www.transportation.gov/rural>

- Publication of a new WZDx-compliant data feed **(Category A)**
- Increased jurisdiction/system coverage of an existing WZDx-compliant data feed **(Category B)**
- Addition of optional field(s) to an existing WZDx-compliant data feed **(Category C)**

Applicants must specify one project category in their applications. Applicants may submit multiple applications to address multiple project categories; DOT will consider applications consistent with the priorities indicated above.

Challenge Area

The IOOs (data producers) participating in WZDx development identified several potential technical and institutional barriers to implementing data feeds compliant with the specification. These challenges span the data lifecycle and include:

- The IOO and/or the entities performing work on their roadways do not produce one or more data elements in the specification, do not produce them at a sufficient level of quality or granularity, and/or do not produce work zone data on all roadways within or across local jurisdictions; **(Challenge Area 1)**
- The IOO's data generation and acquisition processes (e.g., permitting systems, lane closure management systems) do not exist or rely on manual steps which delay data publication and/or reduce data quality; **(Challenge Area 2)**
- The IOO's backend data system architecture makes it difficult and/or expensive to share data in different formats for different uses, both within and across an organization. **(Challenge Area 3)**

Applicants must identify one or more challenges they propose to address in their projects and the associated challenge area(s). Applicants may propose a challenge not explicitly described in this NOFO; DOT will consider these on a case-by-case basis.

6. MILESTONES/DELIVERABLES

FHWA anticipates the following schedule for each Category under this requirement:

Category A

Milestone/Deliverable	Timing
Final work plan	Within 1 month of award
Publication of WZDx-compliant feed	Within 12 months of award

Category B

Milestone/Deliverable	Timing
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Final work plan	Within 1 month of award
Increased system coverage of an existing WZDx-compliant data feed	Within 12 months of award

Category C

Milestone/Deliverable	Timing
Final work plan	Within 1 month of award
Addition of optional field(s) to an existing WZDx-compliant data feed	Within 12 months of award

SECTION B – FEDERAL AWARD INFORMATION

1. FUNDING AND NUMBER OF AWARDS

This notice announces the availability of up to \$2.4 million in funding for eligible projects, which is authorized by 23 U.S.C § 516(a). The ITS JPO expects to make up to 12 awards of up to \$200,000 each as a result of this NOFO. The ITS JPO may award additional funds, if available.

2. TYPE OF AWARD

The award type will be cost-reimbursement grants.

3. PERIOD OF PERFORMANCE

The estimated period of performance for grants under this NOFO will be 14 months.

4. DEGREE OF FEDERAL INVOLVEMENT

The anticipated Federal involvement may include: performance monitoring, technical guidance, and participation in status meetings, workshops, and technical group discussions.

SECTION C – ELIGIBILITY INFORMATION

1. ELIGIBLE APPLICANTS

Applicants **MUST** meet the following eligibility criteria to be considered for award. Applicants who do not meet the eligibility criteria should not respond to this NOFO.

Eligible Applicants must be one of the following types of organizations:

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), or a multi-jurisdictional group* thereof applying through a single lead Applicant.

Private companies and academic institutions are **NOT** eligible Applicants. However, private companies and academic institutions may be sub-recipients or subcontractors to eligible applicants.

*Multi-jurisdictional group means a combination of eligible Applicants comprised of at least two members, each of whom is an eligible Applicant under the terms of this paragraph. One Applicant must be identified as the lead entity to serve as prime awardee in the event an award is made.

2. COST SHARING OR MATCHING

Cost sharing or matching is required, with the maximum Federal share being 80 percent; hence, this NOFO requires a minimum non-Federal cost share of 20 percent. Cost sharing or matching means the portion of project costs not paid by Federal funds. For a more complete definition, please see the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 Code of Federal Regulations (CFR) Part 200, including section 200.306 on Cost Sharing or matching.

SECTION D – APPLICATION AND SUBMISSION INFORMATION

1. ADDRESS TO REQUEST APPLICATION PAGE

All required standard forms for this opportunity can be obtained through Grants.gov at <http://www.grants.gov/web/grants/forms/sf-424-family.html>.

Should applicants have any difficulties in accessing any standard forms and require paper copies, please contact Ryan Buck by either of the means below:

Ryan Buck
202-366-4229
Ryan.Buck@dot.gov

2. CONTENT AND FORM OF APPLICATION SUBMISSION

Form of Application Submission

- a) Applications should be submitted in PDF format.
- b) Applications are limited to 12 total pages.
- c) Font size must be no less than 12 pt. and margins a minimum of 1 in. on all sides.
- d) Must include page numbers.

Note: Applicants may provide résumés in the “Management Approach, Staffing, and Capabilities” section of the application. Résumés will not count against the page limit. Applicants shall provide letters of commitment in the “Budget Detail” section of the application. Letters of Commitment will not count against the page limit.

For the submitted application package, FHWA suggests that pictures, graphics, and other large files be reduced in number and quality to keep the size of the files of the application manageable and in line with the Grants.gov suggested maximum size of 200 megabytes for the entire grant application package.

The FHWA recommends that applicants use a file naming format of:

Applicant_organization-2020-WZDx-fileID (e.g., Narrative & Technical Approach, Budget Detail) where “Applicant_organization” reflects the applicant’s legal name, abbreviated as appropriate. If an applicant organization is submitting multiple applications, project names or identifiers may be added to the workspace title in parentheses after the applicant organization. For example, a workspace in [Grants.gov](https://www.grants.gov) may be titled “Applicant_organization(Project 1)-2020-WZDx.” If necessary, the workspace title can be edited per the instructions on [Grants.gov](https://www.grants.gov).

Content of Application Submission

Applications should include the following sections:

a) Narrative and Technical Approach

Provide a narrative, including:

- An executive summary;
- The Applicant's current capabilities and process for generating and disseminating data on planned and active work zones, including any collection, storage, use, and dissemination of data;
- The Applicant's vision and goals for the WZDx during and after completion of award activities;
- How the funding from this grant would benefit the Applicant's work zone management and safety, including potential metrics;
- Current and planned ADS activities in the Applicant's jurisdiction and approaches the Applicant is taking to prepare for ADS integration; and
- Technical approach(es) to meeting the goals of the program.
- Applicants should also state whether the project is located in a qualified opportunity zone designated pursuant to 26 U.S.C. § 1400Z-1.

b) Management Approach, Staffing, and Capabilities

Describe your program/project management structure or organization that will implement and oversee the award, describe your staffing approach and key personnel, and describe your team's capabilities. Staff résumés may be included and do not count towards the page limit.

c) Work Plan

Describe the work to be performed under this grant, broken down into the three Work Areas in Section A.5, and how this work to be performed will meet the research program's goals and accomplish the deliverables in Section A.6.

d) Budget Detail

Budget Detail, Section I - Application Standard Forms (SF)

Section I of the budget detail portion of the application must include the Standard Form 424 (Application for Federal Assistance), Standard Form 424A (Budget Information for Non-Construction Programs), and the Grants.gov Lobbying Form. Standard Form 424B (Assurances for Non-Construction Programs) is required if the applicant does not have an updated SAM.gov Registration as of 02/01/2019. The SF are available online at <http://www.grants.gov/web/grants/forms/sf-424-family.html>.

On the SF-424, the information in block 8a (Applicant's "Legal Name") must be the same as entered for registration in www.SAM.gov and for the Applicant's Data Universal Numbering System (DUNS) number. The title for an applicant's workspace on Grants.gov is limited to 240 characters and may be different than the DUNS name.

For applications under this NOFO, the breakdown of the applicable sections of standard form 424A is:

- **Section A:** Since this is an initial application, only columns (a) through (d) and (g) need to be completed. The applicant should enter the proposed project as one program or function; however, as an option, the applicant may subdivide this entry into partial programs (e.g., a Phase I and Phase II).
- **Section B** is a summary of the entire project budget.
- **Section C** is the source of the non-Federal matching share.
- **Section D** is the forecasted funding needs for year one (1).

Budget Detail, Section II - Summary Budget Narrative

The Applicant shall provide a summary budget narrative that describes all of the planned project costs (i.e., direct labor, travel, equipment, supplies, contractual, & other) and how these planned costs are connected to the project scope. The summary budget narrative must be sufficiently clear, concise, and detailed to describe how funds will be spent under the project. The applicant shall also provide a summary budget table that provides estimated costs across project components or tasks, and across all years of the project. The summary budget should represent the total cost of the project, inclusive of both the Federal share and the required matching non-Federal cost share. An example of a summary level budget table is provided below.

The detailed budget must comply with 2 CFR Part 200 and include each of the following items/sub-items:

1. Tables and supporting information clearly delineating and supporting all estimated costs: with columns or rows for Federal Share, Cost Share and Total Costs (in summary form) as follows:
 - a. Labor Rates - Proposed direct labor categories to include labor categories, hours, labor rates, and escalation.

- b. Indirect Rates - As applicable, provide proposed indirect rates for all years. Identify all the various specific indirect rates including what they are (pool and base), and what they are based on (e.g., labor overhead based on direct labor dollars) and how they are applied/calculated. Provide dollar values as well as percentages. Please also provide any audit information to support these rates (for example, a copy of the signed U.S. Department of Health of Human Services rate agreement).

Note: Per 2 CFR 200.414(f), Indirect (F&A) Costs, an Applicant may elect to propose a de minimis indirect rate of 10 percent of modified total direct costs.

- c. Other Direct Costs - Applicants must provide a breakout and justification of Other Direct Costs by Category (travel, equipment, etc.).
- d. Subcontractors/Consultants - Provide the following minimum information as applicable:
- i. Name and address of the subcontractor/consultant.
 - ii. Description of the portion of work to be conducted by the subcontractor/consultant.
 - iii. Cost details for that portion of work.
 - iv. Applicant's cost/price analysis of each proposed subcontractor/consultant showing the Applicant's determination that the proposed subcontractor/consultant costs and pricing is fair and reasonable; and
 - v. Letter of commitment from each subcontractor/consultant.
- e. Detail and support for cost share as part of overall project budget.
- f. Clearly delineate Non-Federal cost share versus Federal share.

In addition to the annual budget tables described above, provide the following two summary level budget tables revised as relevant to the proposed project:

Table 2. Example of Summary Budget Figures

	Total Costs
Description of Project Component or Milestone	
Description of Project Component or Milestone	
Description of Project Component or Milestone	
Description of Project Component or Milestone	
Total Federal Share =	
Total Non-Federal Share =	

Budget Detail, Section III - Cost Share Information

The Applicant should show evidence that funding has been identified for the project that will cover the 20 percent non-Federal cost share requirement. The Applicant should include letters of commitment from organizations that will provide a portion of the cost share, and identify the source of those funds (e.g., general treasury funds, revolving loan fund, capital budget, in-kind labor, in-kind equipment, etc.).

Note: The maximum amount of funding requested from each applicant cannot exceed \$200,000 per award, nor exceed 80 percent of the total cost of the activities proposed to be funded.

e) Organizational Information

In addition to the forms and budget information noted above, provide the following organizational information in a pdf format:

- a. Identify any exceptions to the anticipated award terms and conditions as contained in Section F, Federal Award Administration Information. Identify any preexisting intellectual property that you anticipate using during award performance, and your position on its data rights during and after the award period of performance.
- b. The use of a Dun and Bradstreet (D&B) DUNS number is required on all applications for Federal grants or cooperative agreements. Please provide your organization's DUNS number in your budget application.
- c. A statement to indicate whether your organization has previously completed an A-133 Single Audit and, if so, the date that the last A-133 Single Audit was completed.
- d. A statement regarding Conflicts of Interest. The Applicant must disclose in writing any actual or potential personal or organizational conflict of interest in its application that describes in a concise manner all past, present or planned organizational, contractual or other interest(s), which may affect the Applicants' ability to perform the proposed project in an impartial and objective manner. Actual or potential conflicts of interest may include but are not limited to any past, present or planned contractual, financial, or other relationships, obligations, commitments, or responsibilities, which may bias the Applicant or affect the Applicant's ability to perform the agreement in an impartial and objective manner. The Agreement Officer (AO) will review the statement(s) and may require additional relevant information from the Applicant. All such information, and any other relevant information known to DOT, will be used to determine whether an award to the Applicant may create an actual or potential conflict of interest. If any such conflict of interest is

- found to exist, the AO may (a) disqualify the Applicant, or (b) determine that it is otherwise in the best interest of the United States to contract with the Applicant and include appropriate provisions to mitigate or avoid such conflict in the agreement pursuant to 2 CFR 200.112.
- e. A statement to indicate whether a Federal or State organization has audited or reviewed the Applicant's accounting system, purchasing system, and/or property control system. If such systems have been reviewed, provide summary information of the audit/review results to include as applicable summary letter or agreement, date of audit/review, Federal or State point of contact for such review.
 - f. Terminated Contracts - List any contract/agreement that was terminated for convenience of the Government within the past 3 years, and any contract/agreement that was terminated for default within the past 5 years. Briefly explain the circumstances in each instance.
 - g. The Applicant is directed to review Title 2 CFR §170 (http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title02/2cfr170_main_02.tpl) dated September 14, 2010, and Appendix A thereto, and acknowledge in its application that it understands the requirement, has the necessary processes and systems in place, and is prepared to fully comply with the reporting described in the term if it receives funding resulting from this Notice. The text of Appendix A will be incorporated in the award document as a General Term and Condition as referenced under this Notice's Section F, Federal Award Administration Information.
 - h. Disclose any violations of Federal criminal law involving fraud, bribery, or gratuity violations. Failure to make required disclosures can result in any of the remedies described in 2 CFR 200.338 entitled Remedies for Noncompliance, including suspension or debarment. (See also 2 CFR Part 180 and 31 U.S.C. 3321).

f) Additional Submission Information

How to Register to Apply Through Grants.gov

- a. *Instructions:* Read the instructions below about registering to apply for USDOT funds. Applicants should read the registration instructions carefully and prepare the information requested before beginning the registration process. Reviewing and assembling the required information before beginning the registration process will alleviate last-minute searches for required information.

The registration process can take up to 4 weeks to complete. Therefore, registration should be done in sufficient time to ensure it does not impact your ability to meet required application submission deadlines.

For applicant registration instructions, refer to:

<https://www.grants.gov/web/grants/applicants/registration.html>.

Organization applicants can find complete instructions here:

<https://www.grants.gov/web/grants/applicants/organization-registration.html>.

1. *Obtain a DUNS Number:* All entities applying for funding, including renewal funding, must have a DUNS number from D&B. Applicants must enter the DUNS number in the data entry field labeled "Organizational DUNS" on the SF-424 form.

For more detailed instructions for obtaining a DUNS number, refer to:

<https://www.grants.gov/web/grants/applicants/organization-registration/step-1-obtain-duns-number.html>.

2. *Register with the System for Award Management (SAM):* In addition to having a DUNS number, organizations applying online through Grants.gov must register with SAM. All organizations must register with SAM in order to apply online. Failure to register with SAM will prevent your organization from applying through Grants.gov.

For more detailed instructions for registering with SAM, refer to:

<https://www.grants.gov/web/grants/applicants/organization-registration/step-2-register-with-sam.html>.

3. *Create a Grants.gov Account:* The next step in the registration process is to create an account with Grants.gov. Applicants must know their organization's DUNS number to complete this process. Completing this process automatically triggers an email request for applicant roles to the organization's E-Business Point of Contact (EBiz POC) for review. The EBiz POC is a representative from your organization who is the contact listed for SAM. To apply for grants on behalf of your organization, you will need the Authorized Organizational Representative (AOR) role.

For more detailed instructions about creating a profile on Grants.gov, refer to:

<https://www.grants.gov/web/grants/applicants/registration.html>.

4. *Authorize Grants.gov Roles:* After creating an account on Grants.gov, the EBiz POC receives an email notifying them of your registration and request for roles. The EBiz POC will then log in to Grants.gov and authorize the appropriate roles, which may include the AOR role, thereby giving you permission to complete and submit applications on behalf of the organization. You will be able to submit your application online any time after you have been approved as an AOR.

For more detailed instructions about creating a profile on Grants.gov, refer to:
<https://www.grants.gov/web/grants/applicants/registration/authorize-roles.html>.

5. *Track Role Status*: To track your role request, refer to:
<https://www.grants.gov/web/grants/applicants/registration/track-role-status.html>.

b. *Electronic Signature*: When applications are submitted through Grants.gov, the name of the organization's AOR that submitted the application is inserted into the signature line of the application, serving as the electronic signature. The EBiz POC **must** authorize individuals who are able to make legally binding commitments on behalf of the organization as an AOR; **this step is often missed and it is crucial for valid and timely submissions.**

HOW TO SUBMIT AN APPLICATION TO DOT VIA GRANTS.GOV

On behalf of DOT, this NOFO is issued by FHWA Office of Acquisition and Grants Management. Accordingly, the grants.gov notice will appear under the Agency name of FHWA.

Grants.gov applicants can apply online using Workspace. Workspace is a shared, online environment where members of a grant team may simultaneously access and edit different Webforms within an application. For each funding opportunity announcement, you can create individual instances of a Workspace.

Below is an overview of applying on Grants.gov. For access to complete instructions on how to apply for opportunities, refer to:
<https://www.grants.gov/web/grants/applicants/apply-for-grants.html>.

1. *Create a Workspace*: Creating a Workspace allows you to complete it online and route it through your organization for review before submitting.
2. *Complete a Workspace*: Add participants to the Workspace, complete all the required forms, and check for errors before submission.
 - a. *Adobe Reader*: If you decide not to apply by filling out Webforms you can download individual PDF forms in Workspace so that they will appear similar to other Standard or FHWA forms. The individual PDF forms can be downloaded and saved to your local device storage, network drive(s), or external drives, then accessed through Adobe Reader.
 - b. *NOTE*: Visit the Adobe Software Compatibility page on Grants.gov to download the appropriate version of the software at:
<https://www.grants.gov/web/grants/applicants/adobe-software-compatibility.html>.

- c. *Mandatory Fields in Forms:* In the forms, you will note fields marked with an asterisk and a different background color. These fields are mandatory fields that must be completed to successfully submit your application.
- d. *Complete SF-424 Fields First:* The forms are designed to fill in common required fields across other forms, such as the applicant name, address, and DUNS number. To trigger this feature, an applicant must complete the SF-424 information first. Once it is completed, the information will transfer to the other forms.
- 3. *Submit a Workspace:* An application may be submitted through Workspace by clicking the Sign and Submit button on the Manage Workspace page, under the Forms tab. Grants.gov recommends submitting your application package at least 24-48 hours prior to the close date to provide you with time to correct any potential technical issues that may disrupt the application submission.
- 4. *Track a Workspace:* After successfully submitting a Workspace package, a Grants.gov Tracking Number (GRANTXXXXXXXX) is automatically assigned to the package. The number will be listed on the Confirmation page that is generated after submission.

For additional training resources, including video tutorials, refer to:

<https://www.grants.gov/web/grants/applicants/applicant-training.html>.

Applicant Support: Grants.gov provides applicants 24/7 support via the toll-free number 1-800-518-4726 and email at support@grants.gov. For questions related to the specific grant opportunity, contact the number listed in the application package of the grant you are applying for.

If you are experiencing difficulties with your submission, it is best to call the Grants.gov Support Center and get a ticket number. The Support Center ticket number will assist FHWA with tracking your issue and understanding background information on the issue.

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

The Applicant 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.

The Federal awarding Agency **may not** make a Federal award to an Applicant until the Applicant has complied with all applicable unique entity identifier and SAM

requirements. If an Applicant has not fully complied with the requirements by the time the Federal awarding Agency is ready to make a Federal award, the Federal awarding Agency may determine that the Applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another Applicant.

4. SUBMISSION DATES AND TIMES

Applications must be submitted through www.grants.gov by submission deadline of August 3, 2020, **11:59 PM ET**.

5. FUNDING RESTRICTIONS

The DOT will not reimburse any pre-award costs or application preparation costs.

6. OTHER SUBMISSION REQUIREMENTS

A) APPLICATION SUBMITTAL INFORMATION

Applicants must submit their applications via www.Grants.gov under the NOFO number cited herein. Applications must be submitted through the Grants.gov workspace.

The Applicant must complete and submit all forms included in the application package for this notice as contained at Grants.gov.

B) 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 future similar opportunities.

SECTION E – APPLICATION REVIEW INFORMATION

1. CRITERIA

The Government will evaluate applications on the following criteria, which are of equal importance.

Project Type:

The DOT intends to fund projects in the following prioritized order:

- Projects that will result in the publication of a new WZDx-compliant data feed **(Category A)**
- Projects that will result in increased system coverage of an existing WZDx-compliant data feed **(Category B)**
- Projects that will result in the addition of optional field(s) to an existing WZDx-compliant data feed **(Category C)**

Technical Merit:

- Likelihood of the Applicant's technical approach to result in successful demonstration of a live, conformant work zone data feed and/or expansion of existing feeds to include new jurisdictions and or optional data elements.
- The Applicant's readiness to achieve the objective; for example, organizational support, existing resources or data infrastructure, etc.
- Articulation of how the data feed will be sustained in an open, public manner conducive to third party use.
- Likelihood of the Applicant's technical approach to be replicable at a low cost by other deployers, and contribute to national interoperability.
- The Applicant's willingness to participate in technical development of the WZDx specification and share lessons learned and implementation tools with peers.

Challenge Area:

The DOT intends to fund projects that address one or more of the following challenges spanning the data lifecycle:

- The IOO and/or the entities performing work on their roadways do not produce one or more data elements in the specification, do not produce them at a sufficient level of quality or granularity, and/or do not produce work zone data on all roadways within or across local jurisdictions; **(Challenge Area 1)**
- The IOO's data generation and acquisition processes (e.g., permitting systems, lane closure management systems) do not exist or rely on manual steps which delay data publication and/or reduce data quality; **(Challenge Area 2)**
- The IOO's backend data system architecture makes it difficult and/or expensive to share data in different formats for different uses, both within and across an organization. **(Challenge Area 3)**

Cost & Cost Share:

- Cost will be considered in the award decision. The cost information will be analyzed to assess cost and cost share reasonableness and conformance to applicable cost principles and cost share requirements. Applicants must provide the required matching funds, and supporting detail for these funds, including the applicant's activities to maximize the non-Federal share of the project funding.
- 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 DOT will use the following merit review process to evaluate applications and make selections for award:

Review: A panel of Agency experts will evaluate all eligible applications using the Project Category, Technical Merit, Challenge Area, and Cost & Cost Share criteria listed above. The panel will determine whether each application satisfies statutory requirements and rate how well it addresses selection criteria. The DOT reserves the right to use outside expertise and/or contractor support to perform application evaluation.

Selection: The panel of Agency experts will consider the applications, finalize its technical evaluations and recommend projects for selection by the Secretary of Transportation for consideration. The Secretary will select for award the applications that are considered the most advantageous to DOT, adhering to the following criteria:

- a. Based on the Technical Merit criteria above;
- b. Subject to the result of an Applicant risk assessment; and
- c. Considering the following objectives:
 - i. The DOT intends to fund projects of varying geographic and functional diversity to address the unique transportation management considerations in urban vs. rural environments, high-speed limited-access facilities vs. local roads, etc.
 - ii. Applicants who demonstrate a commitment to creating an open work zone data feed accessible to the public and third-party users.
 - iii. The Department may also consider whether the project is located in a qualified Opportunity Zone designated pursuant to 26 U.S.C. § 1400Z-1.

Risk Assessment: Prior to award, each selected Applicant will be subject to a risk assessment required by 2 CFR 200.205. If the Federal awarding Agency determines that a Federal award will be made, special conditions that correspond to the degree of risk assessed may be applied to the Federal award.

This Risk Assessment will include evaluation of some or all of the following items relative to the Applicant and/or sub-applicants as applicable:

- (1) Applicant's financial stability;
- (2) Applicant's quality of management systems and ability to meet the management standards prescribed in 2 CFR Part 200;
- (3) Applicant's history of performance;

Note: History of performance includes the Applicant's record in managing Federal awards, if it is a prior Recipient of Federal awards, including timeliness of compliance with applicable reporting requirements, conformance to the terms and conditions of previous Federal awards, and if applicable, the extent to which any previously awarded amounts will be expended prior to future awards. The Government will evaluate the relevant merits of the Applicant's history of performance based on its reputation and record with its current and/or former customers with respect to quality, timeliness and cost control. The history of performance will be reviewed to assure that the Applicant has relevant and successful experience and will be considered in the risk assessment. In evaluating history of performance, the Government may consider both written information provided in the application, as well as any other information available to the Government through outside sources.

- (4) Applicant's audit reports and findings from audits performed on the Applicant pursuant to 2 CFR Part 200 Subpart F—Audit Requirements or the reports and findings of any other available audits;
- (5) Applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-Federal entities;
- (6) Applicant's potential for conflict of interest if applicable; and

Note: DOT will review information provided by the Applicant, and any other relevant information known to DOT, to determine whether an award to the Applicant may create an actual or potential conflict of interest. If any such conflict of interest is found to exist, FHWA may (a) disqualify the Applicant, or (b) determine that it is otherwise in the best interest of the United States to award to the Applicant and include appropriate provisions to mitigate or avoid such conflict in the agreement pursuant to 2 CFR 200.112.

- (7) Applicant's eligibility to receive Federal funding. 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.

Pursuant to 2 CFR Part 200.205, prior to making a Federal award, the Federal awarding agency is required to review information available through any OMB-designated repositories of governmentwide eligibility qualification or financial integrity information, such as Federal Awardee Performance and Integrity Information System (FAPIIS), D&B, and Sam.gov. The Government's review of this information will occur as part of the risk assessment. An Applicant may review information in FAPIIS and comment on any information about itself. The DOT will consider comments by the Applicant, in addition to other information in FAPIIS, in making a judgment about the Applicant's integrity, business ethics, and record of performance under Federal awards when completing the risk assessment. The DOT reserves the right to deny an award based on the results of the risk assessment.

SECTION F – FEDERAL AWARD ADMINISTRATION INFORMATION

1. FEDERAL AWARD NOTICES

Following the evaluation outlined in Section E, DOT will notify the selected Applicants and announce the selected projects. Notice that an Applicant has been selected for award does not constitute approval of the application as submitted. Before the award, DOT may contact the applicant's point of contact listed in the SF 424 to initiate negotiation of a project specific agreement if applicable. If the negotiations do not result in an acceptable submittal, DOT reserves the right to terminate the negotiation and decline to fund the Applicant.

2. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

GOVERNING REGULATIONS

Performance under this agreement will be governed by and in compliance with the following regulations:

- 2 CFR Part 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards" as adopted by DOT at 2 CFR Part 1201.
- Cost Principles For-profit Organizations: 48 CFR 31 (Federal Acquisition Regulations) Subpart 31.2
- Applicable Federal laws, rules, and regulations also apply.
- 23 U.S.C. and 23 CFR

GENERAL TERMS AND CONDITIONS:

NOTE TO APPLICANTS: The following link contains General Terms and Conditions that may be incorporated into grant awards. As needed and appropriate to the awarding agency/office, the General Terms and Conditions may differ to reflect the administrative procedures of the awarding agency/office. However, the following link contains representative General Terms and Conditions to be incorporated into resulting grant awards:

<http://www.fhwa.dot.gov/aaa/generaltermsconditions.cfm>

SPECIAL TERMS AND CONDITIONS:

NOTE TO APPLICANTS: The following paragraphs contain Special Terms and Conditions that may be incorporated into grant awards. As needed and appropriate to the awarding agency/office, the Special Terms and Conditions may differ to reflect the administrative procedures of the awarding agency/office. However, the following paragraphs are representative Special Terms and Conditions to be incorporated into resulting grant awards:

A. PUBLIC ACCESS TO DOCUMENTS

The Applicant agrees that the resulting deliverables/documentation submitted to DOT under this agreement may be posted online for public access and/or shared by DOT with other interested parties. The DOT anticipates the documents cited herein may be posted on a DOT Website or another appropriate Website.

B. DATA RIGHTS

The Recipient must make available to DOT copies of all work developed in performance with this agreement, including but not limited to software and data. Data rights under this agreement shall be in accordance with 2 CFR 200.315, Intangible property.

C. PERSONALLY IDENTIFIABLE INFORMATION (PII)

Personally Identifiable Information (PII) as defined at 2 CFR Part 200.79 and 2 CFR 200.82 will not be requested unless necessary and only with prior written approval of the AO with concurrence from the AOR.

D. AVAILABLE FUNDING

The total estimated amount of Federal funding that may be provided under this agreement is \$_____ (to be filled in at award) for the entire period of performance, subject to the limitations shown below:

- (1) Currently, Federal funds identified on page 1 of the award document, are obligated to this agreement.
- (2) Subject to availability of funds, and an executed document by the AO, the difference between the current funding and the total estimated amount of Federal funding may be obligated to this agreement.
- (3) The FHWA's liability to make payments to the Recipient is limited to those funds obligated under this agreement as indicated above and any subsequent amendments.

E. PROGRAM INCOME

Pursuant to 2 CFR 200.307, program income earned during the agreement period must be added to the Federal award and used for the purposes and under the conditions of the Federal award, unless otherwise approved by the AO. Program income must not be used to offset the Federal or Recipient contribution to this project.

F. DESIGNATION AS RESEARCH AND DEVELOPMENT OR NON-RESEARCH AND DEVELOPMENT

This agreement is designated as: RESEARCH AND DEVELOPMENT

G. CONFERENCE SUPPORT RESTRICTIONS

The Recipient must obtain written approval from the AOR prior to incurring any costs for conference support. See the definition of conference as contained in 2 CFR 200.432.

Food and beverage costs are not allowable conference expenses for reimbursement under this agreement.

Note: Costs of meals are allowable as a travel per diem expense for individuals on travel status and pursuant to the Travel clause of this agreement.

H. DISPUTES

The parties to this agreement will communicate with one another in good faith and in a timely and cooperative manner when raising issues under this provision. Any dispute, which for the purposes of this provision includes any disagreement or claim, between DOT and the Recipient concerning questions of fact or law arising from or in connection with this agreement and whether or not involving alleged breach of this agreement, may be raised only under this Disputes provision.

Whenever a dispute arises, the parties will attempt to resolve the issues involved by discussion and mutual agreement as soon as practical. In no event will a dispute which arose more than 3 months prior to the notification made under the following paragraph of this provision constitute the basis for relief under this article unless DOT waives this requirement.

Failing resolution by mutual agreement, the aggrieved party will document the dispute by notifying the other party in writing of the relevant facts, identify unresolved issues and specify the clarification or remedy sought. Within 5 working days after providing written notice to the other party, the aggrieved party may, in writing, request a decision from one level above the AO. The AO will conduct a review of the matters in dispute and render a decision in writing within 30 calendar days of receipt of such written request. Any decision of the AO is final and binding unless a party will, within 30 calendar days, request further review as provided below.

Upon written request to FHWA Director, Office of Acquisition and Grants Management or designee, made within 30 calendar days after the AO's written decision or upon unavailability of a decision within the stated time frame under the preceding paragraph, the dispute will be further reviewed. This review will be

conducted by the Director, Office of Acquisition and Grants Management. Following the review, the Director, Office of Acquisition and Grants Management, will resolve the issues and notify the parties in writing. Such resolution is not subject to further administrative review and to the extent permitted by law, will be final and binding. Nothing in this agreement is intended to prevent the parties from pursuing disputes in a United States Federal Court of competent jurisdiction.

I. PUBLIC ACCESS REQUIREMENTS AND COMPLIANCE (DATA ACCESS AND DATA SHARING)

In response to the White House Office of Science and Technology Policy memorandum dated February 22, 2013, entitled Increasing Access to the Results of Federally Funded Scientific Research, DOT is incorporating Public Access requirements into all funding awards (grants and cooperative agreements) for scientific research. This section sets forth the requirements a funding recipient must satisfy to be in full compliance with DOT Public Access plan.

For all wholly or partially Federal funded scientific research agreements, the Recipient hereby agrees to comply with the requirements of DOT Public Access plan. The Recipient is required to include these obligations in any sub- awards or other related funding agreements. The full requirements of DOT Public Access plan requirements include, but are not limited to, the following:

i. Copyright License

Recipient hereby grants to DOT a worldwide, non-exclusive, non-transferable, paid-up, royalty-free copyright license, including all rights under copyright, to any and all Publications and Digital Data Sets as such terms are defined in DOT Public Access plan, resulting from scientific research funded either fully or partially by this funding agreement.

Recipient herein acknowledges that the above copyright license grant is first in time to any and all other grants of a copyright license to such Publications and/or Digital Data Sets, and that DOT shall have priority over any other claim of exclusive copyright to same.

ii. Reporting and Compliance Activities

Recipient hereby agrees to satisfy the reporting and compliance requirements as set forth in DOT Public Access plan, including, but not limited to, the submission and approval of a Data Management Plan, the use of Open Researcher and Contributor ID numbers, the creation and maintenance of a research project record in the Transportation Research Board's Research in Progress database, and the timely and complete submission of all required publications and associated digital data sets as such terms are defined in the DOT Public Access plan. Additional

information about how to comply with the requirements can be found at:
<https://ntl.bts.gov/public-access/how-comply>.

Definition of Data: "Data" is defined by the Federal Acquisition Regulation Subpart 27.4 as "...recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information." For additional information:

<https://www.acquisition.gov/content/subpart-274-rights-data-and-copyrights>.

J. INDIRECT COSTS

Indirect costs are allowable under this agreement in accordance with the Recipient's Federally Negotiated Indirect Cost Rates as documented in writing and approved by the Recipient's cognizant Government agency. In the absence of such Government-approved indirect rates, the following rates are hereby approved for use under this agreement as shown below:

<i>Type*</i>	<i>Indirect Rate</i>	<i>Period</i>	<i>Rate (%)</i>	<i>Base</i>
(*** Information to be filled in at award ***)				

*Types of Rates: Pred - Predetermined; Fixed - Fixed; Final – Final; Prov: Provisional/billing; or De minimus.

In the event the Recipient determines the need to adjust the above listed rates, the Recipient will notify the AO of the planned adjustment and provide rationale for such adjustment. In the event such adjustment rates have not been audited by a Federal Agency, the adjustment of rates must be pre-approved in writing by the AO.

This Indirect Cost provision does not operate to waive the limitations on Federal funding provided in this document. The Recipient's audited final indirect costs are allowable only insofar as they do not cause the Recipient to exceed the total obligated funding.

K. KEY PERSONNEL

Pursuant to 2 CFR 200.308(c)(1)(ii), the Recipient must request prior written approval from the AO for any change in Key Personnel specified in the award. The following person(s) are/have been identified as Key Personnel:

Name	Title/Position
(** to be filled in at award **)	

3. REPORTING

Progress Reports

The Recipient must submit an electronic copy of the Research Performance Progress Report (SF-RPPR), to the AOR and the AO on or before the 30th of the month following the calendar quarter being reported. Final RPPRs are due 90 days after the end of the agreement period of performance. The SF-RPPR content directions and budget formats are available online:

http://www.nsf.gov/bfa/dias/policy/rppr/format_ombostp.pdf

The Progress Report must include the required certification pursuant to 2 CFR 200.415.

Submit an electronic copy to ITS JPO at the following address:
ITSPROJECTS@dot.gov.

SECTION G – FEDERAL AWARDING AGENCY CONTACTS

Address any questions to:

Ryan.Buck@dot.gov