HOW TO IMPROVE CIVIL ENGINEERING DESIGN WORKFLOWS

Bentley®

CHALLENGE #1

VARIOUS FILE FORMATS, MULTIPLE DISCIPLINES, AND PROJECT WORKFLOW EFFICIENCY

The inability to coordinate data in multiple formats results in errors, project delays, and a waste of time and money. With all the different applications used by the many different consultants that collaborate on today's design projects, a lack of interoperability between software products represents a huge risk. But there is a solution.

COMPATIBLE

WITH EVERY FILE FORMAT

With MicroStation®, data conversions are no longer necessary. Users can incorporate legacy client data and a variety of natively supported file formats like DWG, SHP, point cloud data, and more, so workflows are accelerated.

INCORPORATES

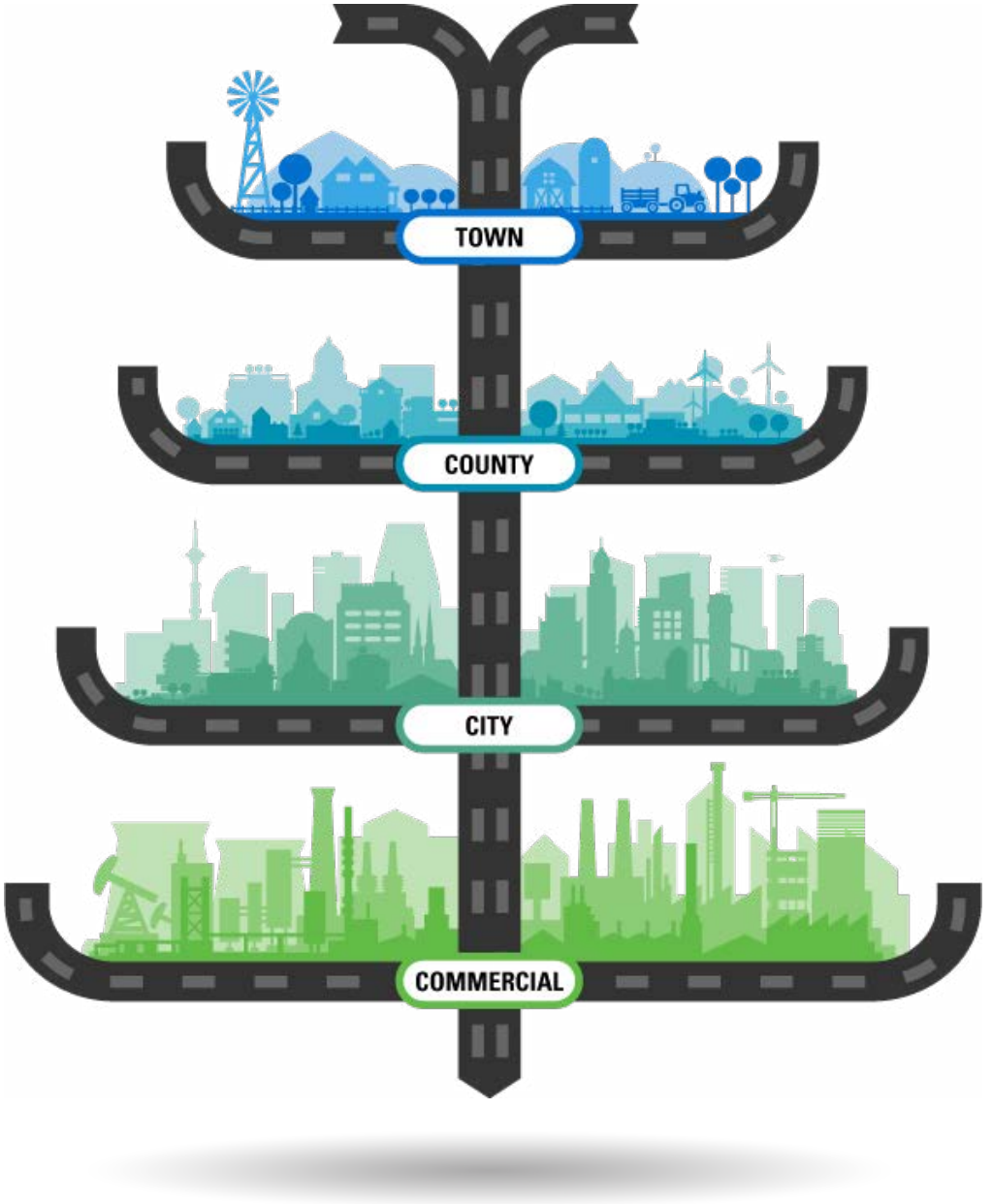
MULTIPLE DISCIPLINES

Connect project team members to the standards and projects they work on in a connected modeling environment. With easy integration of models, drawings, documents, and data from other disciplines, MicroStation can significantly improve the design process by eliminating errors prior to construction.

SCALES

TO SUPPORT ALL YOUR PROJECTS — LARGE OR SMALL

Whether it's a pond, parking lot, or 20-mile stretch of highway, MicroStation supports projects both large and small. Its robust modeling capabilities allow users to rapidly model projects of any scale and complexity while confidently maintaining design intent. Equally important, MicroStation's federated approach to managing files allows large design teams to easily and reliably share common files across multiple team members and disciplines whether they're working at the office or home. As a result, better quality designs are developed faster, saving time and money.



CHALLENGE #2

DELIVER QUALITY CONTRACT REQUIREMENTS ON TIME, EVERY TIME

Delivering and using drawings and models that don't conform to standards introduces safety risks to field staff, potential errors and rework during construction, and, ultimately, the potential loss of future work and can damage the reputation of your organization. But there is a solution.

DESIGN WITHIN

REAL-WORLD CONTEXT

Integrate representations of existing conditions into designs to generate accurate 3D models. Leverage raster images, point clouds, reality meshes, GIS, and more. With MicroStation, users can make better decisions throughout the project lifecycle and create high impact visuals for stakeholders.

DEVELOP COMPLEX MODELS

MORE EASILY

MicroStation supports a comprehensive set of mesh, solid, surface, and feature modeling tools so users can more easily develop demanding civil engineering designs. Robust constraints capabilities ensure design intent is maintained. Plus, MicroStation helps users to simplify the management and use of similar engineering components by using a smaller number of parametric components with pre-defined variants that can be easily shared. This means users can complete jobs faster, explore more design alternatives, and develop better quality designs.

Image courtesy of Alabama DOT, The Mobile River Bridge Project

OUTPUT DESIGNS

AS PLAN SETS OR 3D VIDEOS — AND EVERYTHING IN BETWEEN

Produce all deliverables needed to support project demands in one application. Save time automating the creation and sharing of drawing sheets, models, visualizations, multidiscipline documentation sets, and more. With MicroStation, users reduce the risk of project delays and errors because they can easily adapt to project changes while assuring standards are met across design teams.

"The quality of imagery, rendering performance, continual stream of enhanced and new visualization tools, as well as integration with industry standard file types and content have dramatically optimized the workflows that are required to model, render, and produce imagery."

— Tim Kohn, AECOM

MICROSTATION

THE FOUNDATION OF EFFICIENT CIVIL ENGINEERING DESIGN WORKFLOWS

MicroStation — and all Bentley BIM applications — are built on the same comprehensive modeling platform so that users can easily progress MicroStation work into discipline-specific BIM workflows. It enables every civil engineer and designer to:

- **Create better designs, faster:** With MicroStation, users can model, document, and visualize infrastructure projects of any type, scale, and complexity using a comprehensive set of design and documentation capabilities. Reliably integrate any existing design content and work with any-size team using virtually any mix of design applications because MicroStation enables users to develop and document better designs in less time by better connecting tools, data, and the team.

- **Better integrated project teams:** MicroStation CONNECT Edition provides a common environment for comprehensive project delivery and connects users, projects, and the enterprise. With the CONNECT Edition, users have a personal portal to access learning, communities, and project information.

Plus, MicroStation offers the flexibility you need to work the way you want—with the choice of several different customizable user interfaces, including a dark mode that will look familiar to users of AutoCAD. There's also optional support for over a hundred AutoCAD keyboard commands and native support for RealDWG with libraries licensed directly from Autodesk to ensure 100% compatibility and confidence in your data.

To learn more, visit http://www.bentley.com/ProfessionalGradeCAD

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