

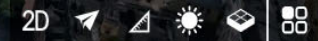
Bentley Systems

Bentley®
OpenCities™ Planner

Bentley®
Advancing Infrastructure



- 3D PLAN
- ETELÄOSA
- POHJOINEN OSA
- KALASATAMAN KESKUS
- KELLUVAT TALOT



KALASATAMA



ABOUT THIS PROJECT



Bentley OpenCities Planner

Create City-scale Digital Twin for City Planning

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Challenges

City planning without transparency and proper communication of plans can result in costly delays and unnecessary misunderstandings.

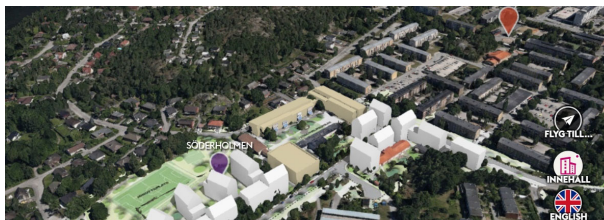
- Create projects and visualizations
- Visualize any project -- from large-scale city developments to detailed architectural designs
- Share urban planning projects with citizens and stakeholders



Ideal Solution

Design, visualize, and share your city projects with OpenCities Planner, a web-based 3D visualization solution for communication in city planning.

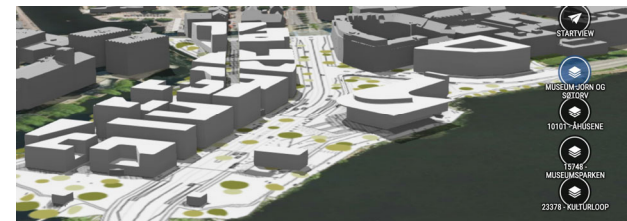
- Easily illustrate within the context of the city utilizing city-scale digital twins
- Quickly test ideas and visualize options in a city model
- Fast and easy sharing with teams and stakeholders



Desired Outcomes

A fast, easy, and visual way to communicate urban planning and development options with citizens and stakeholders. Easily share projects and crowdsource ideas.

- Transparency and openness
- Improved understanding to accelerate the decision-making process and buy-in
- Make smarter decisions and quicken the city planning process



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Visualize in a city-scale digital twin

Integrate Data

Efficient Projects

- Powerful 3D rendering engine streams massive 3D data from files, services, and databases
- Instant web access to the city model for basic considerations
- Create combinations of relevant 3D data (e.g. reality meshes, terrain models, and semantic objects)

Sketch and evaluate

Improved Planning

- Simple-to-use sketching with data uploading and a built-in library of 3D objects
- Quickly test ideas and visualize planning options
- Perform sun, shadow, sight, and spatial analyses
- Add images, videos, documents, CAD, and BIM models

Share and collaborate

Informed decisions

- Share and collaborate with your team or stakeholders
- Work in restricted groups to get feedback and approvals
- Provide public links for wider communications

Citizen engagement

Better interactions

- Publish interactive planning illustration to web, mobile, and showrooms
- Carry out dialogues with stakeholders and citizens to engage and to collect valuable local knowledge

Bentley OpenCities Planner capabilities combined with Bentley's reality modeling offerings make city-scale digital twins broadly accessible.

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Bentley OpenCities Planner + Microsoft Azure

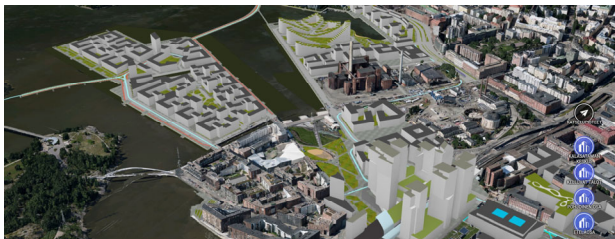
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Leveraging Microsoft Azure, Bentley OpenCities Planner enables organizations to easily visualize and share project and asset information for immersive communication for better, participative planning and project performance.

Solution Alignment

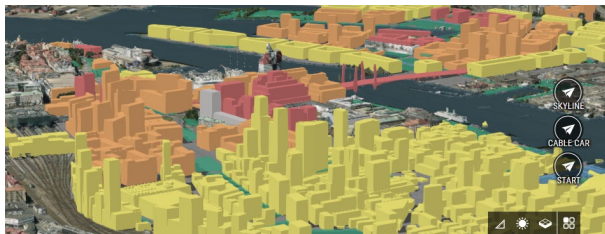
Scalability

A powerful 3D rendering engine supports the streaming of massive 3D models to visualize entire cities, countries, or the world.



Interoperability

Import detailed 2D and 3D models, GIS and web services, images, vector data, and documents to create your illustration.



Accessibility

Share projects and crowdsource ideas with fast streaming technology to mobile, web and showrooms.



Customer Success Story – City of Helsinki



Helsinki created a connected data environment enabling a digital twin of the city to manage all information and share data across internal and external teams.

- Since the 1980s, Helsinki has been developing 3D strategies for urban planning
- City model includes geospatial information modeling, cadastral mapping, and 3D city GIS
- City models available as open data to citizens, companies, developers, and universities
- Region – Government/Finland

Win Results

Helsinki used a combination of laser scanning and oblique photogrammetry to acquire data and images for the project and generated reality mesh of the entire city.

With an open, connected data environment, they manage all information and share data across internal and external teams, involving the public and encouraging commercial research and development.

Helsinki has expanded the application of the models to several pilot projects. Models have helped to analyze solar power utilization and conduct flood assessments, noise calculations, and more.

Customer Success Story – City of Gothenburg



Gothenburg uses 3D city models to support the internal urban planning tasks and to improve the public participation in urban development.

- The second largest city in Sweden is quickly expanding and has plans underway to accommodate 150,000 new residents in 80,000 new homes and offices.
- Close Date - 2035
- Region – Government/Sweden

Win Results

A complete 3D model of the metropolitan area was created with ContextCapture for an urban planning visualization canvas and Bentley OpenCities Planner serves as the visualization and dialogue platform.

A strong and clear online presence broadens the conversation to new demographics.

Gothenburg was listed in second place in the global ranking of smart cities in 2019 by the Future Today Institute.

Customer Success Story – City of Stockholm



Stockholm leverages digital twins and visualization to improve citizen dialogue and engagement in urban development.

- The quickly expanding city has plans underway to build 140,000 new apartments to meet high demand.
- Close Date - 2030
- Region – Government/Sweden

Win Results

With Bentley OpenCities Planner, Stockholm is actively progressing its digitization to become a smarter city.

Shared urban planning projects in 3D engages citizens, involving them in urban planning.

The Stockholm Room showcases a 3D presentation, providing visual context to the development plan to thousands of visitors each year.

Customer Success Story – Silkeborg Municipality



Silkeborg is using OpenCities Planner, Bentley's city planning and visualization application, to create immersive communication of urban planning and large-scale infrastructure projects

- The municipality sought to improve communications and be more transparent with its 100,000 citizens about urban planning
- Close Date – Ongoing
- Region – Government/Denmark

Win Results

Silkeborg is the first municipality in Denmark to use 3D illustrations to inform citizens about urban planning, and they are the first to use 3D city models as a cornerstone in the urban development process.

Infrastructure and housing projects are visualized in a city context.

Web-based 3D illustrations of projects have proven to attract the citizens' interest and have improved the understanding of potential benefits and the impact of change.