

U.S. NATIONAL BUILDING INFORMATION MANAGEMENT PROGRAM

Objective

The National Institute of Building Sciences (NIBS) is leading the development and dissemination of a next-generation information standard for the built environment. The U.S. National Building Information Management Program will build on the work of the NIBS BIM Council and the National Building Information Modeling Standard (NBIMS) 3.0 to provide a step-change in capacity, creating a platform for the next phase of digital innovation. This project offers the opportunity to improve the relationships, performance and profitability of the increasingly digitalized U.S. architecture, engineering, construction, operation (AECO) industry.

Partnerships

NIBS will lead a consortium of government and private sector owners and industry representatives from design, construction, manufacturing, technology and asset operation sectors, plus software providers, to develop a standard that reflects current best practices, international process standards and the evolution of future digital tools.

Measuring Success

The program will:



Allow owners to build more assets with less money by enhancing efficiency.



Strengthen U.S. industry access to global markets with compatible standards.



Create industry standards for faster delivery, managed costs, and increased sustainability across the supply chain.



Bridge the digital exchange divide between owners and their suppliers to generate greater value from asset data.



Expand and accelerate innovation of new digital solutions.



Build on U.S. leadership in AECO technology development.

Why is the U.S. National Building Information Management Program needed?



Construction comprises **13%** of the global economy

but it has not enjoyed the productivity improvements of the digital age, averaging **only 1% growth in the past 20 years.**



Demand for design and construction will increase in the coming decade

as **the public sector requires \$2 trillion in infrastructure investment** that must be delivered as efficiently as possible.

Digital process standards will



Increase the clarity of project requirements and improve project outcomes.



Accelerate the effectiveness of the supply chain by improving communications.



Enhance cooperation between owners, designers and builders.



Provide predictable processes with uniformity in AECO workflows, training and resourcing.



Drive efficiency of delivery by eliminating unnecessary and ambiguous requirements and processes.



Integrate buildings, lifelines and infrastructure to improve safety, security, resilience and sustainability.

Next Steps

- 1 Develop an operational plan**, for developing the standard, led by NIBS.
- 2 Build a leadership coalition** of owners and industry representatives.
- 3 Develop and implement** a comprehensive NBIMS 4.0 and program that directly benefits owners.

Top Program Benefits

41%

of the U.S. labor force will retire by 2031 – industrialized construction processes driven by digital automation can address the coming shortage while also increasing diversity

13-21%

savings via increased efficiencies in design and construction assembly in the next 10 years

60%

long-term increased construction productivity through design-to-manufacturing processes supported by digital information

100%

increase in profits for AECO players

15%

public construction cost savings