

October 24, 2022

## Research Proposal TPF5(480): [Building Information Modeling \(BIM\) for Infrastructure](#)

### Questions and Responses

Q1) The RFP notes that responses must comply with the proposal guidelines (<https://iowadot.gov/research/documents/ProposalGuidelines.pdf>). In guidelines Section XIV. Budget, it states to show the estimated costs for the entire research project. Given the uncertainties and complexities of this multi-year project in conjunction with the number of other ongoing BIM-related efforts, it would be very difficult for proposers to develop a detailed project budget for each year of at the time of proposing as it is difficult to account for activities and results of the other BIM-related efforts. Are proposers expected to prepare detailed work budgets for each year at the time of proposal submittal and are proposers held to those budgets even as the activities may change in future years due to the other BIM-related projects?

R1) There is an expectation that detailed budgets and activities for years one and two should be obtainable and that few, if any, changes will be needed as those are short-term projections. Years three and beyond are expected to contain anticipated activities but with less detailed and estimated budget owing to the expectation that other BIM-related efforts may significantly change the level of depth required for activities noted in the RFP and thus the resulting budgets.

Since each year's activities will be scoped individually throughout the project to account for the changing BIM landscape, future years (especially three and beyond) should be provided as an estimate at the time of proposal but proposers will not be held to those estimates when the time comes to scope that individual year. It is expected that year one's estimate should be very close to the actual scope with year two's being close as well.

Q2) Related to Question 1, is there any flexibility related to raising the ceiling of the funding limitations should the funding needed to complete these tasks require more than the stated budget?

R2) Since this project is a pooled fund open to funding support from every state DOT and FHWA, the current budget ceiling of \$2,600,000 would rise with each additional partner. At the time of RFP posting, the available ceiling was the amount provided. Should additional partners join, additional funds would become available to scope against in future years. In addition, should other BIM-related efforts provide results overlapping with intended activities of this project, that may reduce the budget needed to complete that activity. The funding amount available to be scoped will be provided in advance of each year to account for fluctuating budgets spent versus available funds.

Should the proposer be hesitant about their ability to accomplish the desired activities in the RFP due to the funding limitations, the proposal should address areas of concern and activities they assume may be partially covered in other projects and will spend less time on or activities that

---

may provide less value than the estimated budget needed to accomplish and would be candidates for removing in future years.

**Q3) Is this a single-award or multiple-award contract?**

R3) This is presumed to be a single-award contract that may have one or more subcontractors. Should the need for a multiple-award contract arise, discussions with potentially involved proposers will take place to determine the best course of action.

**Q4) Data dictionary is mentioned in the tasks but not in the deliverables section. Is it implied in another deliverable? What form and format should the data dictionary be delivered in?**

R4) It was an oversight not to list it in the deliverables and it would be a deliverable. Offerers should propose the form and format that should be delivered, with the objective that the deliverable is compatible with and can be used to enhance other data dictionary efforts.

**Q5) Minimum Priority Task 1.e outlines the need to “develop a forum for best practices”. Are we supposed to develop the forum and implement it or recommendations for how to develop a forum as 1.e.vi seems to suggest? In either case, neither a forum nor a recommendation for a forum are in the deliverables list on Page 10.**

R5) Such a forum may be convened through other efforts but recommendations on the scope, functioning and makeup of such a forum is being requested.

**Q6) Related to Question 5, can you please clarify the relationship between the tasks and deliverables as has been articulated in the RFP?**

R6) The minimum project tasks listed were intended to indicate the tasks identified by the pooled fund team as foundationally critical to achieve the objectives of the pooled fund. Those listed are not necessarily the only tasks that the proposing team could undertake, nor do they intend to prescribe every subtask likely needed to complete each task.

Deliverables shown are the sharable results of those tasks, mostly in white paper form. Different or additional deliverables beyond those listed could be used to support the proposer's understanding of the main objectives and demonstrate how those objectives would be accomplished through the expanded list of tasks and subtasks.

**Q7) The clearinghouse is mentioned in as part of one of the five key areas—key area 4 (a) on Page 5 of the RFP and the again in the Minimum Priority Task 1.v (Page v of the RFP) and then again in the Deliverables section on Page 10. The RFP indicates that the clearinghouse should be “searchable.” Are there technical requirements for the clearinghouse?**

R7) The offeror shall recommend how to structure, house, and maintain the clearinghouse so that it has maximum effectiveness in reaching a wide audience with current information and guidance.

**Q8) What are the technical requirements for delivering the 3D cell library for parametric elements?**

R8) This is for offerors to describe in their proposal. This is an example of something that would be a part of the clearinghouse. As such, structuring the contents so that populating, vetting and accessing the information should be described.

Q9) No project management task has been identified. In addition to allowing the proposers to reorganize the order of the priority tasks, are the proposers allowed to propose essential additional tasks such as this as part of our overall proposal budget (not just as options)?

R9) Yes. Related to Response 6, the tasks listed may not be all encompassing depending on how the proposing team plans to achieve the objectives provided through the tasks and deliverables noted in the RFP.

Q10) Has a location for the in-person meeting been defined? Please share the intent of the meeting and what its objectives so we can plan and budget our travel appropriately.

R10) Additional Information 4 provides some guidance as to the approach to the in-person annual meetings. The time and location is likely to change each year and may be placed adjacent to related AASHTO or TRB committee meetings in support of the pooled fund.

The intent of each in-person meeting usually focus on current project updates, updates on other BIM-related activities that pooled fund members are also on, working group meetings, etc. While specific objectives change from year to year, they are agreed upon by the collective group of pooled fund members and the selected firm prior to the meeting. Shorter virtual meetings are intended to occur throughout the year (e.g., quarterly, biannually) and the in-person should cover the same type of information plus the opportunities for additional breakout sessions between pooled fund members, selected firm, industry, etc.

Since the date and locations are typically not determined until a few months prior to the meeting, the proposal budget can include a simple estimate of \$X (e.g. \$1,500 or \$2,000) per firm team member per year. Travel for pooled fund members and the meeting space is covered by a separate agreement as noted.

Q11) Deliverable 33, Page 10: please elaborate the acronym TAC. Who is a part of TAC?

R11) TAC stands for Technical Advisory Committee and is comprised of one or more technical representatives from each partner agency and FHWA.

Q12) Additional Information #3, Page 11: What is the composition of the pooled fund evaluation team?

R12) The pooled fund evaluation team is comprised of one voting technical representative from each partner agency and FHWA.

Q13) Page 4, Key area 1.a mentions NCHRP 10-111 as providing “will provide a good example from bridges that could be modified for this effort.” The scope of this project on NCHRP’s website appears to focus on “...technical requirements for the selection of 3D model viewers for construction inspection.” Is another project implied. Also, NCHRP research projects have long lead times. How does the pooled fund panel intend to harmonize the need to deliver quick results with research that is outside the control of the proposers? Also, aside from the proposing team’s resources, what additional influence exists to ensure

---

coordination between various parties conducting valuable research is shared to an adequate degree and in a timely manner?

R13) The referenced NCHRP 10-111 was incorrect. The reference should have been to NCHRP 10-113 *Quality Management for 3D Model-Based Project Development and Delivery*. The TAC is comprised of members who serve on various project panels and/or working groups and committees. They have a key role to play in ensuring that synergies between different efforts/projects can be leveraged to the maximum extent possible. With one of the underlying goals of this project being to align and leverage various efforts in the larger BIM community, this project was referenced as an example of one such opportunity.

Q14) The guidelines for the proposal organization in “Required Format for Iowa DOT Research Proposals” is very Iowa-specific. For example, “Section IX. Implementation/Technology Transfer, ask the proposers to describe how Iowa cities, counties or the Iowa DOT can apply the anticipated research results to improve their practice.”. Similarly, “Section XIII. Iowa DOT or Local Jurisdiction Involvement”, asks the proposers to describe any assistance required from Iowa cities, counties, or the Iowa DOT.”; however, we expect the non-Iowa DOT benefactor’s implementation of the product as well. Therefore, are we allowed to include DOTs other than Iowa in addressing the research product?

R14) Yes. The proposal guidelines referenced are those used by Iowa DOT Research for all research-related RFPs. Since Iowa is the lead organization for this pooled fund research project and is responsible for the administrative duties including RFP, contracting, etc., the standard research project proposal guidelines are utilized. Since this RFP is for a pooled fund project, it would seemingly benefit the partnering organizations and their local jurisdictions as well. Proposers are welcome to generalize this section to DOTs and local jurisdictions nationwide rather than focusing specifically on Iowa.