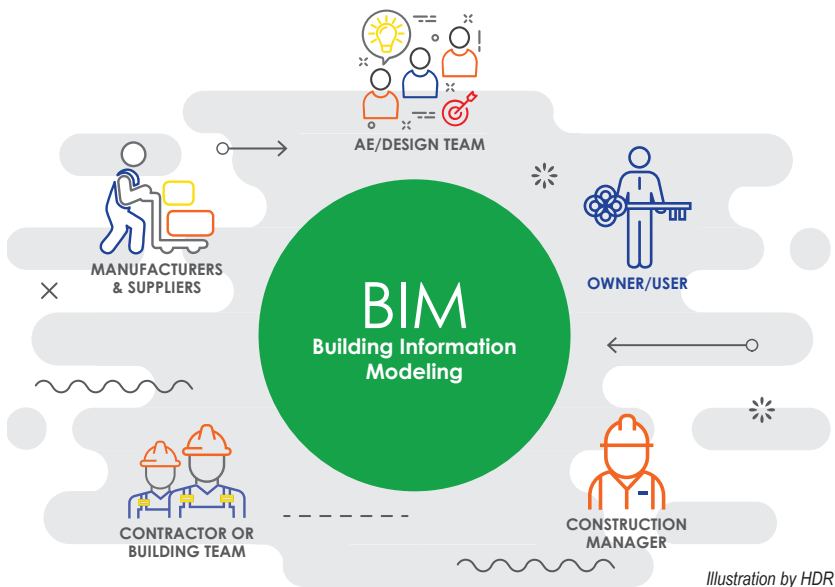


BIM FOR INFRASTRUCTURE

How It Affects Your Workflow

Building Information Modeling (BIM) deployment for transportation infrastructure projects is a trend that is increasing, and with this new technology, there are some potential users wondering how it will affect their work.



Building Information Modeling

The process of developing a 3D virtual information model involves much more than the skill to run modeling software. BIM allows owners, planners, engineers, surveyors, and contractors to collaborate around the development of a built environment. Agency requirements are developed and an understanding of the information contained in the model, and how it should be applied, is formed. Without this common understanding, the model's information can be misused or misrepresented.

Having a developed model allows for design collaboration by analyzing all discipline models during a review session. This process, called 3D Coordination, utilizes a user-guided programmable function to selectively detect interference between modeled objects. Commonly known as “clash detection,” this process is by far the most valuable tool provided through the implementation of BIM.

For more information about BIM for Infrastructure, visit <https://www.fhwa.dot.gov/construction/bim/>.



U.S. Department of Transportation
Federal Highway Administration

BIM Execution Plan (BEP)

A BIM Manager, trained in the practice of managing information modeling coordination, is intended to work closely with the design team to develop a comprehensive BIM Execution Plan that outlines several project elements.

PROJECT ELEMENTS

- Roles and responsibilities
- The intended uses of the model(s)
- Model element breakdown and specific property sets
- The models progression schedule(s)
- Key deliverables with their formats and due dates
- Specific modeling software versions
- Collaboration and exchange environments
- Meeting schedule to monitor the modeling processes

The BEP is used as a reference during the modeling task to keep the model development coordinated throughout each phase of the project. The workflow of Information Modeling will allow the designer to add descriptive data to the modeled assemblies, objects, and elements, which will allow modelers to use advanced features of existing and future modeling software. Training programs will be developed as a part of the implementation of BIM that will focus on process and specific workflows dedicated to ensure successful BIM deliverables.

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