BIM FOR INFRASTRUCTURE

BIM Progression Level

The base level zero

Plan and profiles, cross sections, and details along with specifications have been the source of design and construction information for decades. Whether printing to paper or maintaining them virtually in a portable document (PDF), operation is occurring at level zero. Project data are contained in a variety of different documents where filtering and querying is not an option.

Getting to level one

Getting to level one requires investment in individuals who understand how to strategically plan for the rollout of an agency-wide Building Information Modeling (BIM) for Infrastructure program. This is the time to gain knowledge of BIM and its processes that have benefited vertical industries for years. Agencies will need to rethink their position on technology and provide collaborative environments that BIM demands. BIM standards and data requirements will need to be developed and maintained. BIM-centric policies may require legal changes in the way projects are prepared and delivered. Local industry will need to be on board with this move. Advertising, educating, and motivating will be a full-time effort that will pay off in the long term. Level one BIM for Infrastructure is where you begin your BIM journey—it is starting with the basics.

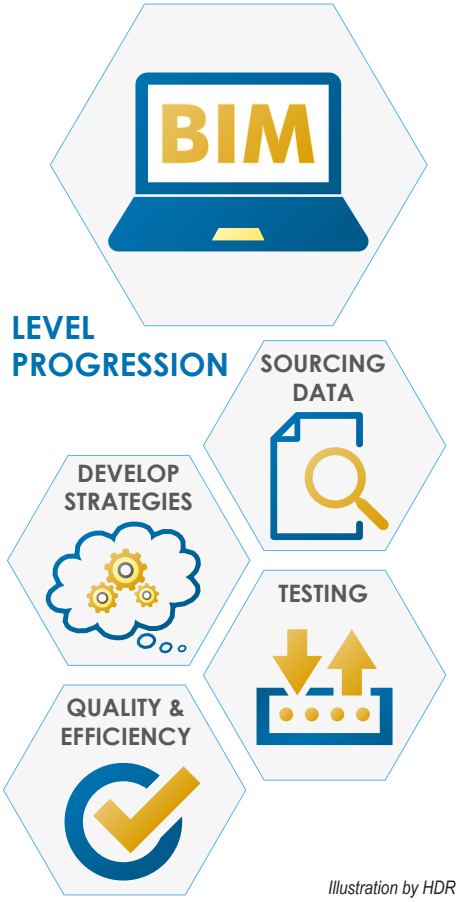

Illustration by HDR

Working through the challenges and achieving level two

Once your BIM program is established, it is time to put it to the test. Pilot programs will quickly uncover any holes in the program. With carefully chosen projects that highlight various BIM use cases and technologies, you will be able to fine-tune your policies, procedures, and standards. During this transition period, various data exchange pathways and discovering the efficiencies of collaborative design and construction are worked through and refined.

Level two and beyond—What does the future hold?

It is difficult to say where technology will be in the future. Advancements in artificial intelligence and mass storage will most certainly play a part in agencies decisions. What we can predict is that from conception to construction, your project will be virtually available to all concerned stakeholders. Data will move at a fast pace within discipline specific applications and on to construction layout, excavation equipment as it is checked and approved. Errors and omissions will most likely see a sharp decline and production rate and quality should increase.

U.S. Department of Transportation
Federal Highway Administration

FHWA-HIF-20-023

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