Bentley[®]

Solution overview



City design solution

Accelerate smarter, greener city infrastructure with cutting-edge design and seamless project collaboration.

Urban infrastructure professionals are facing a period of dramatic transformation, driven by rapid population growth and accelerating urbanization in cities. To meet these rising demands, Bentley's City Design Solution enables city officials and architecture, engineering, and construction firms to design city infrastructure with greater speed and precision, while fostering seamless collaboration across stakeholders. It simplifies access to accurate documentation within a shared digital environment, accelerates the transition from design to construction with fewer complications, and ensures ideas and data can be exchanged securely and efficiently among all parties involved.

With Bentley's City Design Solution, users can improve design project transparency for all disciplines and streamline the design workflow by enabling designers, reviewers, and project owners to collaborate in a centralized environment. For engineers responsible for the project's design, this solution provides industry-leading, globally recognized technology for conducting design and analysis. Design collaboratively over a precise digital version of the urban environment minimizing errors and expediting construction.

- Connected data environment for the design of infrastructure projects in the urban realm.
- Configurable workflows for engineering, project administrators, and beyond.
- Fit-for-purpose capabilities for detailed engineering of streets, utilities, buildings, and any other urban assets.
- Immersive visualization for effective public participation.

Empowering your infrastructure projects with advanced solution capabilities

Multidisciplinary design improves productivity while reducing time and cost by producing accurate, high-quality designs with a digital twin of the built environment. Create, visualize, and analyze 3D digital representations of structures and their components, with software specific to the discipline involved in the delivery of complete projects (road, highway, bridge, rail, transit, electric utilities, water, wastewater, stormwater network engineering, campuses, industrial sites, public spaces, and buildings).

With accelerated project delivery, users enhance efficiency while reducing risk and cost by enabling internal and external project stakeholders to securely access engineering data and documentation through the internet. Work in a centralized, cloud-based repository to make finding up-to-date information quick and simple, reducing the risk of costly rework and potential project delays.

The core products in this solution are <u>MicroStation</u>° and <u>ProjectWise</u>°, alongside one Open application for infrastructure design. For example:

- OpenRoads[™] Designer
- OpenBridge® Designer
- OpenRail[™] Designer
- OpenBuildings® Designer
- OpenFlows[™] Storm
- Structural Analysis and Detailing
- Electric Distribution Design

Key benefits

- Maximize land and assets utilization
- · A single source of truth
- · Higher design quality
- Scalable innovation
- Improved collaboration and stakeholder communication
- · Optimized workflows
- Accelerated project delivery
- · Increased productivity
- · Save time and reduce costs



Proposed building design using a 3D mesh for existing conditions



New Street design, and street level view of new developments

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