Bentley Systems Advances Infrastructure AI with New Applications and Industry Collaboration

Company shares its vision for trustworthy AI to shape the future of infrastructure

AMSTERDAM – (Bentley Systems' Year in Infrastructure 2025) – October 15, 2025 – Bentley Systems, Incorporated (Nasdaq: BSY), the infrastructure engineering software company, today unveiled new infrastructure AI capabilities at its Year in Infrastructure conference. Bentley also announced an Infrastructure AI co-innovation initiative, inviting engineering firms and asset owners to collaborate on the next generation of AI workflows.

"AI is poised to transform infrastructure," said Bentley CEO Nicholas Cumins. "At Bentley, our vision is for AI to empower infrastructure engineers—not replace them. Trustworthy AI, built on infrastructure context, can improve engineering productivity and transform workflows across project and asset lifecycles."

AI use expanding across infrastructure

Each year, Bentley honors leading infrastructure organizations with the Going Digital Awards, recognizing excellence in project delivery and asset performance through digital innovation. This year, nearly one-third of award submissions—and almost half of finalists—incorporated AI into their projects.

This aligns with the findings from a global survey of infrastructure professionals released at the conference. Conducted by Bentley in collaboration with law firm Pinsent Masons, engineering firm Mott MacDonald, and consultancy Turner & Townsend, the survey found that about half of respondents are either piloting AI or have already implemented it, with plans to scale its use across their organizations. Key focus areas include boosting design and engineering productivity and automating documentation processes.

"The greatest challenge to delivering better and more resilient infrastructure is engineering capacity," said Cumins. "The reality is, there simply aren't enough engineers in the world to do all the work that needs to be done. AI promises a step change in productivity that can help close this capacity gap."

AI rolled out across Bentley product portfolio

At last year's conference, Bentley introduced OpenSite+ for civil site design, the first in a series of new AI-powered applications. Today, Bentley unveiled additional next generation applications for substation design and construction management that accelerate the adoption of AI across project delivery.

"We have been creating a new generation of infrastructure applications built on digital twins, powered by AI, and fully connected to Bentley Infrastructure Cloud," said Francois Valois, senior vice

president, Bentley Open Applications. “They show what’s possible when AI is built for real infrastructure workflows and tailored to the needs of engineers.”

Featuring Bentley Copilot, a context-aware AI assistant that guides users through workflows, surfaces relevant documents, and can make changes to models, the new generation of data-centric applications include:

- **Site design:** OpenSite+, the first engineering application leveraging generative AI for civil site design, is now in limited availability. It delivers projects up to 10 times faster without sacrificing accuracy.

  “OpenSite+ is going to open a lot of doors for us to move faster, get better answers, and really be better engineers,” said Brianne Belschner, Model-Based Design Lead, VHB, which contributed to the development of OpenSite+ through an early access program.

- **Substation design:** OpenUtilities Substation+ is a new application that brings digital twin and AI-powered capabilities to substation design. In rethinking how substations can be designed collaboratively, it helps solve one of the biggest sources of frustration for designers, by allowing multiple users to work at the same time in the same model, reducing errors and rework during construction. OpenUtilities Substation+ will be available in November through an early access program.

- **Construction management:** SYNCHRO+, part of Bentley Infrastructure Cloud, is a next-generation, AI-powered construction application that redefines traditional 4D modeling. By shifting to a data-centric workflow, SYNCHRO+ streamlines construction planning and coordination. It integrates Cesium for rich geospatial context, and leverages AI to explore construction sequences with greater depth, speed, and actionable insights. SYNCHRO+ will be available for early access in December 2025.

AI enhancements are coming to Bentley’s existing engineering applications as well, starting with OpenRoads Designer and OpenRail Designer for model-based road and rail design. A new AI agent that automates one of the most time-consuming aspects of design—annotating drawings—will be generally available in November 2025. Bentley Copilot will be integrated into both products in early 2026.

Bentley also announced new AI-powered search capabilities in ProjectWise, part of Bentley Infrastructure Cloud, designed to significantly reduce the time users spend searching for information. With a streamlined, intuitive interface, and contextualized AI search capabilities, users receive instant, concise summaries generated by AI, without needing to open files or switch between applications. These enhancements deliver a productivity boost across the entire project workflow. ProjectWise AI capabilities will be available for early access in December 2025, with general availability planned in 2026.

Commitment to data stewardship

While ProjectWise’s new AI-powered search capabilities promise significant productivity gains, Bentley recognizes that innovation must be grounded on a foundation of trust. As users rely on Bentley Infrastructure Cloud to manage their engineering files and data, Bentley remains firmly committed to data stewardship.

Cumins reaffirmed that longstanding commitment, first outlined at the 2023 Year in Infrastructure conference, emphasizing that respect for intellectual property is foundational to Bentley's approach to Infrastructure AI. "Our users are in control of their data. They decide if it is used for AI training, and to what extent," Cumins said. "Our users' data is their data, always."

To uphold this principle, Bentley has implemented strict governance around AI model training. Only data that has been explicitly licensed or purchased for this purpose is used—this includes contributions from accounts that have agreed to supply data for the benefit of the broader Bentley user community. Users also have the option to fine-tune Bentley AI models with their own data, for exclusive use within their organizations.

To further support transparency, Bentley has introduced the Data Agreement Registry, an auditing system that provides visibility into how data was used to train Bentley AI models.

Shaping the future of infrastructure with trustworthy AI

With engineering firms increasingly looking to adopt reliable infrastructure AI applications—and to train and deploy their own AI models alongside Bentley software—Bentley provides the necessary context for trustworthy AI.

"Infrastructure engineers work in a creative profession, but one where precision is non-negotiable and consequences are real," Cumins explained. "That's why AI in infrastructure must be grounded in real-world context."

Infrastructure organizations are leveraging Bentley software to ensure their AI models are informed by the right context—drawing on their past project design data in Bentley Infrastructure Cloud, subsurface insights from Seequent, and the engineering logic and physical principles embedded in Bentley Open Applications.

Cumins noted the growing number and diversity of Going Digital Awards submissions that leveraged Bentley's applications to inform their own AI agents.

"What's striking is how diverse these AI use cases are. AI is emerging across design, construction, and operations, touching every phase of the infrastructure lifecycle," he said. "And the results go well beyond time savings; they're using AI not just to automate, but to optimize decisions and outcomes in ways that were not possible before."

He cited a geothermal energy project in Turkey that used AI and the GPU-accelerated simulation capabilities of a Seequent application to compress a five-year development timeline into one year, cutting costs by more than 75%. Engineers evaluated over 10 million scenarios in days instead of years, and ran 3,000 simulations in hours instead of days, setting a new benchmark for speed and accuracy.

Infrastructure AI Co-Innovation Initiative

"For more than 40 years, we've helped infrastructure professionals and organizations become more productive through our software," Cumins said. "We welcome the creative ways our users are already combining our applications with AI—and we believe this is just the beginning."

To navigate this change together with users, Bentley announced the Infrastructure AI Co-Innovation Initiative to collaborate with engineering firms and asset owners on the next generation of AI-

enhanced workflows. The co-innovation initiative, open to Bentley users, will examine how Bentley APIs can evolve to better support AI use cases and explore new commercial models that reflect the evolving balance between AI-driven and human-driven work.

“This is a pivotal moment,” Cumins said. “The opportunity to shape the future of infrastructure is in front of us—and we’re incredibly excited to collaborate with our users in this new way.”

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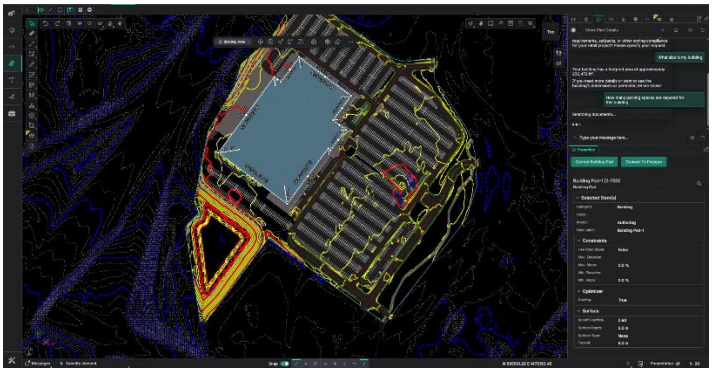
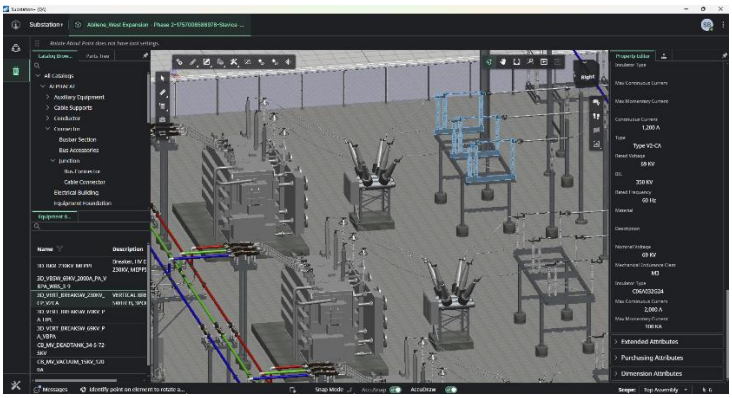
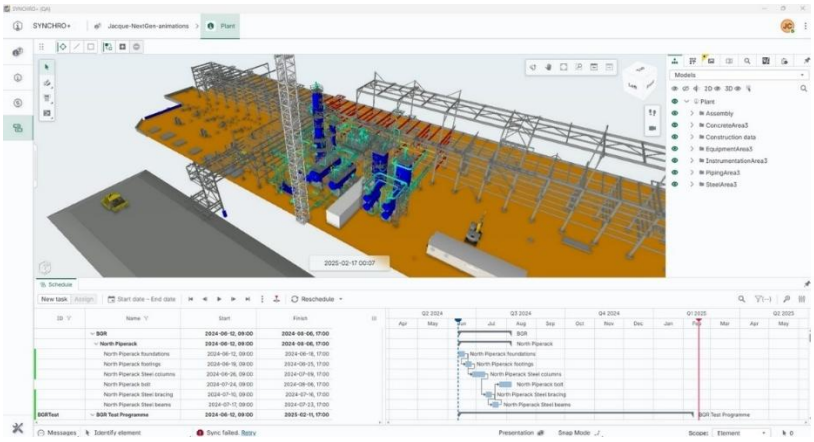
Associated Images



Caption: Bentley's OpenSite+, the first engineering application leveraging generative AI for civil site design, is now in limited availability. It delivers projects up to 10 times faster without sacrificing accuracy. (Image courtesy of Bentley Systems)



Caption: Bentley’s OpenUtilities Substation+ is a new application that brings digital twin and AI-powered capabilities to substation design. (Image courtesy of Bentley Systems)



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About Bentley Systems

Around the world, infrastructure professionals rely on software from Bentley Systems to help them design, build, and operate better and more resilient infrastructure for transportation, water, energy, cities, and more. Founded in 1984 by engineers for engineers, Bentley is the partner of choice for engineering firms and owner-operators worldwide, with software that spans engineering disciplines, industry sectors, and all phases of the infrastructure lifecycle. Through our digital twin solutions, we help infrastructure professionals unlock the value of their data to transform project delivery and asset performance.

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