Технологии умных городов

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Hexagon Safety, Infrastructure & Geospatial

Profit Day Smart City

Almaty, Sep 15, 2023

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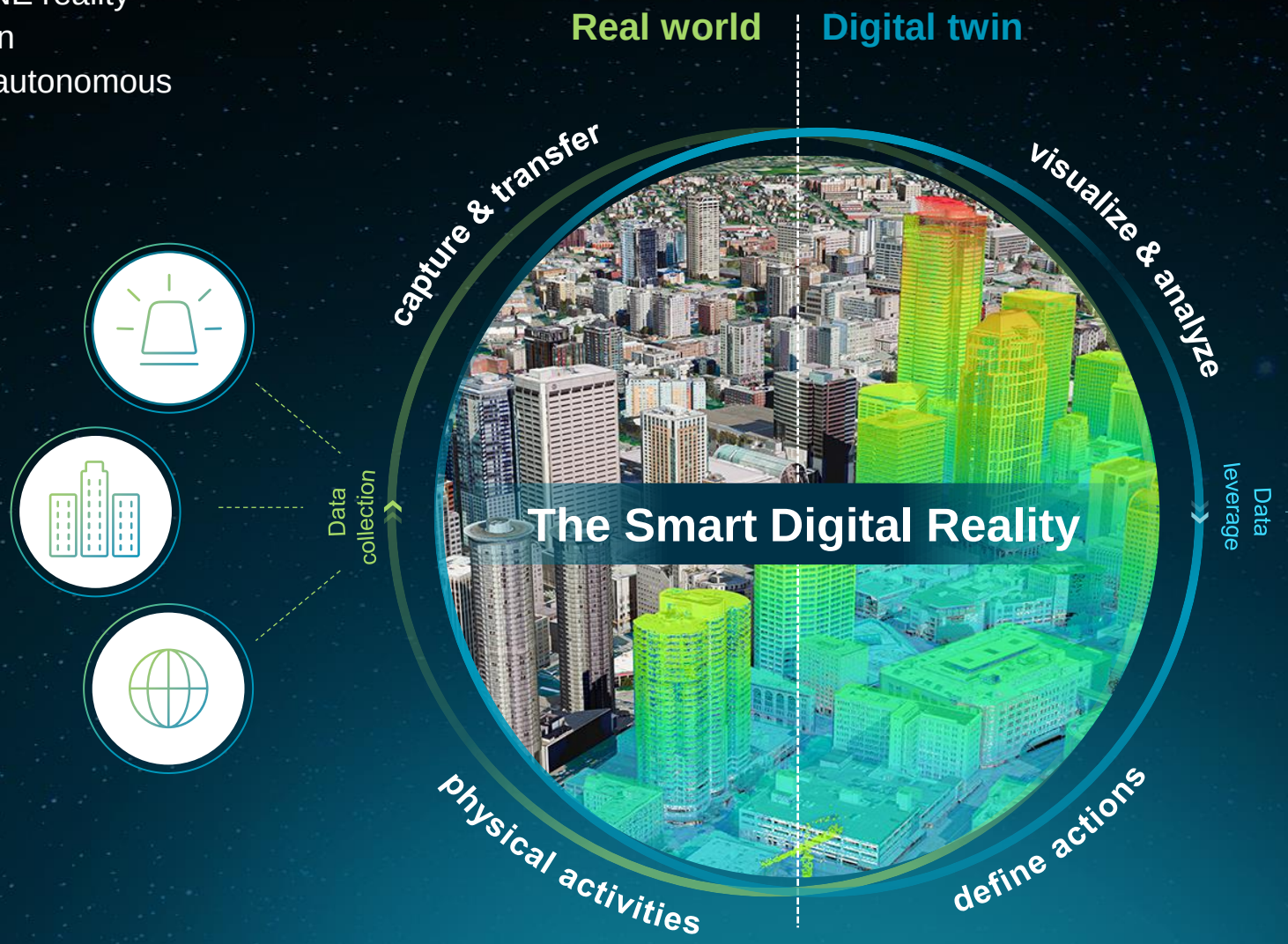
- Кто Hexagon?
- Что это ЦДГ?
- Зачем он нужен?

The Smart Digital Reality

Two worlds, ONE reality
Workflow-driven
Real time and autonomous



Intelligence engine

- Reality capture data sets
- 3D models
- Connection to persistent data sets
- Enrichment with real-time data sets
- Two-way integration and interaction
- Autonomous decision-making and actions

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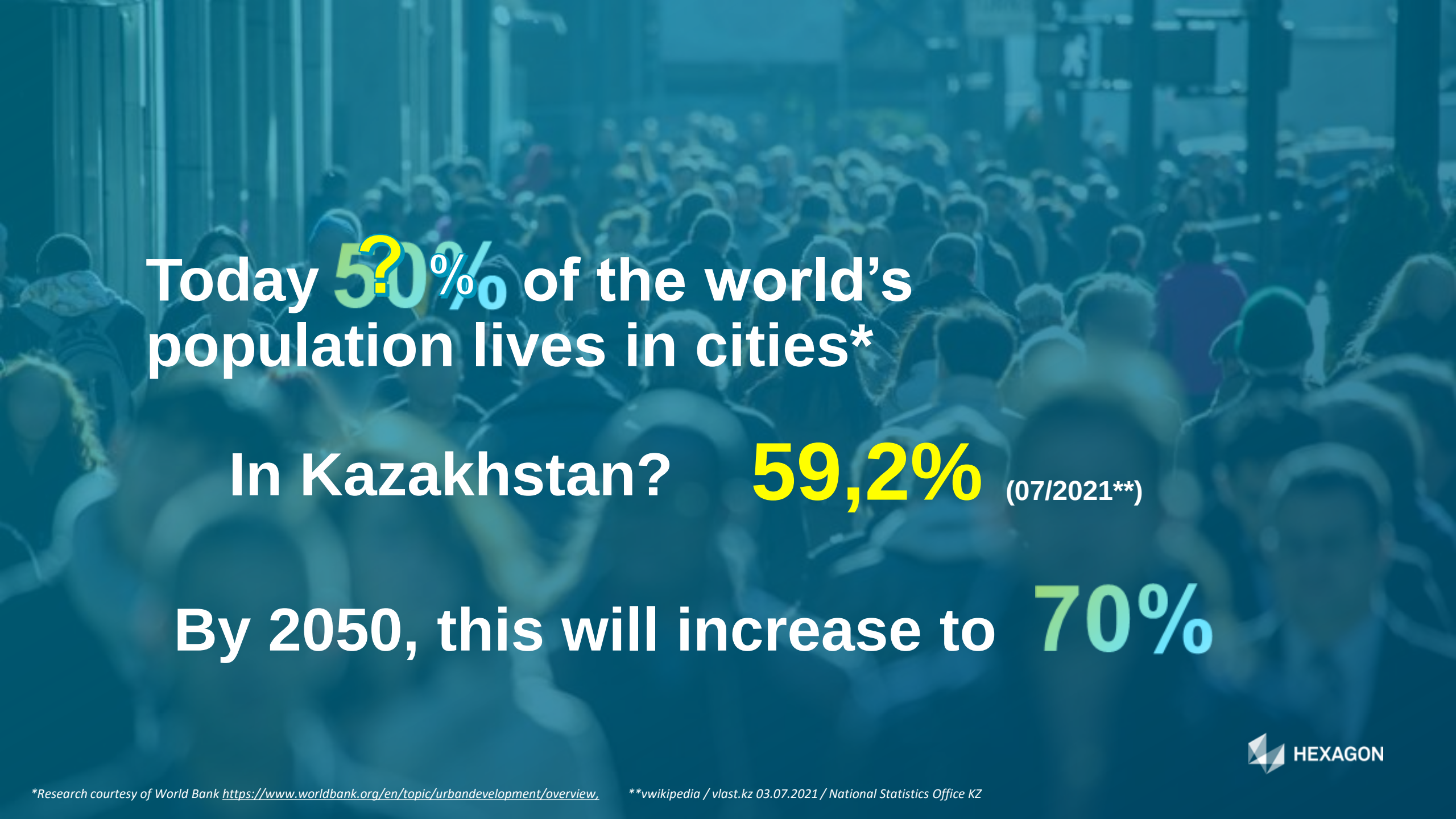
Urban digital twin

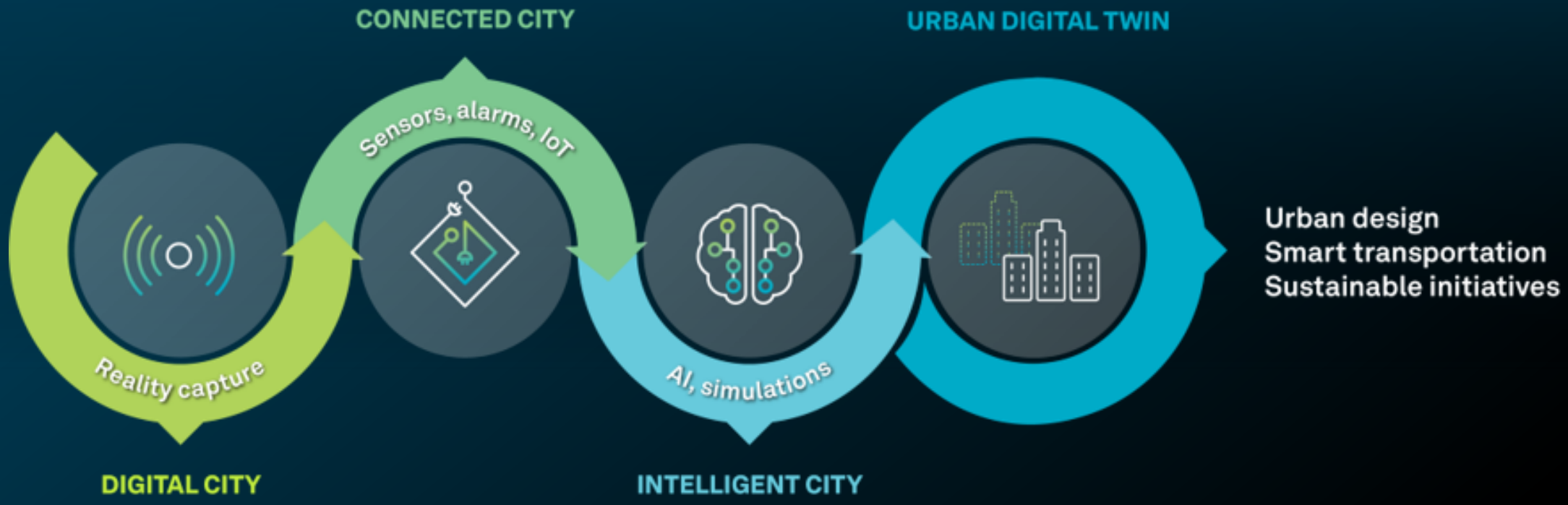
Beyond the buzzword



*Research courtesy of World Bank https://www.worldbank.org/en/topic/urbandevelopment/overview,

**vwikipedia / vlast.kz 03.07.2021 / National Statistics Office KZ

Hexagon’s urban digital twin



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Use cases

The choice is yours: Use independently or all together

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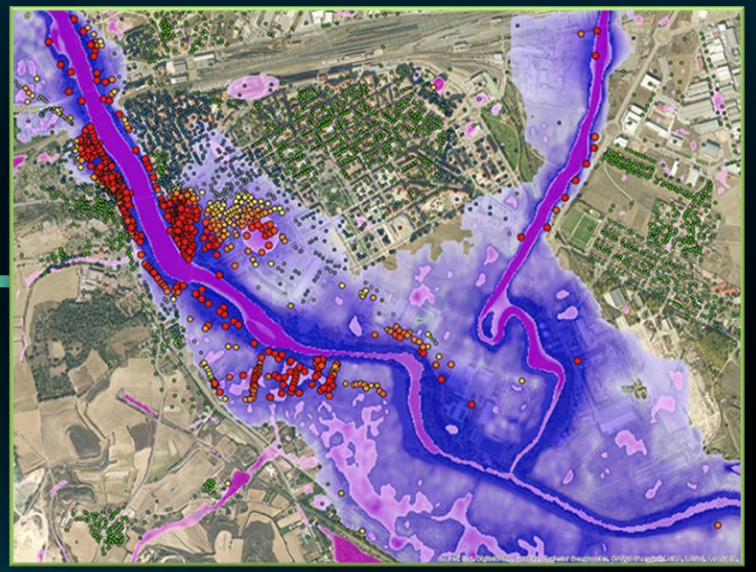
Urban design

Urban planning

- See the impact of a new building immediately
- Engage the public more easily

Infrastructure monitoring

- Detect infrastructure failure before it causes a disaster
- Prioritize inspection and maintenance activities



Flood prevention

- Determine flood-prone areas with sensor data
- Identify buildings at risk and their insurance values

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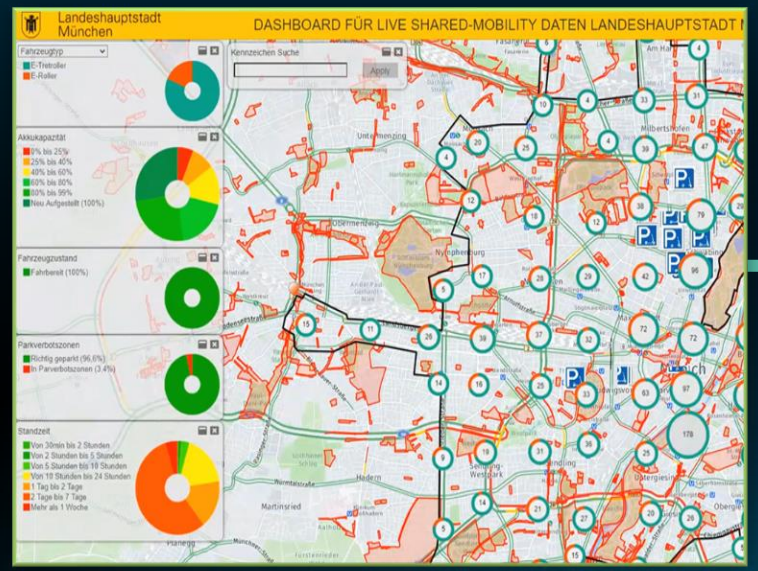
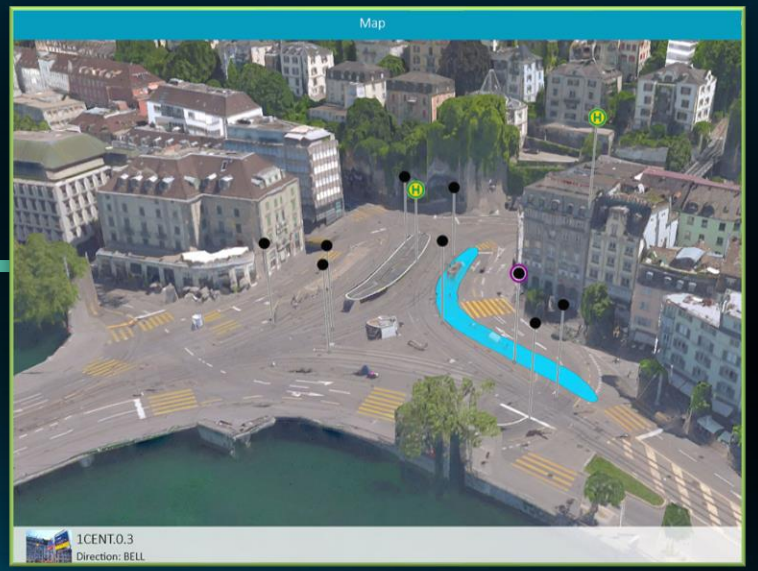
Smart transportation



Mobility

- Track, visualize and analyze IoT data from mobility providers
- Identify and understand transportation patterns to improve policies



Public transportation

- Combine asset and spatial data to access accurate information
- Increase efficiency and safety for workers, passengers and the environment

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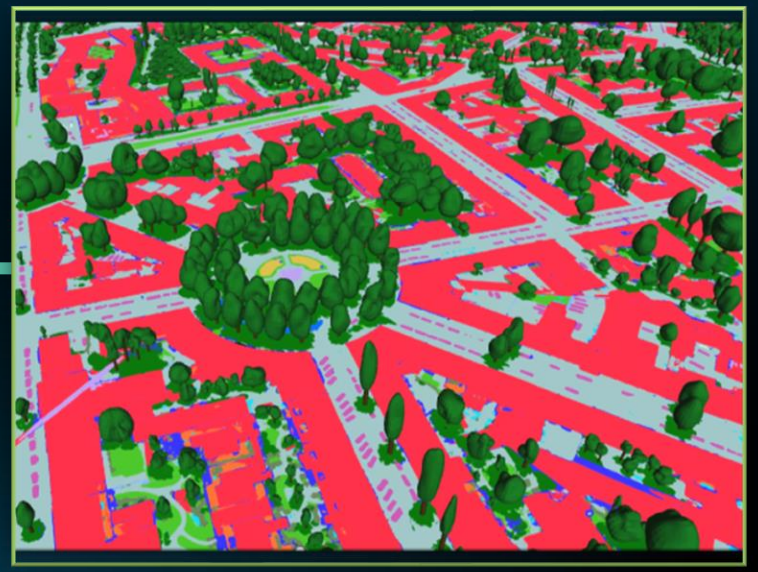
Sustainability initiatives

Renewable energy

- Identify areas that receive sufficient sunlight
- Estimate how much energy solar panels could generate

Pollution reduction

- Discover pollution hotspots with sensor data
- Evaluate the effectiveness of specific measures



Greening cities

- Predict heat islands
- Simulate cooling interventions

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Реальные примеры

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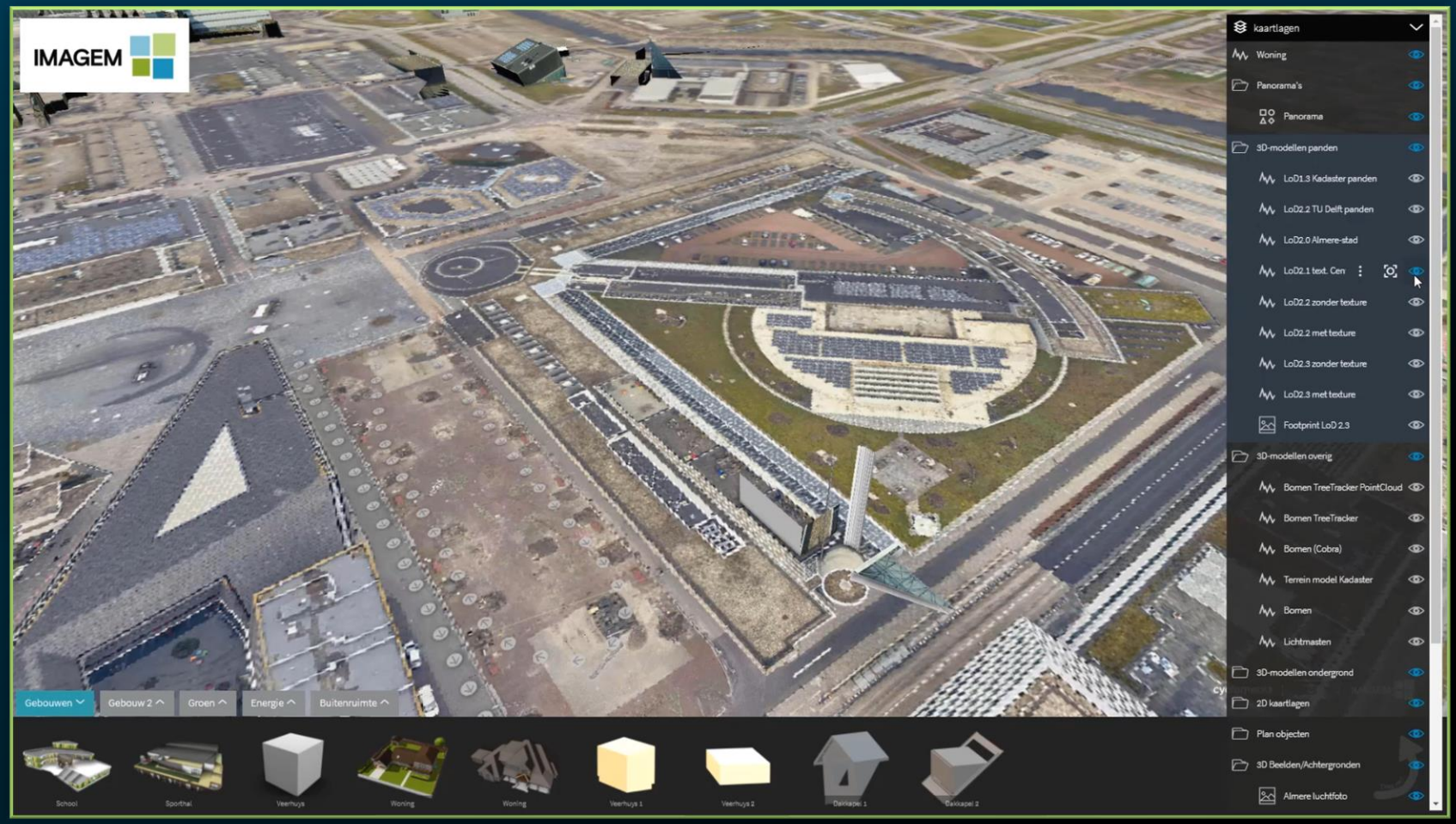
City of Almere, The Netherlands

Urban planning



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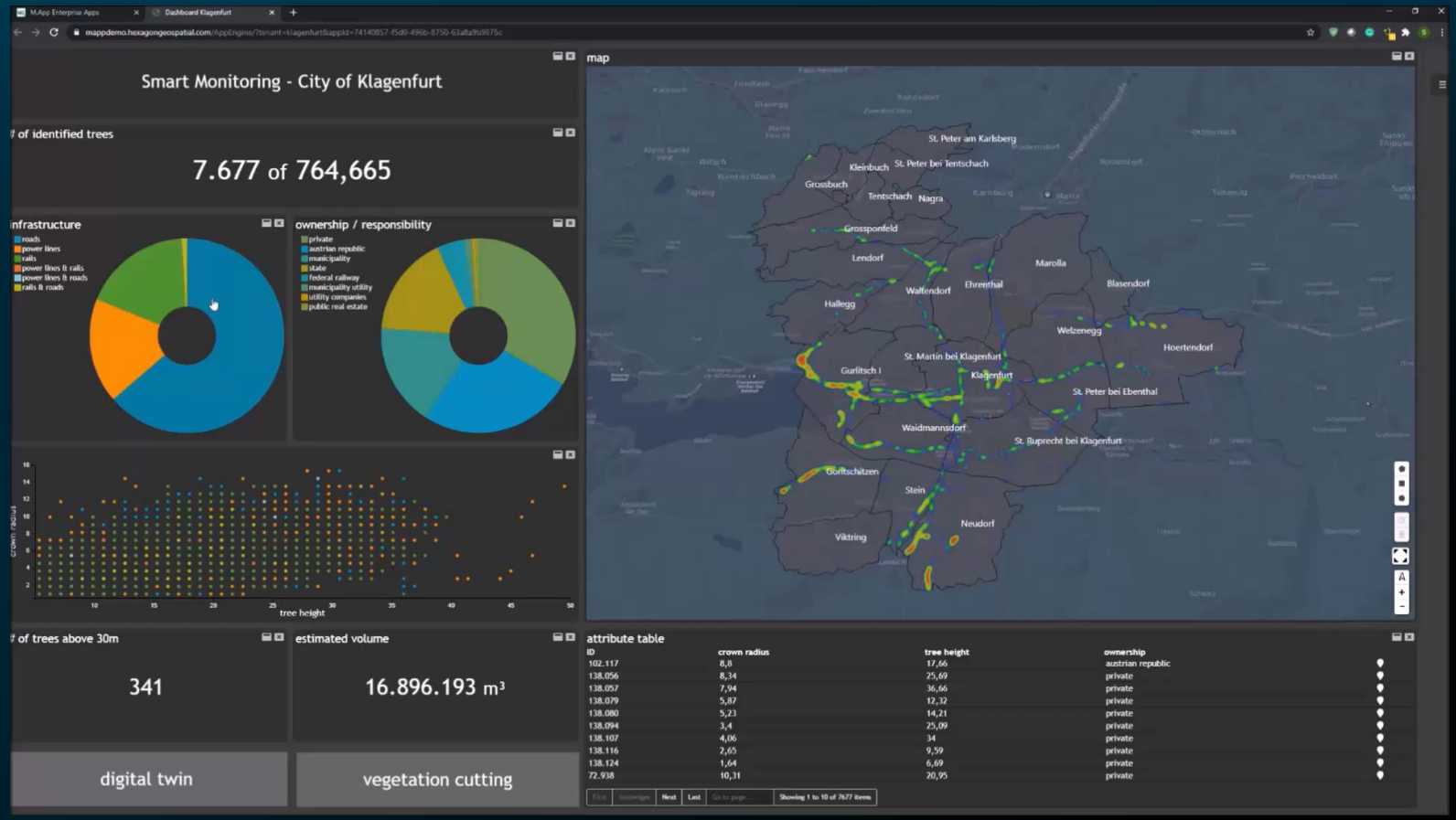
City of Klagenfurt, Austria

Greening cities



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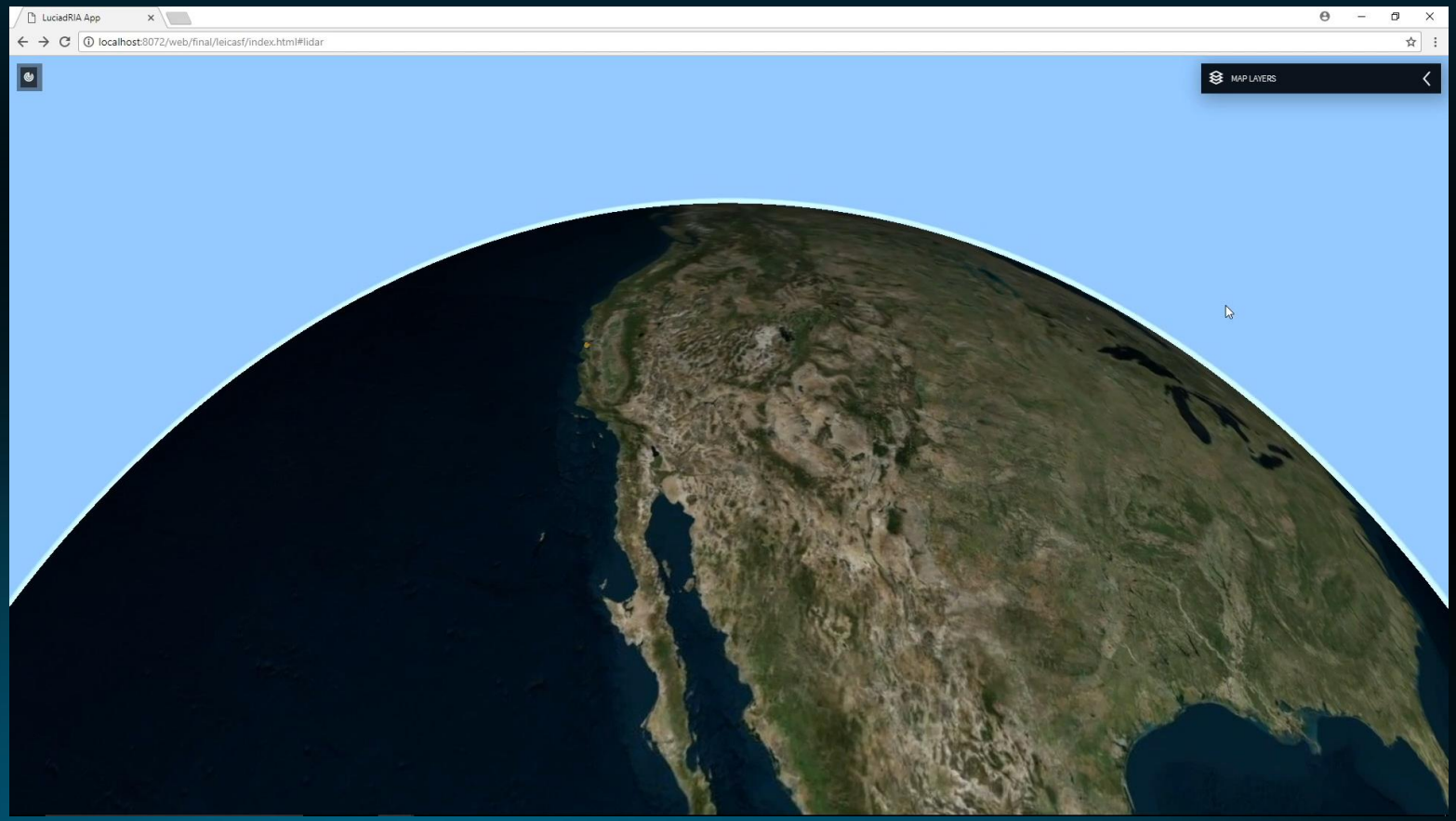
City of San Francisco, USA

Transportation



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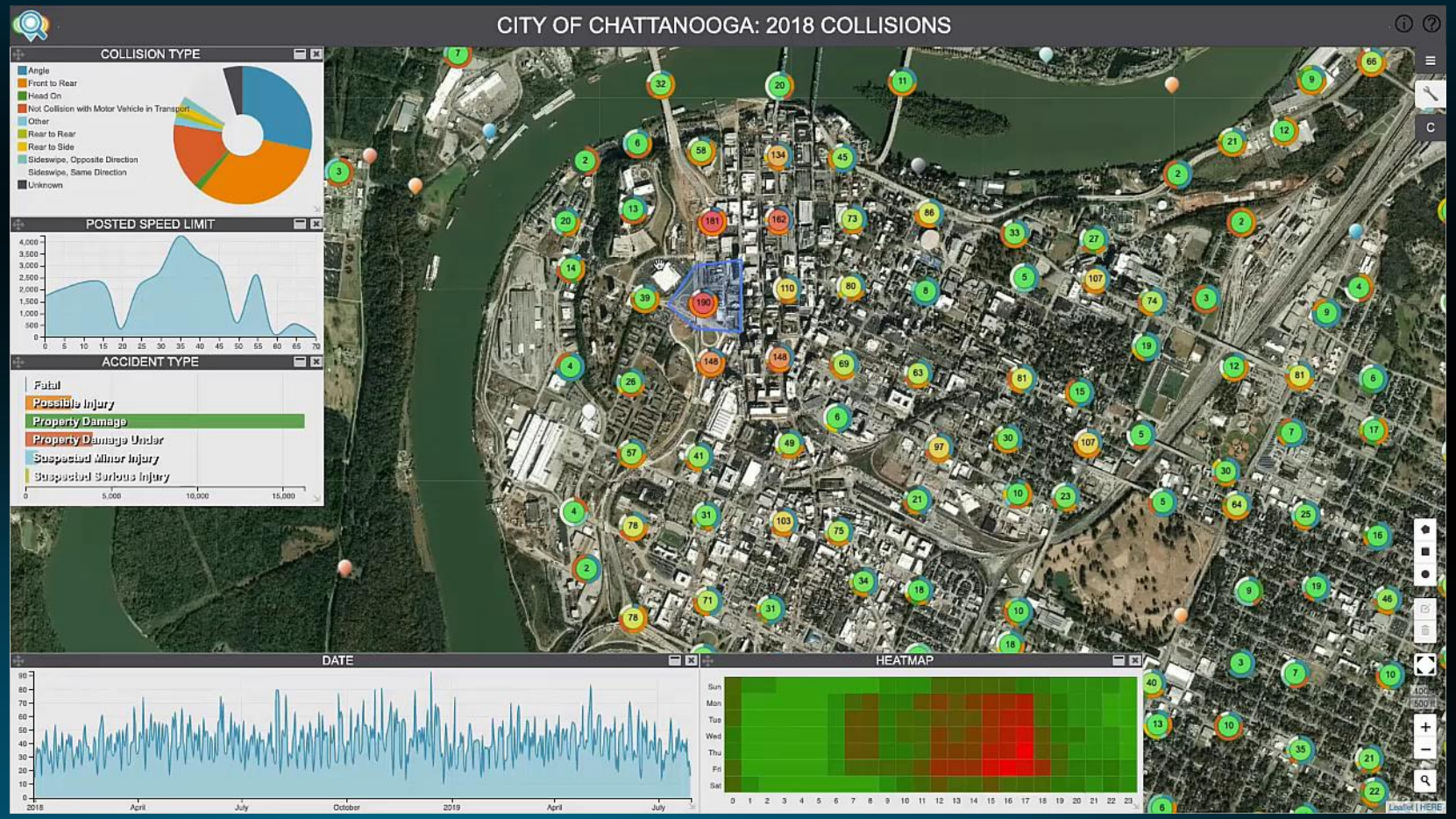
City of Chattanooga, USA

Transportation



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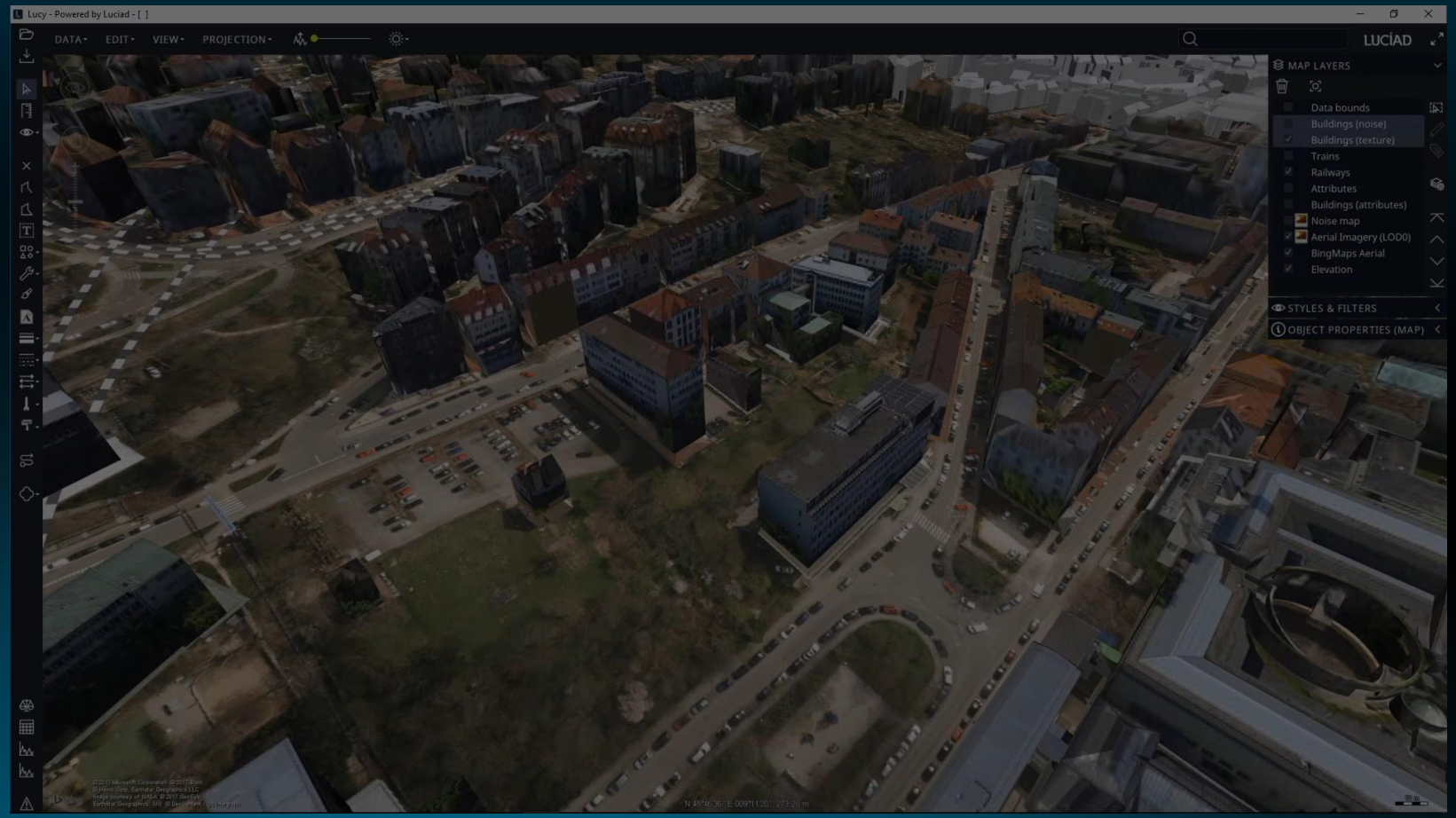
City of Stuttgart, Germany

Environment



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City of Munich, Germany

Environment

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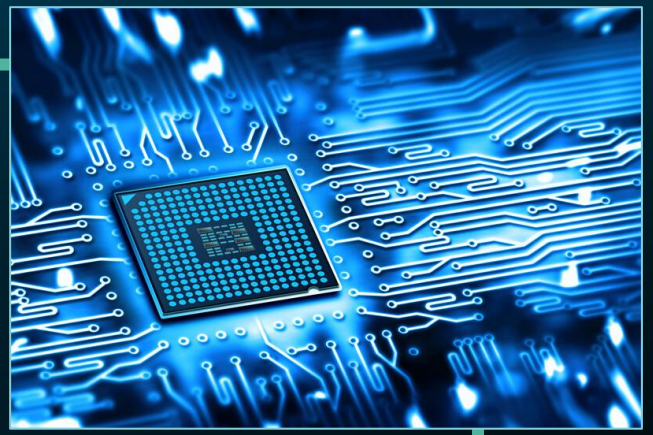
Hexagon’s smart urban digital twin portfolio

HxGN Content Program and Hexagon’s reality capture devices

Digital city



Xalt, HxGN EAM & Qognify VMS

Connected city

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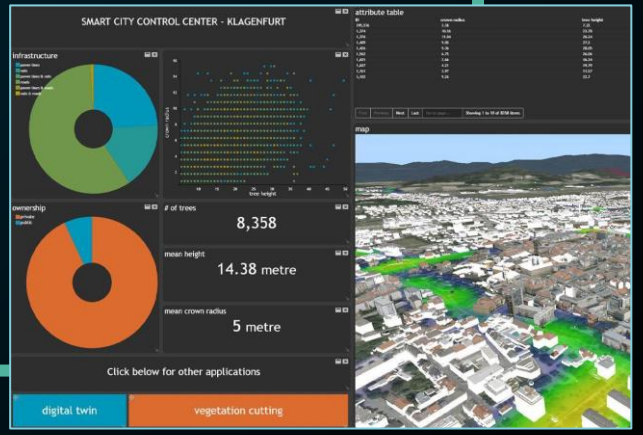
Intelligent city



M.App Enterprise

Intelligent city

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Creating safe, sustainable cities takes a
Smart Digital Reality

Learn more about Hexagon urban digital twins

https://hxgn.biz/udt

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