



SHIN DIGITAL TWIN

The Nishi-Shinjuku Project

Putting Smart City Development into Practice

2026.3.17-20

TAISEI CORPORATION

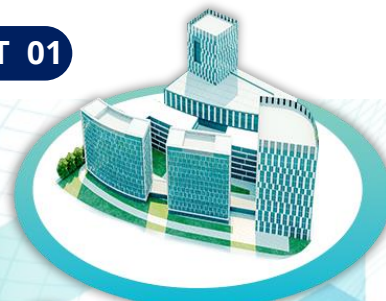
ABOUT



Shin Digital Twin

シン・デジタルツイン

POINT 01



Spectacular graphics

POINT 02



A wide variety of simulations

POINT 03



Easily repeatable trial and error

POINT 04



Easy-to-understand output

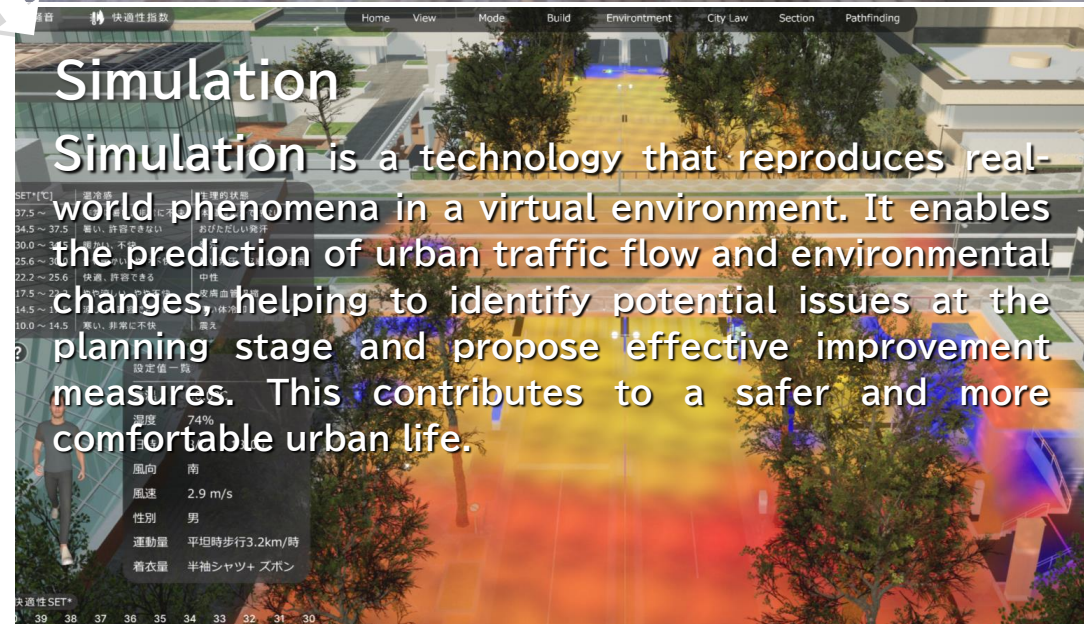


Shin Digital Twin

Shin Digital Twin is a digital replica of a real-world city. It enables real-time monitoring of urban data, supporting efficient city management and urban development planning. By visualizing traffic conditions and infrastructure status, the Shin Digital Twin contributes to future urban planning and development.

Disaster Prevention

Disaster Prevention involves efforts to protect people's lives and property from disasters. By using Shin Digital Twin and simulation technologies, the impacts of natural disasters such as earthquakes and floods can be assessed in advance. These technologies enable rapid response measures and help create a safer living environment.





1 Developing Sophisticated Models at the City Scale

- Developing ultra-high-precision models using laser scanning
- Reproducing the city at scale, including building interiors and underground spaces

2 The use of a game engine makes the system easy for anyone to operate.

- Incorporating point cloud data, BIM, and other datasets into the game engine to significantly improve operability
- Adding various functions, such as walk-through features, to further enhance operability

Graphics have been improved to support professional use



Shin Digital Twin



Live-action



Planning with Shin Digital Twin

Using a Shin Digital Twin, we planned and discussed ideas for open space utilization through workshop-style sessions.

Reproduced in Real Urban Space!

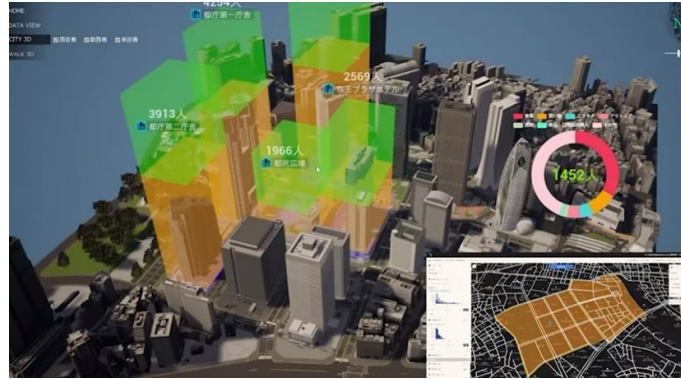
In October 2023, during “Fun More Time Shinjuku,” designs developed with the digital twin were implemented in real urban space.

Detailed City Model



- We build precise 3D models by focusing on specific areas.
- We then develop city-scale models by effectively combining open data and other datasets.

Add Practical Functions



- In addition to operating detailed models, we add functions based on user needs.
- We enhance the digital twin by incorporating urban development know-how and expertise gained through our area management activities.

Consensus and Decision-Making Tool



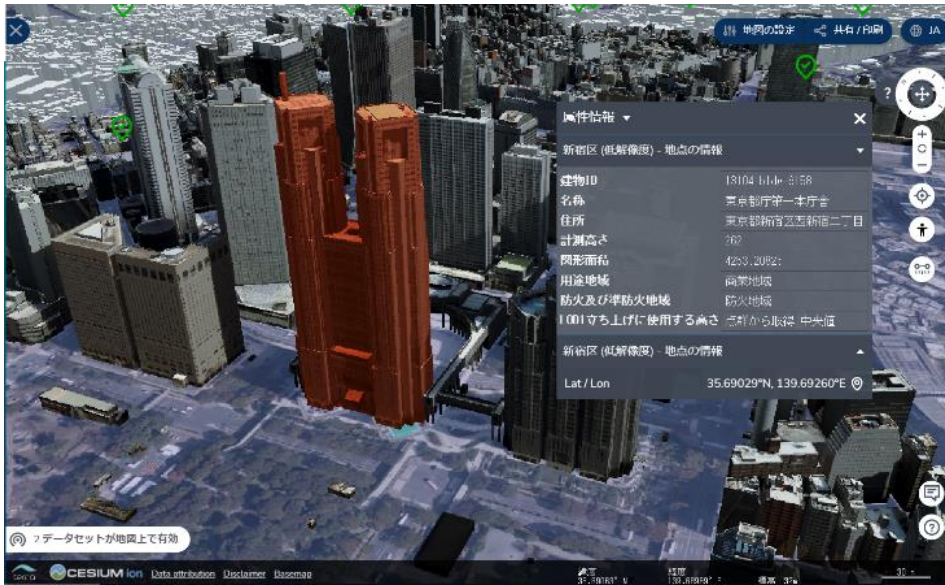
- We expect this platform to become a tool used by leaders in urban development to support consensus building and decision-making for a wide range of urban initiatives.



to be continued

Build digital twins for practical business

Wide-Area Data



Narrow-Area Data



PLATEAU

(3D city models developed by the government)

- Available for secondary and commercial use
- Installed in major cities throughout the country

BIM data / Point cloud data

(Laser scanning-based development)

- Developing detailed models for specific areas
- Developing seamless models within buildings and underground spaces