Advanced Digital Construction Management Systems (ADCMS)

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U.S. Department of Transportation

Federal Highway Administration

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Today's Webinar

- What Is ADCMS?
- Program Eligibility
- Selection Criteria
- Application Format and Templates
- Process Details

What Is ADCMS?

- The Bipartisan Infrastructure Law (BIL*) established a new program for the accelerated implementation and deployment of Advanced Digital Construction Management Systems (ADCMS), codified in 23 U.S.C. 503(c)(5).
- BIL provided funding for FY22 through FY26 for this program.
- The statutory program goals will be carried out through the ADCMS Grant Program and other FHWA-led activities, such as peer exchanges, the development and deployment of best practices, and training.

*BIL -Enacted as the Infrastructure Investment and Jobs Act (IIJA) (Pub. L. 117-58, Nov. 15, 2021)

Program Goals (23 U.S.C. 503(c)(5))

- 1. Accelerate adoption of ADCMS throughout project lifecycle
 - Maximize interoperability with other systems or tools
 - Boost productivity
 - Reduce delays
 - Enhance safety & quality

- Promotes more timely information sharing among stakeholders and reduced reliance on paper
- 3. Leverage use of digital tech by contractors
- 4. Develop & deploy best practices

Program Goals Continued

- Increase tech adoption & deployment
 - By States and Local Governments
 - Integrate tech in contracts
- 6. Technical training and workforce development
- 7. Develop guidance to assists in updating State regulations

- 8. Reduce environmental footprint and congestion
- 9. Enhance safety

See NOFO: Section A 4.

Program Eligibility

- Applicants
- Projects
- Project Costs
- Award Size
- Cost Share

Eligible Applicants

State DOTs, including the District of Columbia and the Commonwealth of Puerto Rico

Note: Applicants are encouraged to work in partnership with other State DOTs, local governments, Tribes, and private industry in designing their proposed projects.



Eligible Projects

- Activities that will achieve one or more goals of the ADCMS program.
- Eligible project activities may occur at any point during the project lifecycle.
 (*including during the design and engineering,* construction, and operations phases)

Eligible Project Costs

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

For grant recipients, costs must comply with the requirements in 2 CFR Part 200 and *may* include:

- Personnel (State and/or contractor)
- Equipment
- Travel

Award Size & Available Funds Minimum award: \$1 Million Maximum award: \$5 Million

- Per project selected
- Applicants may receive multiple awards in a single year.

FHWA anticipates awarding 5 to 10 grants for each FY

Available Funds:

- FY 2022 & 2023 Combined: \$34 Million
- FY 2024 to 2026: up to \$17 Million per year

See NOFO: Section B 1 and B 2.



Cost Share & Period of Performance

- 20% Match Required
- Period of Performance is anticipated to be 1 to 4 years, starting from the date funds are obligated in FHWA's Financial Management Information System (FMIS)



Application Content

- Standard Forms
- Technical Application
- Budget Application
- Supporting Documentation



Standard Forms

- SF-424 Applicant info and brief project description.
- SF-424A Basic Budget Information

https://www.grants.gov/web/grants/forms/sf-424-family.html

Technical Application

- Cover Page
- Table of Contents
- Project Description
- Project Team Information
- Project Readiness
 - Technical Feasibility
 - Project Schedule
 - Project Risks and Mitigation Strategies
- Responsiveness to Merit Criteria

Budget Application

- Budget Tables:
 - Detailed budget table for each year,
 - Summary of all years for all activities.
- Budget Application:
 - Cost-sharing information,
 - Contingency planning,
 - Limitations on use of non-Federal funds.
- Other Business Information:
 - See NOFO Section D.2.b.2.III.

Supporting Documents (as needed)

- Technical Information
- Letters of Endorsement
- Memoranda of Understanding

Note: Weblinks may be used as appropriate instead of attaching information

Application Review

- Technical Merit
- Cost
- Additional Selection Considerations
- Review and Selection Process
- Overall Ratings
- USDOT Priorities
- Selection Process

Technical Merit Criteria

- Technical and Management Approach
- Promotes efficient information sharing among stakeholders
- Accelerates technology adoption and deployment

- Safety
- Workforce Development, Job Quality and Wealth Creation
- Environment, Climate Change and Sustainability, and Equity

Criteria Rating - Highly Qualified

Directly addresses:

- Criterion #1 Eval Factors 1 and 2
- Criterion #2 Eval Factors 1 and 2
- Criterion #3 Eval Factor 1
- Criterion #4, #5 & #6 At least one Eval Factor addressed on each

Criteria Rating - Qualified

Directly addresses:

- Criterion #1 Eval Factors 1 and 2
- Criterion #2 Eval Factors 1 and 2
- Criterion #3 Eval Factor 1
- At least one Eval Factor on one of Criterion #4, #5 or #6

Criteria Rating – Not Qualified

A Not Qualified project is one that fails to meet the criteria as described above for a Qualified project. U.S. Department of Transportation

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Criterion #1 – Technical & Management Approach

1. Builds upon an existing framework or is identified as a need in existing data plans.

2. 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. Staffing structure is adequate.

5. Applicant has the commitment and resources to fully implement the project.

6. Risks understood and mitigation strategies are comprehensive and implementable. See NOFO: Section E 1.

Criterion #2 – Promotes efficient information sharing among stakeholders

1. Promotes efficiencies and will result in time savings during project development or construction.

2. Will eliminate or substantially decrease the use of paper documentation.

3. Will improve information sharing and the likelihood it will result in improved decision making when issues arise during project development or construction.

4. Will provide benefits to both project owners and contractors in either time or cost savings.

Criterion #3 – Accelerate technology adoption & deployment

- 1. Creates a process that can be utilized by other transportation organizations.
- 2. Process enhancement can be utilized by other entities without the need for significant capital investment.
- 3. Process enhancements address missing electronic data connections identified by multiple organizations.
- 4. Results in an open data format or eliminates the need for data conversion for use by other software/data systems.
- 5. Improves budgeting or cost control.

See NOFO: Section E 1.

Criterion #4 - Safety

- 1. Eliminates or mitigates the amount of time workers are in hazardous situations (e.g., work zones) gathering data adjacent to active roadways.
- 2. Reduces the time a work zone needs to be in place.
- 3. Improves quality and timeliness of information to the public, thereby making travel through a work zone safer.

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

1. 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 & Equity

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.

Priority Considerations

- 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.
- Projects that support the FHWA <u>"Advancing BIM for</u> <u>Infrastructure: National Strategic Roadmap"</u> (June 2021; FHWA-HRT-21-064) and related concepts that enhance the exchange and management of digital asset information.



Selection Process

- Applications are screened for eligibility, completeness, and compliance with NOFO requirements.
- Technical Review Team (TRT) reviews and assigns rating.
- TRT also reviews Budget Applications.
- Among projects with similar merit, FHWA prioritizes projects addressing at least one of the additional selection considerations.
- TRT will recommend projects for award.
- FHWA Administrator makes final award selections



Application Submission

- All applications must be submitted through grants.gov
- Applications are due on July 30, 2024, by 11:59 PM EDT



Questions?

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