

## 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)                  TPF-5(480)</i>		<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 Infrastructure			
<b>Lead Agency Contact:</b> John Wilkerson Abhishek Bhargava, BIM Launch Alliance	<b>Lead Agency Phone Number:</b> 517-610-6736	<b>Lead Agency E-Mail:</b> john.wilkerson@mbakerintl.com; Abhishek.Bhargava@wsp.com	
<b>Lead Agency Project ID:</b>	<b>Other Project ID (i.e., contract #):</b>	<b>Project Start Date:</b> 4/12/2023	
<b>Original Project Start Date:</b> 12/31/2023	<b>Original Project End Date:</b> 12/31/2027	<b>If Extension has been requested, updated project End Date:</b> 0	

Project schedule status:

- On schedule     
  On revised schedule     
  Ahead of schedule     
  Behind schedule

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Percentage of Work Completed to Date
\$2,416,369	\$1,458,045.50 (incl. Work in Progress)	60.3

Quarterly Project Statistics:

Total Project Budget And Percentage This Quarter	Total Funds Expended This Quarter	Total Percentage of Time to Date
	\$169,350	60.3

**Project Description:**

Activities that advance the short and medium term goals of the BIM National Strategic Work Plan will be prioritized and carried out by the pooled fund participants. Meetings will serve as a forum to facilitate knowledge sharing among participants. Proposed activities include:

- Develop BIM foundational use cases and workflows. Highlight more effective digital exchange of information (e.g. survey to design, design to construction, construction to asset management, etc.). This kind of exchange will increase collaboration and automation, reduce duplication of effort and avoid errors.
- Establish BIM Processes (e.g. Develop contract model language to guide BIM procurements.)
- Identify and Execute Capacity-Building Activities (e.g. Establish project selection criteria for BIM implementation; Identify project types and use cases for early pilot projects phase).
- Enhance Skills and Collaboration (e.g. Establish workforce training curriculum to set expectations about required BIM qualifications. Understand organizational roles and responsibilities to connect data silos).
- Deploy Standards-Based Data Management Tools and Techniques (e.g. Develop catalog of information model requirements to define what data should be created and why. Develop standard information delivery specifications for data exchange between systems).
- Lessons Learned - Identify issues with current implementation efforts and share potential solutions to help move toward to greater BIM maturity.
- Research Priorities - Identify short-term and long-term research needs and strategically prioritize the needs so the most urgent and impactful opportunities are addressed first.
- Information Exchange - Establish a forum/expert hub for practitioners in the highway industry to understand the various tools and technologies being used, promote the common modeling formats and share experiences.

The objective will be to increase the BIM maturity of each state by one as it relates to the FHWA BIM NSWP. This will be accomplished by publishing artifacts (living and evidence based versions) through the BIM Implementation Guidebook and creating BIM Deployment Tools related to openBIM data exchanges. The BIM Clearinghouse will be the hub for agencies to access these useful tools to help the mature on their journey toward BIM for Infrastructure.

**Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):****COORDINATION AND OUTREACH ACTIVITIES**

Focus on D-C IDM for review by TAC for each Discipline Group

Organized and attended Monthly Project Sprint Meetings

Deliverable Status:

The first video was published

**Task 0:**

Year	Deliverable	Description	D-C	DABs	Total	Comments
3	1	Project kickoff meeting and work plan	N/A	N/A	100%	Year 3 work plan and monthly meeting overview
3	2	Monthly progress meetings (12), workgroup meetings (24), and Technical meetings with BIM for Bridges & Structures Pooled Fund (3)	N/A	N/A	65%	7 monthly meetings, 16 work group meetings, 2 Technical Meetings
3	3	Quarterly progress reports (4)	N/A	N/A	75%	2025 Q3 and Q4, 2026 Q1
3	4	Three-day, in-person meeting (1)	N/A	N/A	100%	<a href="#">2024 12 03 BIM Week 2024</a>
3	5	Virtual, end-of-the-year meeting (1)	N/A	N/A		

**Task 1:**

Year	Deliverable	Description	D-C	DABs	Total	Comments
2	10	Continued development of marketing & communications collateral (6 flyers; 6 short videos)	N/A	N/A	45%	<a href="#">Videos</a>
3	6	Maintain, support and enhance the TPF-5(480) website.	N/A	N/A	60%	Website Updated Pending TAC Review
3	7	Conference/event presentations (6)	N/A	N/A	80%	COD, COC, IHEEP, COB, 2 DDSG Meetings
3	8	Project-specific stakeholder with industry (2) and software vendors (2)	N/A	N/A	10%	Drafts in progress and planning Started
3	9	White paper: CDE Requirements to Enable open BIM Workflows.	N/A	N/A	0%	

**Task 2:**

Year	Deliverable	Description	D-C	DABs	Total	Comments
2	11	Scope of DABs IDM	100%	90%	96%	DABs Scope Early April 2026
2	12	Baseline report DABs	100%	90%	96%	DABs Internal Review by 4/10/2026
3	10	Scope of IDS and mapping of IDS elements to the IDM	0%	0%	0%	
3	11	Scan of design authoring and CDE tools and plan for use on project	0%	0%	0%	
3	12	Scan of IDS development and testing tools and recommendations for project	0%	0%	0%	

**Task 3:**

Year	Deliverable	Description	D-C	DABs	Total	Comments
2	13	Detailed digital workflow/process models for DABs data exchange	100%	40%	70%	<a href="#">Appendix B Detailed Process Maps Design to Construction.pdf</a>
2	14	Preliminary Information Architecture for D-C and DABs data exchanges– (a) Information Requirements Database (b) Data Dictionary to support IDMs	95%	80%	88%	<a href="#">TAC Review</a>
2	15	Guidance to link information requirements to BIM execution plan for D-C and DABs	98%	90%	94%	<a href="#">Work Plan Document</a>
3	13	Gap analysis spreadsheet showing differences in the data models from various States and the data in the US roads data dictionary	30%	30%	30%	Use about 5 states target draft 4/15/26. April TAC meeting
3	14	Level of development matrix for the models acquired from each of the States, and, LOD specification mapping requirements in the BEP	0%	0%	0%	
3	15	Prototype design models that reflect the data in D-C & DABs data dictionary	20%		20%	Need IDS draft. Internal Alignment on efforts to date
3	16	Models loaded in the BIM TPF CDE with metadata	0%	0%	0%	

**Task 4:**

Year	Deliverable	Description	D-C	DABs	Total	Comments
2	16	Beta Info Architecture for D-C process model	60%	N/A	60%	Process map definitions. Working to align processes with preliminary information architecture
2	17	Beta Info Architecture for IFC-Aligned Data Dictionary (D-C)	40%	N/A	40%	<a href="#">REVIEW-US-RoadsDD-v1.3.xlsx</a>
2	18	Draft IDM for the D-C Information Exchange	60%	N/A	60%	<a href="#">REVIEW D-C Information Delivery Manual v1.3.docx</a>
3	17	Beta Info Architecture for DABs process model	N/A	50%	50%	SME Work group meetings are complete.
3	18	Draft DABs IDM	N/A	0%	0%	
3	19	Draft IDS (XML) for D-C Exchange	N/A	0%	0%	

**Task 5:**

Year	Deliverable	Description	D-C	DABs	Total	Comments
2	19	Final Year 2 Data Dictionary to cover the process models and information architecture	15%	N/A	15%	Scripting for IDS development from the IDM
2	20	Final IDM for the D-C Exchange	15%	N/A	15%	
3	20	Final IDM for the DABs Exchange.	N/A	0%	0%	
3	21	Unit Test Scripts and Test Results from IDS Unit Testing, along with Final IDS		0%	0%	

**Anticipated work next quarter:****COORDINATION AND OUTREACH ACTIVITIES**

Establish Technical Working Groups with Industry to review the D-C IDM Information Requirements and DABs IDM Scope

Finish remaining videos

**Task 0:**

Year	Deliverable	Description	D-C	DABs	Total	Comments
3	1	Project kickoff meeting and work plan	N/A	N/A	100%	Year 3 work plan and monthly meeting overview
3	2	Monthly progress meetings (12), workgroup meetings (24), and Technical meetings with BIM for Bridges & Structures Pooled Fund (3)	N/A	N/A	100%	10 monthly meetings, 24 work group meetings, 3 Technical Meeting
3	3	Quarterly progress reports (4)	N/A	N/A	100%	2026 Q1
3	4	Three-day, in-person meeting (1)	N/A	N/A	100%	<a href="#">2024 12 03 BIM Week 2024</a>
3	5	Virtual, end-of-the-year meeting (1)	N/A	N/A	100%	

**Task 1:**

Year	Deliverable	Description	D-C	DABs	Total	Comments
2	10	Continued development of marketing & communications collateral (6 flyers; 6 short videos)	N/A	N/A	100%	Post all Videos and Post web based flyers
3	6	Maintain, support and enhance the TPF-5(480) website.	N/A	N/A	100%	
3	7	Conference/event presentations (6)	N/A	N/A	100%	COD, COC, IHEEP, COB, DDSG, COBS
3	8	Project-specific stakeholder with industry (2) and software vendors (2)	N/A	N/A	80%	2 Industry Meetings and 1 Vendor Meeting
3	9	White paper: CDE Requirements to Enable open BIM Workflows.	N/A	N/A	100%	

**Task 2:**

Year	Deliverable	Description	D-C	DABs	Total	Comments
2	11	Scope of DABs IDM	100%	90%	100%	DABs Scope April 2026
2	12	Baseline report DABs	100%	50%	100%	DABs April 2026
3	10	Scope of IDS and mapping of IDS elements to the IDM	0%	0%	25%	Develop draft document
3	11	Scan of design authoring and CDE tools and plan for use on project	0%	0%	0%	
3	12	Scan of IDS development and testing tools and recommendations for project	0%	0%	0%	

**Task 3:**

Year	Deliverable	Description	D-C	DABs	Total	Comments
2	13	Detailed digital workflow/process models for DABs data exchange	100%	100%	100%	Finalize DABs
2	14	Preliminary Information Architecture for D-C and DABs data exchanges– (a) Information Requirements Database (b) Data Dictionary to support IDMs	100%	100%	100%	Finalize DABs
2	15	Guidance to link information requirements to BIM execution plan for D-C and DABs	100%	100%	100%	Finalize Document
3	13	Gap analysis spreadsheet showing differences in the data models from various States and the data in the US roads data dictionary	100%	100%	100%	April TAC
3	14	Level of development matrix for the models acquired from each of the States, and, LOD specification mapping requirements in the BEP	100%	100%	100%	May TAC
3	15	Prototype design models that reflect the data in D-C & DABs data dictionary	100%	100%	100%	
3	16	Models loaded in the BIM TPF CDE with metadata	0%	0%	0%	

**Task 4:**

Year	Deliverable	Description	D-C	DABs	Total	Comments
2	16	Beta Info Architecture for D-C process model	85%	N/A	90%	Submit Final Draft
2	17	Beta Info Architecture for IFC-Aligned Data Dictionary (D-C)	85%	N/A	90%	Submit Final Draft
2	18	Draft IDM for the D-C Information Exchange	100%	N/A	100%	Submit Final Draft
3	17	Beta Info Architecture for DABs process model	N/A	80%	80%	SME Work group meetings are complete.
3	18	Draft DABs IDM	N/A	0%	0%	
3	19	Draft IDS (XML) for D-C Exchange	N/A	0%	0%	

**Task 5:**

Year	Deliverable	Description	D-C	DABs	Total	Comments
2	19	Final Year 2 Data Dictionary to cover the process models and information architecture	60%	N/A	60%	Submit Draft
2	20	Final IDM for the D-C Exchange	60%	N/A	60%	Submit Draft
3	20	Final IDM for the DABs Exchange.	N/A	0%	0%	
3	21	Unit Test Scripts and Test Results from IDS Unit Testing, along with Final IDS		0%	0%	

**Significant Results:**

Deliverables completed are available for immediate use.

- Task 1 (Outreach): Marketing & communications collateral (6 flyers; 6 short videos) progressed to 45% overall; video development ongoing. Simultaneous development of 3 flyers and 2 additional videos in progress.
- Task 1 (Website): TPF-5(480) website maintenance/enhancements progressed to 60%; updates completed to the BIM Clearinghouse content pulling several published research documents from state DOTs, FHWA, and NCHRP, brand refresh, video/flyer page.
- Task 1 (Presentations): Conference/event presentations progressed to 80% (COD, COC, IHEEP, COB, and two DDSG meetings).
- Task 2 (DABs IDM): Scope and baseline report advanced to 96% overall. Draft scope and baseline materials were completed during Q1 and queued for early Q2 review/finalization.
- Task 3: Detailed DABs workflow/process models progressed to 70% overall; preliminary information architecture (information requirements database + data dictionary) progressed to 88% and is in TAC review; BEP linkage guidance progressed to 94%.
- Task 3 (Year 3 items): Gap analysis (US roads data dictionary vs. state models) progressed to 30% during Q1, with the initial draft planned for early Q2; LOD matrix is at 0%; prototype design models are at 20% and are dependent on an IDS draft and internal alignment.
- Task 4: Beta information architecture for the D-C process model is at 60%; IFC-aligned D-C data dictionary beta information architecture is at 40%; draft D-C IDM is at 60%; DABs process model beta information architecture is at 50% (SME workgroup meetings complete).
- Task 5: Final Year 2 data dictionary and final D-C IDM are each at 15%; IDS-development scripting from the IDM is underway.

**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).**

AASHTO has formed an Executive Task Force to determine later this year how digital standards should be governed, adopted or maintained. The outcome of the AASHTO Executive Task Force will determine how the final IFC aligned data standards being developed as part of this project will be delivered for industry use and adoption.

**Potential Implementation:**

Living draft materials as noted in the work completed this quarter are available to the pooled fund team through the project SharePoint Site and will become available for all state DOTs through the BIM for Infrastructure Website.

[bimclearinghouse.com](http://bimclearinghouse.com)