ACCELERATED IMPLEMENTATION AND DEPLOYMENT OF ADVANCED DIGITAL CONSTRUCTION MANAGEMENT SYSTEMS PROGRAM

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<th>Fiscal year (FY)</th>
<th>FAST Act (extension)</th>
<th>Bipartisan Infrastructure Law (BIL)</th>
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<td>2021</td>
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<td>Contract authority</td>
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Note: Except as indicated, all references in this document are to the Bipartisan Infrastructure Law (BIL), enacted as the Infrastructure Investment and Jobs Act, Pub. L. 117-58 (Nov. 15, 2021).

Program Purpose

The BIL establishes the Accelerated Implementation and Deployment of Advanced Digital Construction Management Systems program to promote, implement, deploy, demonstrate, showcase, support and document the application of advanced digital construction management systems, practices, performance, and benefits.

Statutory Citation

- § 13006(a)(3)(D); 23 U.S.C. 503(c)(5)

Funding Features

Type of Budget Authority or Authorization of Appropriations

- Contract authority from the Highway Account of the Highway Trust Fund, subject to the overall Federal-aid obligation limitation.

Source of funding

- The BIL funds the program through a set-aside from the Technology and Innovation Deployment Program. [23 U.S.C. 503(c)(5)(C)]

Federal Share

- The Federal share of the cost of a project carried out with ADCMS funds shall be 80%. [§ 11101(c)(3)(A)]

Program Goals

The ADCMS program goals include—

- Accelerated State adoption of advanced digital construction management systems applied throughout the construction lifecycle (including through the design and engineering, construction, and operations phases) that—
  o Maximize interoperability with other systems, products, tools, or applications;
  o Boost productivity;
  o Manage complexity;
  o Reduce project delays and cost overruns; and
  o 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 best practices for 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 advanced digital construction management systems and related technologies;
- Reduction in the environmental footprint of construction projects using advanced digital construction management systems resulting from elimination of congestion through more efficient projects; and
- Enhanced worker and pedestrian safety resulting from increased transparency. [23 U.S.C. 503(c)(5)(B)]

**Program Features**

This is a new program under BIL.

**Publication**

At least annually, the Secretary shall issue and make available to the public on a website a report on—

- Progress made in the implementation of advanced digital management systems by States; and
- The costs and benefits of the deployment of new technology and innovations that substantially and directly resulted from the program.

- The report may include an analysis of—
  - Federal, State, and local cost savings;
  - Project delivery time improvements;
  - Congestion impacts; and
  - Safety improvements for roadway users and construction workers. [23 U.S.C. 503(c)(5)(D)]

**Additional Information and Assistance**

- FHWA can connect you with your local FHWA office and support you with technical assistance for planning, design, construction, preserving, and improving public roads and in the stewardship of Federal funds. For assistance, visit: https://www.fhwa.dot.gov/bipartisan-infrastructure-law/technical_support.cfm.

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