

Demand for new and improved infrastructure is growing on local, national and global levels, with varying levels of investment, and often with limited resources. Under pressure to make smarter investments, infrastructure asset owners and managers are requiring innovative approaches to deliver new or upgraded systems. Technology proven in the vertical world — The Building Information Model — is integrated into infrastructure applications with many of the same notable results.

THE EVIDENCE IS CLEAR

BIM helps provide:



Greater productivity from improved collaboration



Clearer accountability among the team



Optimized design solutions, reduced errors and omissions, and higher quality products



Improved safety



Better transparency on project cost and schedule



Enhanced stakeholder communications

Improving our communities in this age of information requires essential tools to ensure a seamless transition from design and construction to operations and maintenance.



Learn more about how BIM is transforming infrastructure projects. For more information, call your Autodesk representative.

HOW IS BIM ADOPTED FOR DISTINCT INFRASTRUCTURE APPLICATIONS?

Consider these examples:

Sustainability and Scalability

The integration of climate-related data into large-scale infrastructure projects – or 0&M materials and processes for smaller and mid-sized projects – can improve project sustainability, regardless of scale.

Safety

Transit-related components become part of the model, enabling prefabrication and just-in-time delivery, reducing site congestion and improving safety. Roadway and bridge designers model performance data for high traffic, nighttime or intense weather conditions.

Efficiency and Transparency

For rail, BIM manages interfaces with above-grade or sub-surface stations. BIM's ability to integrate with Geographic Information Systems (GIS) data on water, sewer and stormwater projects optimizes pipe networks. Site development applications help evaluate proposed layouts, access points and how utility tie-ins may affect stakeholders and the surrounding community.