Infrastructure Digital Twins

Accelerating the transition to sustainable, low-carbon, resilient infrastructure

Dustin Parkman
Vice President Transportation
Bentley Systems Inc.
We provide innovative software to advance the world’s infrastructure – sustaining both the global economy and environment – for improved quality of life
Global Top 100 Software Company

FOCUSED ON INFRASTRUCTURE ENGINEERING

39 years in operation

>5,200 colleagues in 40 countries

>1,400 colleagues with doctoral and master’s degrees

87% colleagues recommend as a place to work

~$1.1B annual revenue

>194 countries where BSY solutions are in use

$664M in R&D in past 3 years

290 patents granted or pending

72% Bentley Infrastructure Top 500 Owners

93% ENR Top 250 Engineering Firms

initial public offering September 2020

advancing sustainable infrastructure
Bentley is leading the development of digital twin technology as an enabler and accelerator of the transition to sustainable, low-carbon, resilient infrastructure.

We strongly believe that Infrastructure digital twins and sustainable development go hand in hand.
Infrastructure Data Challenges

- Diverse data environment
- Siloed data sources
- Complexity of information
- Platform for growth
Source: adapted from Centre of Digital Built Britain
A **digital twin** is a virtual representation of real-world entities and processes, synchronized at a specified frequency and fidelity.

An **iTwin** is an **infrastructure digital twin** implemented using Bentley’s iTwin Platform.
Diablo Dam
3D Digital Twin
Bridge Monitoring & Inspection Solution
siemensstadt square
By going digital and leveraging data, the infrastructure sector is building *better* infrastructure and building infrastructure *better*.
Thank you!