

NOTICE OF FUNDING OPPORTUNITY FOR Fiscal Year (FY) 2022-2026 Advanced Digital Construction Management Systems (ADCMS)

AGENCY: U.S. Department of Transportation (DOT), Federal Highway Administration (FHWA)

ACTION: Notice of Funding Opportunity (NOFO) for ADCMS

FUNDING OPPORTUNITY NUMBER: 693JJ323NF00014

ASSISTANCE LISTING NUMBER: 20.200

TOTAL AMOUNT AVAILABLE: This NOFO will result in the distribution of up to \$34 million of Federal funds for combined FYs 2022 and 2023 and up to \$17 million of Federal funds each for FY 2024, 2025, and 2026. The actual amount available to be awarded under this notice will be subject to the availability of funds. This NOFO will result in the award of grants.

DEADLINE FOR APPLICATIONS: For FYs 2022 and 2023, applications must be received by August 28, 2023, at 11:59 p.m., EDT. See Attachment A for application deadlines for FY 2022-2026. FHWA will make a call for submissions announcement for FYs 2024, 2025, and 2026 in accordance with Attachment A at <https://www.fhwa.dot.gov/construction/ADCMS/>.

The FHWA plans to conduct outreach regarding this program in the form of a virtual meeting on July 25, 2023, at 2:00 p.m., EDT. To join the Webinar, follow the instructions posted on <https://www.fhwa.dot.gov/construction/ADCMS/>. The audio portion of the Webinar can be accessed from this teleconference line: TOLL FREE +1 669-254-5252; ACCESS CODE 845380 and WEBINAR ID 160 551 5559. The FHWA is committed to providing equal access to this meeting (or event) for all participants. If you need alternative formats or services because of a disability, please contact David Scott at (651) 318-5402 or via email david.scott@dot.gov with your request by close of business at least 5 business days (July 19, 2023) prior to the Webinar.

SUBMIT APPLICATIONS TO: The FHWA uses www.grants.gov 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 several weeks. It is the Applicant's responsibility to monitor for any updates to this notice.

FHWA POINTS OF CONTACT:

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Each section of this notice contains information and instructions relevant to the application process. The Applicant should read this notice in its entirety so that they have the information they need to submit eligible and competitive applications.

The FHWA will not review applications in advance, but the FHWA staff are available for technical questions and assistance. In addition, the FHWA will post answers to questions and requests for clarifications at Grants.gov under this NOFO's page.

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This notice contains collection-of-information requirements subject to the Paperwork Reduction Act. The use of Standard Forms 424, 424A, 424B, 424C, 424 D, and SF-LLL has been approved by the Office of Management and Budget (OMB) under 2105-0520. Notwithstanding any other provision of law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the Paperwork Reduction Act, unless that collection displays a currently valid OMB control number.

SECTION A - PROGRAM DESCRIPTION

1. STATEMENT OF PURPOSE

The purpose of this NOFO is to solicit applications for ADCMS Grant Program awards. The ADCMS Program will award up to \$34 million for combined Fiscal Years (FY) 2022 and 2023 and up to \$17 million each for FYs 2024, 2025 and 2026. The actual amount available to be awarded under this notice will be subject to the availability of funds.

2. LEGISLATIVE AUTHORITY

Section 13006(a) of the Bipartisan Infrastructure Law (BIL), enacted as the Infrastructure Investment and Jobs Act (Pub. L. 117-58, Nov. 15, 2021), established the ADCMS Program, which is codified at 23, U.S.C. § 503(c)(5).

3. BACKGROUND

The ADCMS Program is one aspect of the FHWA's multifaceted Technology and Innovation Deployment Program (TIDP) and provides funding as an incentive for State departments of transportation (State DOT). The program is intended to promote, implement, deploy, demonstrate, showcase, support, and document the application of ADCMS, practices, performance, and benefits.

4. PROGRAM GOALS

The goals of the ADCMS Program, as defined in 23 U.S.C. 503(c)(5)(B), include:

- Accelerated State adoption of ADCMS applied throughout the construction lifecycle (including through the design and engineering, construction, and operations phases) that maximize interoperability with other systems, products, tools or applications; boost productivity; manage complexity; reduce project delays and cost overruns; and enhance safety and quality;
- More timely and productive information sharing among stakeholders through reduced reliance on paper to manage construction processes and deliverables such as blueprints, design drawings, procurement and supply-chain orders, equipment logs, daily progress reports, and punch lists;
- Deployment of digital management systems that enable and leverage the use of digital technologies on construction sites by contractors, such as state-of-the-art automated and connected machinery and optimized routing software that allows construction workers to perform tasks faster, safer, more accurately, and with minimal supervision;
- The development and deployment of the best practices for the use in digital construction management;
- Increased technology adoption and deployment by States and units of local government that enables project sponsors to integrate the adoption of digital management systems and technologies in contracts and to weigh the cost of digitization and technology in setting project budgets;

- Technology training and workforce development to build the capabilities of project managers and sponsors that enables States and units of local government to better manage projects using advanced construction management technologies and to properly measure and reward technology adoption across projects of the State or unit of local government;
- Development of guidance to assist States in updating regulations of the State to allow project sponsors and contractors to report data relating to the project in digital formats and to fully capture the efficiencies and benefits of ADCMS and related technologies;
- Reduction in the environmental footprint of construction projects using ADCMS resulting from elimination of congestion through more efficient projects; and
- Enhance worker and pedestrian safety resulting from increased transparency.

Activities may occur throughout the project lifecycle (including through the design and engineering, construction, and operations phases) with a focus on the integration of information from design to construction to asset management.

Building Information Modeling (BIM) practices are fundamental to the objective of data interoperability and integration that is sought by the ADCMS Program. As a result, the FHWA seeks to fund projects that support the “Advancing BIM for Infrastructure: National Strategic Roadmap”¹ and related concepts that enhance the exchange and management of digital asset information.

5. ADMINISTRATION GOALS

The FHWA seeks to fund projects under this NOFO that advance one or more of the following Administration goals, where applicable.

Safety

DOT is committed to advancing safe, efficient transportation, including in the ADCMS Program. The National Roadway Safety Strategy (NRSS), issued January 27, 2022, commits DOT to respond to the current crisis in roadway fatalities by “taking substantial, comprehensive action to significantly reduce serious and fatal injuries on the Nation’s roadways,” in pursuit of the goal of achieving zero roadway deaths through a Safe System Approach. The outcomes that are anticipated from the projects funded by the ADCMS Program should align with the NRSS.

Climate Change and Sustainability

DOT seeks to fund projects under the ADCMS Program that reduce greenhouse gas (GHG) emissions in the transportation sector, incorporate evidence-based climate resilience measures and features, reduce the lifecycle GHG emissions from the project materials, and avoid adverse environmental impacts to air or water quality, wetlands, and endangered species, and address the disproportionate negative environmental impacts of transportation on disadvantaged communities, consistent with Executive Order (EO) 14008, Tackling the Climate Crisis at Home and Abroad (86 FR 7619).

¹ See <https://www.fhwa.dot.gov/publications/research/infrastructure/pavements/21064/index.cfm>

Workforce Development, Job Quality, and Wealth Creation

DOT intends to use the ADCMS Program to support the creation of good-paying jobs with the free and fair choice to join a union and the incorporation of strong labor standards and training and placement programs, especially registered apprenticeships, in project planning stages, consistent with EO 14025, Worker Organizing and Empowerment (86 FR 22829), and EO 14052, Implementation of the Infrastructure Investment and Jobs Act (86 FR 64335). DOT also intends to use the ADCMS Program to support wealth creation, consistent with DOT's Equity Action Plan through the inclusion of local inclusive economic development and entrepreneurship such as the use of Disadvantaged Business Enterprises, Minority-owned Businesses, Women-owned Businesses, or 8(a) firms.

Equity

DOT seeks to award projects under the ADCMS Program that will create proportional impacts to all populations in a project area, remove transportation-related disparities to all populations in a project area, and increase equitable access to project benefits, consistent with EO 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (86 FR 7009).

SECTION B – FEDERAL AWARD INFORMATION

1. FUNDING

Section 13006(a) of BIL, codified at 23 U.S.C. 503(c)(5)(C), provides \$20 million of TIDP funds per fiscal year for FY 2022-2026 to accelerate the deployment and implementation of ADCMS. Due to the imposition of the obligation limitation on the Highway Trust Fund, as well as reserving funds necessary for other activities to accelerate the deployment and implementation of ADCMS activities, such as peer exchanges, the development and deployment of best practices, and training, up to \$17 million is expected to be available for each fiscal year from 2022 to 2026 for award under the ADCMS Program. The first round of awards will combine FY 2022 and FY 2023 funding, for a total of \$34 million. The actual amount available to be awarded under each NOFO will be subject to the availability of funds and applications received. The Government reserves the right to make no awards under this NOFO.

2. AWARD SIZE

For each of FYs 2022-2026, the FHWA has set the minimum ADCMS Program Federal share per grant award at \$1,000,000 and the maximum Federal share per award at \$5,000,000. The FHWA anticipates awarding 5 to 10 ADCMS Program grants for each of FY 2022 to FY 2026, subject to the availability of funds. The FY 2022 and FY 2023 funding is combined in the first round of awards and, therefore, FHWA anticipates awarding 10 to 20 ADCMS grants in that round. Eligible Applicants may apply each year and receive awards for multiple independent projects.

3. TYPE OF AWARD

The planned award type is a cost reimbursement grant with cost-sharing. ADCMS Program funds will be awarded upon the execution of a project agreement, which is a type of grant agreement for administration of funds to a State DOT using the DOT Payment System named Fiscal Management Information System (FMIS).

4. PERIOD OF PERFORMANCE

The period of performance for the award is anticipated to be 1 to 4 years from the effective date of the grant award. The start of the period of performance will begin on the date that funds are obligated in FMIS and end on the project end date in FMIS.

SECTION C – ELIGIBILITY INFORMATION

1. ELIGIBLE APPLICANTS

Entities eligible to apply for an ADCMS Program grant are State DOTs, including the District of Columbia and the Commonwealth of Puerto Rico. While State DOTs are the only eligible Applicants to receive funds, they are encouraged to work in partnership with other State DOTs, local governments, Tribes, and private industry in designing their proposed projects. For projects involving partnerships, the FHWA expects one State DOT to serve as the lead entity and to be the grant recipient.

2. COST SHARING OR MATCHING

Cost sharing or matching is required for awards under this program. In accordance with Section 11101(c)(3) of BIL, the Federal share of the cost of a project carried out with ADCMS Program funds shall be 80 percent of the total project cost. Therefore, 20 percent of the total project cost must come from non-Federal sources.

Cost sharing or matching means the portion of project costs not paid by Federal funds.² Other Federal funds using their appropriate matching share may be leveraged for the project but cannot be considered matching funds under an application for ADCMS Program funds unless supported by statute. The FHWA will not consider costs incurred prior to award or funds expended or encumbered prior to award towards the matching requirement for any project. Matching funds are subject to the same Federal requirements described in Section F.2. as awarded funds.

See Section D.2.b.2 for information about documenting cost sharing in the application.

For each project that receives a grant under this NOFO, the FHWA expects the project to be completed using at least the level of non-Federal funding that was specified in the application.

3. OTHER

a. Number of Applications

Eligible Applicants may submit up to three applications per fiscal year. Since the first round of awards will combine FY 2022 and FY 2023 funding, up to six applications may be submitted for that round. An application in which a State DOT serves as a partner to a different State DOT that is the prime Applicant will not count against the limit of three applications per fiscal year. Applicants are eligible to receive one or more grants per award cycle.

² For a more complete definition, see 2 CFR Part 200.306 on Cost Sharing or matching. Additional information on non-Federal matching requirements can be found at https://www.fhwa.dot.gov/legsregs/directives/policy/memonfmr_tapered20190515.htm

b. Eligible Projects

The ADCMS Program funds are available for activities that will achieve one or more goals of the ADCMS Program as described in Section A.4 of this NOFO. Eligible project activities may occur at any point during the project lifecycle (including through the design and engineering, construction, and operations phases).

SECTION D - APPLICATION AND SUBMISSION INFORMATION

1. ADDRESS TO REQUEST APPLICATION PACKAGE

Applicants may obtain application forms at Grants.gov under the NOFO number cited herein. All application materials may be found on Grants.gov at <http://www.grants.gov>.

Once at Grants.gov, select the Search Grants tab. Then enter one of the following:

- Opportunity Number: 693JJ323NF00014
- Opportunity Name: ADCMS
- Assistance Listing Number: 20.200

When at one of these pages, select the Opportunity, which will open a page with several tabs. The first tab is a synopsis of the Opportunity. Select the Application Package tab to download the forms needed to submit an ADCMS Program application. The Applicant must complete and submit all Standard Forms (SF) included in the application package.

For a Telephone Device for the Deaf (TDD), please call (202) 366-3993. If potential Applicants are unable to download the application package from the internet, they may send a written request for a paper copy to the below address. Requests should be sent to:

Angela Jones
Agreement Specialist
Office of Acquisition and Grants Management
Federal Highway Administration
U.S. Department of Transportation
1200 New Jersey Avenue, SE.
Washington, DC 20590
Email: angela.jones@dot.gov

Alternate:

Hector R. Santamaria
Grants Support Team Leader
Office of Assistance Agreements and Acquisition Services
Federal Highway Administration
1200 New Jersey Avenue, SE.
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Email: hector.santamaria@dot.gov
Phone: (202) 493-2402

Office hours are from 7:30 a.m. to 4:00 p.m., EDT, Monday through Friday, except Federal holidays.

2. CONTENT AND FORM OF APPLICATION SUBMISSION

a. Application Overview

All applications must be submitted electronically through www.grants.gov and include the following parts. Forms are available for download at <https://www.grants.gov/web/grants/forms/sf-424-family.html>.

1. SF-424, Application for Federal Assistance

Note: A number of separate PDF flat files must be attached in Item 15 to provide required project information that is not included in the body of the SF-424.

Instructions for adding Item 15 Attachments:

- Click on “Add Attachments” in Item 15 to open the first pop-up window.
- Click “Add Attachment” and a second pop-up File Explorer/Directory window will appear, from which you can choose files to attach. Attachments can be added one at a time or all at once by holding down the CTRL key and selecting multiple files. Select “Open” to add the selected files as attachments.
- Click “Done” to finalize the attachments.
- Click “View Attachments” to see a list of files that have been added as attachments.

Required attachments: the following files must be added as Attachments to Item 15 of the SF-424:

- I. Volume 1 Technical Application**, as described in detail below
- II. Volume 2 Budget Application**, as described in detail below
- III. Additional Supporting Documentation** (as needed)

2. SF-424A, Budget Information for Non-Construction Programs

Table 1 – Application Parts

Part	Section	Description	Page Limit
Standard Forms	SF-424		None
	SF-424A		None
Volume 1 Technical Application <i>(Attach to SF-424, Item 15)</i>	Cover Page	See Section D.2.b.1.I	None
	Table of Contents		None
	Project Description	See Section D.2.b.1.II	15 pages
	Project Team Information	See Section D.2.b.1.III	
	Project Readiness	See Section D.2.b.1.IV	
Responsiveness to Merit Criteria	See Section D.2.b.1.V		

Volume 2 Budget Application (<i>Attach to SF-424, Item 15</i>)	See Section D.2.b.2	None
Additional Supporting Documentation (as needed) (<i>Attach to SF-424, Item 15</i>)	See Section D.2.b.1	10 pages

Application Format

- Applications must be formatted for 8½ x 11- inch paper. Pages that exceed this size are not allowable.
- Page margins must be a minimum of 1-inch top, bottom, and each side.
- Page numbers may be located within the 1-inch margin.
- A Header or Footer identifying the Applicant/Team and the Volume or Part, may be located within the 1-inch margins.
- Page Limits: Application volumes shall adhere to the page limitations listed above in Table 1.

Sharing of Application Information – DOT may share application information within DOT or with other Federal Agencies if DOT determines that sharing is relevant to the respective program’s objectives.

b. Application Detailed Instructions

1. Volume 1 – Technical Application

The Project Narrative should thoroughly address, with as much detail as possible without exceeding the overall page limit, the information necessary for the FHWA to determine that the project satisfies the evaluation criteria, as applicable, in Section E.

The Technical Application may not exceed 15 pages in length. Narrative text must be printed using a font size no less than 12-point font. Tables are permitted. Text in tables may be smaller than 12-point font but must be legible.

Additional supporting documents (e.g., technical information, letters of endorsement) may be submitted as Supporting Documentation to the application and do not count towards the 15-page Technical Application page limit but must not exceed 10 pages. If possible, website links to supporting documentation should be provided rather than copies. If supporting documents are submitted, Applicants should clearly identify within the Project Narrative the relevant portion of the Project Narrative that each supporting document supports. The FHWA recommends using appropriately descriptive final names (e.g., “Project Narrative,” “Memoranda of Understanding and Letters of Support,” etc.) for all attachments.

To the extent practicable, Applicants should provide supporting data and documentation in a form that is readily verifiable by the FHWA. The FHWA may ask any Applicant to supplement data in its application but expects applications to be complete upon submission.

Volume 1: Technical Application must include the following sections as shown in Table 1 above.

- I. Cover Page: Each application should contain a cover page with the information in Table 2 below.

Table 2: Cover Page

ADVANCED DIGITAL CONSTRUCTION MANAGEMENT SYSTEMS	
COVER PAGE	
Entity Type	STATE DOT
Organization Name	
Project Name	
Previously Incurred Project Cost	\$
Future Eligible Project Cost	\$
Total Project Cost (<i>from all funding sources</i>)	\$
ADCMS Program Funding Request	\$
Non-Federal Share for ADCMS Program Funding Request	\$
Total Federal Funding (<i>Including ADCMS Program</i>)	\$

- II. Project Description: Describe the project and clearly state the overall project goal(s) and associated benefits and outcomes. Applications may include any background and state of knowledge to support the purpose of this project. Describe how the Applicant proposes to meet one or more of the program goals listed in NOFO Section A.4 and, where applicable, the administration goals listed in NOFO Section A.5. This section should include a detailed description and scope of work, including specific milestones, and provide a technical and management plan describing in detail how the Applicant proposes to carry out the work. In addition, the Applicant should propose an initial monitoring plan and demonstrate how the effectiveness of the proposed project will meet the program goals of saving cost, reducing project delivery time, reducing congestion, and improving safety.

- III. Project Team Information: Include detailed information about the proposed project team, including details about the Applicant’s staffing or structure and any relationships with other partners or entities that will support the project. Provide a staffing plan to perform the work, including names and positions of key personnel. Provide an organizational chart identifying proposed staff members assigned to this effort. The chart must be supported with narrative text to include the title and a brief description of each position’s responsibilities, as well as the proposed level of effort and allocation of time (percent in relation to their other duties) for each position on a yearly basis and in summary format.

IV. Project Readiness: The application should include information that, when considered with the project budget information, is sufficient for the FHWA to evaluate whether the project is reasonably expected to begin in a timely manner. To assist the FHWA's project readiness assessment, the Applicant should provide the information requested on technical feasibility, project schedule, project approvals, and project risks and mitigation strategies, each of which is described in greater detail in the following sections. Applicants are not required to follow the specific format described here, but this organization, which addresses each relevant aspect of project readiness, promotes a clear discussion that assists project evaluators:

1. **Technical Feasibility**: The Applicant should demonstrate a sound, feasible, and achievable technical and management approach to successfully perform and complete the proposed project. The application should articulate the likelihood of success for the project and the Applicant's commitment to utilize, maintain, and advance the technology. The application should include the basis for the cost estimate presented in the application, including the identification of contingency levels appropriate to any scope, schedule, and budget risk-mitigation measures.
2. **Project Schedule**: The Applicant should include a detailed project schedule that identifies all major project milestones and demonstrates that the project is ready to authorize within 12 months of award. Examples of such milestones include approval of request for proposals; procurement authorization; and project partnership and implementation agreements. The project schedule should be sufficiently detailed to demonstrate that:
 - i. All necessary activities will be complete to allow ADCMS Program funds to be obligated as indicated in the project schedule in the application; and
 - ii. All work tasks can be completed during the period of performance.
3. **Project Risks and Mitigation Strategies**: The Applicant should identify all material risks to the likelihood of successful project start and completion (e.g., procurement delays or lack of legislative or administrative approval) and the strategies that the Applicant and any project partners have undertaken or will undertake to mitigate those risks.

V. Responsiveness to Merit Criteria: The Applicant should describe how the proposal meets the Merit Criteria and, if applicable, the Additional Selection Considerations listed in Section E.

2. Volume 2 – Budget Application

- I. Budget Tables: Provide a separate detailed budget table for each year and summarize the information for all years for all activities. If the project contains components, the budget tables should separate the costs of each project component. If the project will

be completed in phases, the budget tables should separate the costs of each phase.

Grant Funds, Sources and Uses of Project Funds: Project budgets should show how different funding sources will share in each activity and present those data in dollars and percentages. The budget should identify other Federal funds the Applicant is applying for or has been awarded, if any, that the Applicant intends to use. Funding sources should be grouped into three categories: non-Federal, ADCMS Program funds, and other Federal sources with specific amounts from each funding source.

- II. Budget Application: The Budget Application should be detailed enough to demonstrate that the project satisfies the ADCMS Program cost-sharing requirements described in Section C.2 and those associated with each category of other Federal funding. The application should include information showing that the Applicant has budgeted sufficient contingency amounts to cover unanticipated cost increases. The Budget Application should provide complete information on how all project funds may be used. For example, if a source of funds is available only after a condition is satisfied, the application should identify that condition and describe the Applicant's control over whether it is satisfied. Similarly, if a source of funds is available for expenditure only during a fixed period, the application should describe that restriction. Note: If needed, the FHWA may request additional budget information to clarify an application. The FHWA encourages Applicants to submit the most relevant and complete information they can provide.
- III. Other Business Information: Provide the following information relative to the PRIME APPLICANT:
- 1) Identify any exceptions to the anticipated award terms and conditions as contained in Section F, Federal Award Administration Information.
 - 2) Identify any preexisting intellectual property that the Applicant anticipates using during award performance, and your position on its data rights during and after the award period of performance.
 - 3) Applicant's System for Award Management (SAM) Unique Entity Identifier (UEI).
 - 4) A statement to indicate whether the Applicant has previously completed an A-133 Single Audit and, if so, the date that the last A-133 Single Audit was completed.
 - 5) Terminated Contract. List any contract/agreement that was awarded to the prime Applicant then later 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.
 - 6) DOT is committed to considering project funding decisions holistically among the various discretionary grant programs available in BIL. DOT also recognizes that Applicants may be seeking grant program funding from multiple DOT grant

programs and opportunities. An Applicant may seek the same award amounts from multiple DOT grant programs opportunities or seek a combination of funding from multiple DOT opportunities. In those cases, the Applicant must indicate, within the Federal funding description, details as to what other potential DOT grant programs and opportunities they are currently applying for or intend to apply for and what award amounts they will be seeking. This information will be reviewed by DOT to ensure that a single project, or its sub-elements, is not awarded Federal funding under multiple DOT grant programs. DOT reserves the right to contact Applicants to obtain additional information concerning those scopes of work to discuss any possible or actual overlap in scope.

- 7) Acknowledgement of acceptance of the NOFO terms and acknowledgement and acceptance of any Amendments issued to this NOFO. List Amendment numbers and issue dates, if any.

3. UNIQUE ENTITY IDENTIFIER AND SYSTEM FOR AWARD MANAGEMENT

Each Applicant is required to:

- a. Have an active registration in SAM.gov at the time the Applicant submits an application;
- b. Provide a valid UEI in their application; and
- c. Continue to maintain an active SAM registration with current information at all times during which the Applicant has an active Federal award or an application or plan under consideration by a Federal Awarding Agency.

The FHWA may not make a Federal award to an Applicant until the Applicant has complied with all applicable UEI 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 eligible to receive a Federal award and use that determination as a basis for making a Federal award to another Applicant.

NOTE TO APPLICANTS: SAM requires the registrant to provide a UEI number to complete the registration. These processes can take several weeks to complete so should be started well before the application deadline.

4. SUBMISSION DATES AND TIMES

FY 2022 and 2023 applications must be received electronically through www.grants.gov not later than 11:59 p.m., EDT on August 28, 2023 (or as updated by a NOFO Amendment, if applicable). The due date/time is the date and time by which the FHWA must receive the full and completed application, including all required sections. Applications for future year funding will be due as listed in Attachment A – Important Dates. For the submitted application package, the 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 maximum size of 200 megabytes for the entire grant application package.

A late application will not be reviewed or considered unless the FHWA determines that doing so is in the FHWA's best interest. The FHWA will not consider late applications that are the result of failure to register or comply with Grants.gov Applicant requirements in a timely manner. If Applicants are unable to use the system due to verifiable technical difficulties, Applicants must email complete applications directly to the FHWA point of contact (POC) listed in NOFO Section G no later than the NOFO application deadline cited herein, with an explanation of the technical issue experienced and supporting documents regarding the nature of the technical difficulties. For instance, provide screen capture(s) of the technical issues experienced. If you are experiencing difficulties with your submission, it is best to contact the Grants.gov Support Center and get a ticket number. Provide the Grants.gov Help Desk Tracking Number since it will assist the FHWA with tracking your issue and understanding background information on the system issue in the event of a late application. If the reported technical issues cannot be validated, late applications may be rejected as untimely.

GRANTS.GOV: Applicants must follow the instructions on Grants.gov to successfully use the Website to submit an application. Use of Grants.gov may entail the following steps for those setting up new accounts or first-time users:

- a. Register with SAM at www.SAM.gov
- b. Obtain a valid UEI;
- c. Create a Grants.gov account; and
- d. Respond to the registration email sent to the E-Business POC from Grants.gov, and login at Grants.gov to authorize the Applicant as the Authorized Organization Representative (AOR). Please note that there can be more than one AOR for an organization.

Note: The Grants.gov registration process may take 2 to 4 weeks.

GRANTS.GOV HELP: For Grants.gov training resources, including video tutorials, refer to: [Home | GRANTS.GOV](#). For assistance with Grants.gov registration and application submittal, refer to the Grants.gov Support Center: [Support | GRANTS.GOV](#).

5. INTERGOVERNMENTAL REVIEW

An application under this NOFO is not subject to the State review under E.O. 12372.

6. FUNDING RESTRICTIONS

The FHWA will not reimburse any pre-award costs or application preparation costs under this proposed award.

SECTION E - APPLICATION REVIEW INFORMATION

1. MERIT CRITERIA

To be selected for a grant, an Applicant must be an Eligible Applicant and the project must be an Eligible Project as described in Section C. Applications that do not meet the threshold eligibility requirements described in Section C will not be evaluated under the Merit Criteria.

TECHNICAL MERIT: The FHWA will evaluate applications from eligible entities against the following technical merit criteria, considered of equal importance. These criteria are distinct from the eligibility criteria (see Section C) that are addressed before an application is accepted for review.

Criterion #1 – Technical and Management Approach

The FHWA seeks projects that demonstrate a sound, feasible, and achievable technical and management approach to successfully perform and complete the proposed project. The application should articulate the likelihood of success for the project and the Applicant's commitment to use, maintain, and advance the technology. Project risks and mitigation strategies for those risks should be articulated to allow the FHWA to assess potential impacts to achieving the desired outcome.

Evaluation Factors: The FHWA will review applications to evaluate the extent that:

- (1) The project builds upon an existing framework or is identified as a need in existing data plans, e.g., Asset Management Plan, Organization IT Modernization Plan.
- (2) The project outcome will fill a critical need for the organization and support future phases of the proposed project or subsequent projects.
- (3) Staff assigned to the project have related expertise and experience.
- (4) The staffing structure is adequate.
- (5) The Applicant is committed and has the resources to fully implement the project.
- (6) Risks are well understood, and mitigation strategies are comprehensive and implementable.

Criterion #2 – Promotes efficient information sharing among stakeholders

The FHWA will evaluate how the proposed projects will result in timely and productive information sharing among stakeholders through reduced reliance on paper to manage construction processes and deliverables such as blueprints, design drawings, procurement and supply-chain orders, equipment logs, daily progress reports, and punch lists. The FHWA will evaluate how the proposed project enhances the movement of data seamlessly between the owner and the contractor in real time.

Evaluation Factors: The FHWA will review applications to evaluate the extent that:

- (1) The project promotes efficiencies and will result in time savings during project development or construction.
- (2) The project will eliminate or substantially decrease the use of paper documentation.
- (3) The project will improve information sharing and the likelihood it will result in improved decisionmaking when issues arise during project development or construction.
- (4) The project provides benefits to both project owners and contractors in either time or cost savings.

Criterion #3 – Accelerate technology adoption and deployment

The FHWA is seeking proposed projects that accelerate adoption of integrated digital management systems and technologies. The FHWA will evaluate the extent to which the project leverages the interests of multiple entities to develop a robust solution that is transferable to other transportation organizations and will have a benefit to owners in setting project budgets or controlling costs. The FHWA will evaluate the likelihood of the technology innovation being adopted and deployed by other States, local governments, Tribes, and private industry.

Evaluation Factors: The FHWA will review applications to evaluate the extent that:

- (1) The project creates a process that can be used by other transportation organizations.
- (2) The project's process enhancement can be used by other entities without the need for significant capital investment.
- (3) The process enhancements address missing electronic data connections identified by multiple organizations.
- (4) The project results in an open data format or eliminates the need for data conversion for use by other software/data systems.
- (5) The project improves budgeting or cost control.

Criterion #4 – Safety

The FHWA will evaluate how the technology innovation may enhance safety for highway workers and/or the travelling public (non-motorized and motorized). The FHWA is seeking projects that will reduce worker exposure to traffic or hazardous site conditions or reduce the time a work zone needs to be present, which enhances the safety for the highway workers and the travelling public.

Evaluation Factors: The FHWA will review applications to evaluate the extent that:

- (1) The project eliminates or mitigates the amount of time workers are in hazardous situations (e.g., work zones) gathering data adjacent to active roadways.
- (2) The project reduces the time a work zone needs to be in place.

- (3) The project improves quality and timeliness of information to the public, thereby making travel through a work zone safer.

Criterion #5 – Workforce Development, Job Quality and Wealth Creation

The FHWA will evaluate how the proposed project would enhance the skillsets of the workforce, expand the capabilities of project personnel, and provide tools for project management using advanced construction management technologies.

Evaluation Factors: The FHWA will review applications to evaluate the extent that:

- (1) The project provides training on new technology to the workforce and increases workforce skillsets.
- (2) Workforce skills obtained as a result of the proposed project are transferable to other career paths.

Criterion #6 – Environment, Climate Change and Sustainability, and Equity

The FHWA will evaluate the extent that the proposed project uses ADCMS to communicate environmental concerns and commitments made during preliminary design to contractors and other stakeholders in the construction phase, such as the identification of environmentally sensitive areas, thus reducing the environmental footprint of construction projects. The FHWA will also evaluate the extent that the proposed project uses ADCMS to communicate that project design decisions regarding the commitment for proportional impacts to all populations in the project area, removal of transportation-related disparities to all populations in the project area, and equitable access to project benefits will be carried through to construction. The FHWA will also evaluate if the project promotes efficiencies during construction that reduce emissions through reduced hours of operation of heavy equipment and reduced congestion in the work zone. The FHWA will also evaluate if the project may lead to a reduction in the amount of right of way needed for construction.

Evaluation Factors: The FHWA will review applications to evaluate the extent that the proposed project results in:

- (1) Reduced right of way for project construction.
- (2) Communication of environmental and equity commitments made during preliminary design.
- (3) Identification and avoidance of environmentally sensitive areas.
- (4) Reduced work zone congestion.
- (5) More efficient utilization of construction equipment, requiring fewer machine hours of operation.

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. Proposed cost share will be evaluated to ensure the proposed amount meets the minimum matching

requirements and that proposed costs are in compliance with Title 2, Code of Federal Regulations (CFR), Part § 200.306. This evaluation factor will not be rated.

2. REVIEW AND SELECTION PROCESS

The FHWA will screen applications received to confirm Applicant eligibility, project eligibility, completeness of submittal, and compliance with NOFO application requirements. An application determined to be ineligible, incomplete, and/or non-compliant with the NOFO application requirements may be removed from the competition and from further consideration for award or continued evaluation.

The FHWA will use the following merit review process to evaluate applications: the FHWA will establish a Technical Review Team (TRT), comprised of individuals from the FHWA, to review each eligible application. If deemed necessary, the FHWA may use outside experts and/or contractor support to review the applications. The TRT will review each application against the merit criteria and assign an overall rating of “Highly Qualified,” “Qualified,” or “Not Qualified,” as described below, to each application.

Highly Qualified: A Highly Qualified project is one that directly addresses:

- Evaluation Factors one (1) and two (2) on Criterion #1;
- Evaluation Factors one (1) and two (2) on Criterion #2;
- Evaluation Factor one (1) on Criterion #3; and
- At least one Evaluation Factor on each of Criteria #4, #5, and #6.

Qualified: A Qualified project is one that directly addresses:

- Evaluation Factors one (1) and two (2) on Criterion #1;
- Evaluation Factors one (1) and two (2) on Criterion #2;
- Evaluation Factor one (1) on Criterion #3; and
- At least one Evaluation Factor on Criteria #4, #5, or #6.

Not Qualified: A Not Qualified project is one that fails to meet the criteria for a Qualified project, as described above.

The TRT will also review the Budget Application to evaluate the proposed use of funds.

Additional Selection Considerations: After completing the merit review, among projects of similar merit, the FHWA will prioritize projects in which the prime Applicant will work in partnership with other State DOTs, local governments, Tribes, or private industry in designing and implementing their proposed projects. The FHWA will also prioritize projects that support the “Advancing BIM for Infrastructure: National Strategic Roadmap” and related concepts that enhance the exchange and management of digital asset information.

The TRT will recommend awards to the selection official based on the results of the TRT’s review. The TRT will recommend for award the applications that are considered the most advantageous to the FHWA and represent the best use of the funds, using the Merit Criteria, review of the Budget Application, and evaluation of the Additional Selection Considerations.

The FHWA will also seek diversity among the selected projects to the extent practical, to ensure the selected projects demonstrate the benefits and efficiencies of advance digital construction management systems across many different phases of project development and construction. Award recommendations may consist of a group of projects that collectively represent the most advantageous use of funds to achieve a combination of program and Administration goals.

As determined necessary to support the evaluation and selection process, the FHWA may conduct discussions with Applicants to clarify elements of the technical and budget applications and request additional detailed and itemized cost information. Additionally, during the selection process, the FHWA may enter into discussions with an Applicant that may result in a mutual agreement upon a lesser amount of a potential award than originally requested in the application if necessary due to the quantity, size, and scope of the applications received in response to this NOFO and the results of the application review process.

The selection official responsible for final award decisions is the FHWA Administrator.

The Government is not obligated to make any award as a result of this notice.

3. RISK ASSESSMENT

Prior to award, each selected Applicant will be subject to a risk assessment as required by 2 CFR § 200.206. If the FHWA 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. The FHWA must review and consider any information about the Applicant that is in the designated integrity and performance system accessible through SAM. An Applicant may review information in SAM.gov and comment on any information about itself previously entered by a Federal Awarding Agency. The FHWA will consider comments by the Applicant, in addition to the other information in SAM.gov, 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.

4. ANTICIPATED ANNOUNCEMENT AND FEDERAL AWARD DATES

The FHWA anticipates, but does not guarantee, announcing selections in the fall for each year of awards (or as updated by a NOFO Amendment, if applicable). See Attachment A for important dates and deadlines for FYs 2022-2026 applications.

SECTION F – FEDERAL AWARD ADMINISTRATION INFORMATION

1. FEDERAL AWARD NOTICES

Following the evaluation outlined in Section E, the FHWA 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.

Recipients of awards will not receive lump-sum cash disbursements at the time of award announcement or obligation of funds. Instead, the FHWA will reimburse recipients only after a project agreement or award has been executed, allowable expenses are incurred, and valid requests for reimbursement are submitted by the recipient.

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 DOT at 2 CFR Part 1201. Applicable Federal laws, rules and regulations set forth in 23 U.S.C. and 23 CFR and 49 CFR also apply.

GENERAL CLAUSES

The online clauses titled “General Terms and Conditions for Assistance Award” apply to the resulting award, and are available in full text online at:

https://www.fhwa.dot.gov/cfo/contractor_recip/gtandc_generaltermsconditions.cfm

SPECIAL CLAUSES

In addition to the General Clauses cited above, the following Special Clauses will apply to the resulting award.

A. PUBLIC ACCESS TO DOCUMENTS

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

B. DATA RIGHTS

The recipient must make available to the FHWA copies of any project deliverables required under the award and reports required in Section F.3. Data rights under this agreement shall be in accordance with 2 CFR 200.315, Intangible property.

C. PROGRAM REQUIREMENTS

In connection with any program or activity conducted with or benefiting from funds awarded under this notice, recipients of funds must comply with all applicable requirements of Federal law, including, without limitation, the Constitution of the United States; the conditions of performance, nondiscrimination requirements, and other assurances made applicable to the award of funds in accordance with DOT regulations; and applicable Federal financial assistance and contracting principles promulgated by the Office of Management and Budget (OMB). In complying with these requirements, recipients, in particular, must ensure that no concession agreements are denied, or other contracting decisions made on the basis of speech or other activities protected by the First Amendment. If DOT determines that a recipient has failed to comply with applicable Federal requirements, DOT may terminate the award of funds and disallow previously incurred costs, requiring the recipient to reimburse any expended award funds.

1. **Critical Infrastructure Security and Resilience:** It is the policy of the United States to strengthen the security and resilience of its critical infrastructure against both physical and cyber threats. Each Applicant selected for Federal funding under this notice must demonstrate, prior to the signing of the grant agreement, effort to consider and address physical and cyber security risks relevant to the transportation mode and type and scale of the project. Projects that have not appropriately considered and addressed physical and cyber security and resilience in their planning, design, and project oversight, as determined by DOT and the U.S. Department of Homeland Security, will be required to do so before receiving funds for construction, consistent with Presidential Policy Directive 21 – Critical Infrastructure Security and Resilience and the National Security Presidential Memorandum on Improving Cybersecurity for Critical Infrastructure Control Systems.
2. **Domestic Preference Requirements:** As expressed in EO 14005, “Ensuring the Future Is Made in All of America by All of America’s Workers” (86 FR 7475), the Executive Branch should maximize, consistent with law, the use of goods, products, and materials produced in, and services offered in, the United States. Funds made available under this NOFO are subject to the domestic preference requirement at 23 U.S.C. § 313, 23 CFR § 635.410, and 2 CFR § 200.322. DOT expects all Applicants to comply with those requirements.
3. **Civil Rights and Title VI:** As a condition of a grant award, grant recipients should demonstrate that the recipient has a plan for compliance with civil rights obligations and nondiscrimination laws, including Title VI of the Civil Rights Act of 1964 and implementing regulations (49 CFR § 21), the Americans with Disabilities Act of 1990 (ADA), and Section 504 of the Rehabilitation Act, all other civil rights requirements, and accompanying regulations. This should include a current Title VI plan, completed Community Participation Plan, and a plan to address any legacy infrastructure or facilities that are not compliant with ADA standards. DOT’s and the applicable Operating Administrations’ Office of Civil Rights may work with awarded grant recipients to ensure full compliance.

4. Performance and Program Evaluation: As a condition of grant award, grant recipients may be required to participate in an evaluation undertaken by DOT or another Agency or partner. The evaluation may take different forms such as an implementation assessment across grant recipients, an impact and/or outcomes analysis of all or selected sites within or across grant recipients, or a benefit/cost analysis or assessment of return on investment. DOT may require Applicants to collect data elements to aid the evaluation. As a part of the evaluation, as a condition of award, grant recipients must agree to: (1) make records available to the evaluation contractor or DOT staff; (2) provide access to program records, and any other relevant documents to calculate costs and benefits; (3) in the case of an impact analysis, facilitate the access to relevant information as requested; and (4) follow evaluation procedures as specified by the evaluation contractor or DOT staff.

Recipients and subrecipients are also encouraged to incorporate program evaluation, including associated data collection activities, from the outset of their program design and implementation to meaningfully document and measure their progress towards meeting an Agency priority goal(s). Title I of the Foundations for Evidence-Based Policymaking Act of 2018, Pub. L. No. 115-435 (2019) urges Federal Awarding Agencies and Federal assistance recipients and subrecipients to use program evaluation as a critical tool to learn, to improve equitable delivery, and to elevate program service and delivery across the program lifecycle. Evaluation means “an assessment using systematic data collection and analysis of one or more programs, policies, and organizations intended to assess their effectiveness and efficiency.” 5 U.S.C. § 311. Credible program evaluation activities are implemented with relevance and utility, rigor, independence and objectivity, transparency, and ethics (OMB Circular A-11, Part 6 Section 290).

For grant recipients receiving an award, evaluation costs are allowable costs (either as direct or indirect), unless prohibited by statute or regulation, and such costs may include the personnel and equipment needed for data infrastructure and expertise in data analysis, performance, and evaluation. (2 CFR Part 200).

3. REPORTING

ADDRESSES FOR SUBMITTAL OF REPORTS AND DOCUMENTS

The recipient shall submit all required reports and documents, including those referenced below, under transmittal letter referencing the award number to:

Brian R. Hogge
Construction Team Leader
Office of Infrastructure
Federal Highway Administration
1200 New Jersey Avenue, SE.
Washington, DC 20590
Email: DigitalConstruction@dot.gov

Phone: (202) 366-1562

A. BIENNIAL PROGRESS REPORT

The recipient must submit an electronic copy of the SF-425, Federal Financial Report, and SF-425A, Federal Financial Report Attachment (if applicable). The forms must be submitted on or before the 30th of the month following the period being reported. Final forms are due 90 days after the end of the agreement period of performance. These forms may be found by searching using the form numbers at: <https://www.gsa.gov/forms-library/federal-financial-report>.

The recipient must submit the biennial progress report information listed below as an attachment to the SF-425 question 12.

Reporting periods are defined as:

1st: January – June
2nd: July – December

Reports due on or before:

July 30
January 30

The biennial progress report must include the required certification pursuant to 2 CFR § 200.415.

The biennial progress reports shall include the following:

- a. Work performed for the current 6 months;
- b. Work planned for the upcoming 6 months;
- c. Description of any problem encountered or anticipated that will affect the completion of the work within the time and fiscal constraints as set forth in the agreement, together with recommended solutions to such problems; or, a statement that no problems were encountered;
- d. A tabulation, clearly delineated by Federal share, cost share and total, of the current and cumulative costs expended by quarter versus budgeted costs; and
- e. An analysis of the following, if appropriate at the time of the report:
 - Federal, State, or local cost savings resulting from the project;
 - Project delivery time improvements;
 - Congestion impacts; and
 - Safety improvements for roadway users or construction workers.

B. RECIPIENT INTEGRITY AND PERFORMANCE MATTERS

In accordance with 2 CFR § 200.211 and 2 CFR Part § 200, Appendix XII, if the total value of a selected Applicant's currently active grants, cooperative agreements, and procurement contracts from all Federal Awarding Agencies exceeds \$10 million at any time during the period of performance, then the Applicant must maintain the currency of information reported to the SAM and made available in the Federal Awardee Performance and Integrity Information System about civil, criminal, or administrative proceedings as described in the terms and conditions of any resultant award. This is a statutory requirement under Section 872 of Public Law 110-417, as

amended (41 U.S.C. § 2313). As required by Section 3010 of Public Law 111–212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

SECTION G – FEDERAL AWARDING AGENCY CONTACTS

For questions regarding the Standard Forms or Grants.gov procedures please contact:

Angela Jones
Agreement Specialist
Office of Acquisition and Grants Management
Federal Highway Administration
U.S. Department of Transportation
1200 New Jersey Avenue, SE.
Washington, DC 20590
Email: angela.jones@dot.gov (preferred)
Phone: (202) 366-4255

For questions regarding program eligibility please contact:

Brian R. Hogge
Construction Team Leader
Office of Infrastructure
Federal Highway Administration
1200 New Jersey Avenue, SE.
Washington, DC 20590
Email: brian.hogge@dot.gov
Phone: (202) 366-1562

SECTION H - OTHER INFORMATION

1. PROTECTION OF CONFIDENTIAL BUSINESS INFORMATION

All information submitted as part of or in support of any application shall use publicly available data or data that can be made public and methodologies that are accepted by industry practice and standards, to the extent possible. If the application includes information you consider to be a trade secret or confidential commercial or financial information, the Applicant should do the following: (1) Note on the front cover that the submission "Contains Confidential Business Information (CBI)," (2) mark each affected page "CBI," and (3) highlight or otherwise denote the CBI portions.

DOT will protect confidential information complying with these requirements to the extent required under applicable law. If DOT receives a Freedom of Information Act (FOIA) request for the information that the Applicant has marked in accordance with this section, DOT will follow the procedures described in its FOIA regulations at 49 CFR § 7.29. Only information that is in the separate document, marked in accordance with this section, and ultimately determined to be confidential under 49 CFR § 7.29 will be exempt from disclosure under FOIA.

2. PUBLICATION/SHARING OF APPLICATION INFORMATION.

Following the completion of the selection process and announcement of awards, the FHWA intends to publish a list of all applications received along with the names of the Applicant organizations and funding amounts requested. The FHWA intends to use images, graphics, and photographs included in applications for purposes of communications associated with the ADCMS Program. By submitting an application, the Applicant grants the FHWA a royalty-free, nonexclusive, and irrevocable right to reproduce, publish, or otherwise use its photographs or graphics included in the application for a Federal purpose.

ATTACHMENT A – IMPORTANT DATES

Competition Year	Anticipated Announcement Date	Anticipated Application Deadline	Anticipated Award Date
FY 2022 & 2023	June 27, 2023	August 28, 2023	Fall 2023
FY 2024	May 31, 2024	July 31, 2024	Fall 2024
FY 2025	May 31, 2025	July 31, 2025	Fall 2025
FY 2026	May 31, 2026	July 31, 2026	Fall 2026

Note: The FHWA call for submissions announcement on the Program Office Website at <https://www.fhwa.dot.gov/construction/ADCMS/>