

Prepared for disruption?

# SIM-CI: Resilient by design

**SIM·CI**



SAFE, TRANSPARENT, AND EFFICIENT

## Digital twins maximize urban resilience

SIM-CI provides digital environments that make Infrastructure planning, design, and management traceable and cost effective.

Digital twins identify and mitigate potential vulnerabilities.

Digital twins uncover opportunities to shape our urban environment.

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# Model, simulate and visualize an organization's critical data

SIM-CI provides a comprehensive picture of asset risks, infrastructure risks and capital risks.

SIM-CI identifies mitigation strategies and assists in planning.

SIM-CI prevents risks from becoming a real-life catastrophe.

For a video impression [click here](#)



## SIM-CI'S DIGITAL TWIN:

# Platform Advantages

### Cascading Effects

Digital twins reveal cascading effects across domains by integrating multiple infrastructure models.

### Scenario Analysis

Digital twins calculate numerous scenarios to determine distributions of events and optimize risk evaluation and mitigation.

### Visualization

Digital twin scenarios highlight multiple vantage points in time, scale and location, to provide a common picture for informed decision making.

### Open Architecture

The open IT architecture allows easy integration with other data, data models or visualization tools. The system can also process data as live updates based on live input or changing scenario's.



# Domain Applications

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## SIM SURE

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### Insurance and Finance

Climate change & cyber threats represent risks to asset owners, investors, and insurers. SIM-CI's modeling and simulation provide risk assessments to determine insurance rates and required capital reserves.



## SIM SAFE

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### Emergency Management and DoD Installations

Emergency management and defense installations require 24/7 readiness. SIM-CI's tool visualizes how roads, communications, electricity and water are disrupted by natural and man-made events.



## SIM SHAPE

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### Engineering, Construction, and Government

Design and engineering in the urban and governmental sectors have myriad competing requirements. SIM-CI's models incorporate combined variables to expose risks and vulnerabilities over time.

# Partners

SIM-CI's **Open Architecture** incorporates third party models to provide more comprehensive simulation & visualization



→ Cyber threat simulations and training



→ Traffic simulations

Nelen & Schuurmans



→ Flood modelling and rainfall modelling



→ Climate change and effects of sea level rise



→ Modelling crowds



→ Flooding, rainfall, wind and contamination models



→ Flood modelling and rainfall modelling



→ The Center of Excellence on Critical Infrastructure Resilience & Emergency Management