

**TRANSPORTATION POOLED FUND PROGRAM  
QUARTERLY PROGRESS REPORT**

Lead Agency (FHWA or State DOT): Iowa DOT

**INSTRUCTIONS:**

Lead Agency contacts should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.

<b>Transportation Pooled Fund Program Project #</b> <i>(i.e., SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX))</i> TPF-5(523)	<b>Transportation Pooled Fund Program - Report Period:</b> <input checked="" type="checkbox"/> Quarter 1 (January 1 – March 31) <input type="checkbox"/> Quarter 2 (April 1 – June 30) <input type="checkbox"/> Quarter 3 (July 1 – September 30) <input type="checkbox"/> Quarter 4 (October 1 – December 31)	
<b>TPF Study Number and Title:</b> Building Information Modeling (BIM) for Bridges and Structures – Phase II (HDR Portion)		
<b>Lead Agency Contact:</b> Khyle Clute	<b>Lead Agency Phone Number:</b> --	<b>Lead Agency E-Mail:</b> Khyle.Clute@iowadot.us
<b>Lead Agency Project ID:</b> --	<b>Other Project ID (i.e., contract #):</b> --	<b>Project Start Date:</b> 2/1/2024
<b>Original Project Start Date:</b> 2/1/2024	<b>Original Project End Date:</b> 1/31/2025	<b>If Extension has been requested, updated project End Date:</b> 3/31/2027

**Project schedule status:**

<input checked="" type="checkbox"/> On schedule	<input type="checkbox"/> On revised schedule	<input type="checkbox"/> Ahead of schedule	<input type="checkbox"/> Behind schedule
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**Overall Project Statistics:**

Total Project Budget	Total Funds Expended This Quarter	Percentage of Work Completed to Date
\$1,301,794	\$117,416	74%

*2026 Q1 note: This report includes added scope and budget for contract Year 3, so percentage of work completed is lower relative to the previous quarterly report.*

## Project Description:

The AASHTO Committee on Bridges and Structures has been working on a comprehensive plan to advance the use of BIM specifically for bridges and structures. In 2017, the TPF-5(372) BIM for Bridges and Structures project provided the primary funding mechanism for developing the foundational elements to implement open data exchange standards to support BIM for bridges and structures in the U.S. This multi-year effort focused on developing the open standards for enabling digital data exchange from design to construction for workhorse bridges using the Industry Foundation Classes (IFC) schema. A significant amount of progress was accomplished through this effort, which resulted in an implementable AASHTO guide specification to exchange 3D model-based information for workhorse bridges to execute construction. The published IDM was used as a basis for related work products that will allow for further data exchange standards to be implemented into software products and utilized at the agency level.

The current pooled fund effort, TPF-5(523) BIM for Bridges and Structures – Phase II, was created for the purpose of developing additional technical solutions for delivering 3D bridge models and other digital data in an open, non-proprietary format. The Phase II effort will expand upon the Phase I work and undertake additional exchanges in the bridge lifecycle beyond the design-to-construction data exchange. The objectives for TPF-5(523) BIM for Bridges and Structures - Phase II project are to:

1. Develop additional technical solutions to enable the use of IDM requirements specific to IFC exchanges for multiple ways of using bridge models (or model use cases), continue software vendor engagement efforts, and assist State DOTs with piloting and adoption of future IDS.
2. Establish an Industry Advisory Group and Technical Working Group to enhance engagement with industry stakeholders, especially contractor and construction-related groups, and to obtain direct input from these stakeholders on the additional technical solutions to be developed under Phase II.
3. Help State DOTs implement the standards developed during TPF-5(372) through pilot projects selected by individual pooled fund members to produce, export, and validate IFC deliverables to support bidding, construction, and fabrication.

To achieve these objectives, the team will carry out the following tasks, with current percent complete shown:

	% Complete
Task 1: Development of National Open Data Standards	67%
Task 1.1 Methodology Development	
Task 1.2 Evaluation and Final Selection of Exchanges	
Task 1.3 Open Data Standard Development	
Task 1.4 Software Vendor Engagement	
Task 2: State DOT Pilot Project Support	80%
Task 3: External Stakeholder Collaboration Activities	85%
Task 3.1 Update Stakeholder Communication and Engagement Plan	
Task 3.2: Prepare Presentations and Educational Videos	
Task 3.3 Industry Advisory Group Collaboration	
Task 4: Client Communication	67%
Task 5: Project Management and Internal Coordination	75%
Task 6: BIM Week (in-person collaboration meetings)	80%

*Note: The percentage completion values shown correspond to the percent complete for the current contract year. The project is anticipated to last through January 2028 with contract renewals at the end of each year. The current quarterly progress report is inclusive of contract years 1, 2, and 3.*

## Progress this Quarter

(includes meetings, work plan status, contract status, significant progress, etc.):

### Q1 2026

- Task 1.1 Methodology Development
  - Task is complete.
- Task 1.2 Evaluation and Final Selection of Exchanges
  - Task is complete.
  - Per TPF member preference, the next data exchange to be developed is the fabrication detail exchange.
- Task 1.3 Open Data Standard Development
  - Completed updates to the design-to-construction data dictionary workbook, IDM, and IDS package
  - Technical coordination with TPF-5(480) BIM for Infrastructure and buildingSMART International
  - Initiation of fabrication detail exchange development and kickoff of Technical Working Group meetings
- Task 2 State DOT Pilot Project Support
  - Developed survey about IFC bridge pilot projects for pooled fund members
- Task 3 External Stakeholder Collaboration Activities
  - Presented a BIM Pooled Fund update in coordination with BIM for Infrastructure at the FHWA Digital Delivery Stakeholder Group virtual meeting in January 2026
- Task 4 Client Communication
  - Planning activities for contract Year 3

### Anticipated work next quarter:

- Task 1.3 Open Data Standard Development
  - Post the updated design-to-construction IDM as a draft for industry use, including the data dictionary workbook and IDS package
  - Post updated version of the data dictionary to the bSDD service
  - Development work for the fabrication detail exchange
  - Prepare and conduct monthly meetings with the Technical Working Group, with separate meetings for the steel and concrete focus groups
- Task 1.4 Software Vendor Engagement
  - Prepare updated Software Vendor Engagement Plan
- Task 2 State DOT Pilot Project Support
  - Provide advisory support to State DOT IFC bridge pilot projects, pending funding availability
- Task 3 External Stakeholder Collaboration Activities
  - Provide updates/coordination for FHWA Digital Delivery Stakeholder Group
- Task 4 Client Communication
  - Roadmap Infographic updates

## Significant Results:

None at this time

**Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).**

Schedule challenge: Updates to the design-to-construction data dictionary workbook, IDM, and IDS took more time and resources than anticipated.

Recommended solution: Leverage the updated format of the technical work products for more efficient data exchange development efforts for the next set of data exchanges.

## Potential Implementation:

The outcomes of TPF-5(372) and updates provided under TPF-5(523) are being implemented by software vendors and deployed by DOTs via IFC bridge pilot projects.