Advancing Reality Modeling for National Infrastructure

with Bentley solutions

Kuala Lumpur, 17 October 2016

John Taylor, Senior Director – Reality Modeling

Bentley Advancing Infrastructure

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BENTLEY'S PROJECT PLAYLISTS

MicroStation | ProjectWise | AssetWise | Navigator

Mobile Apps

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???

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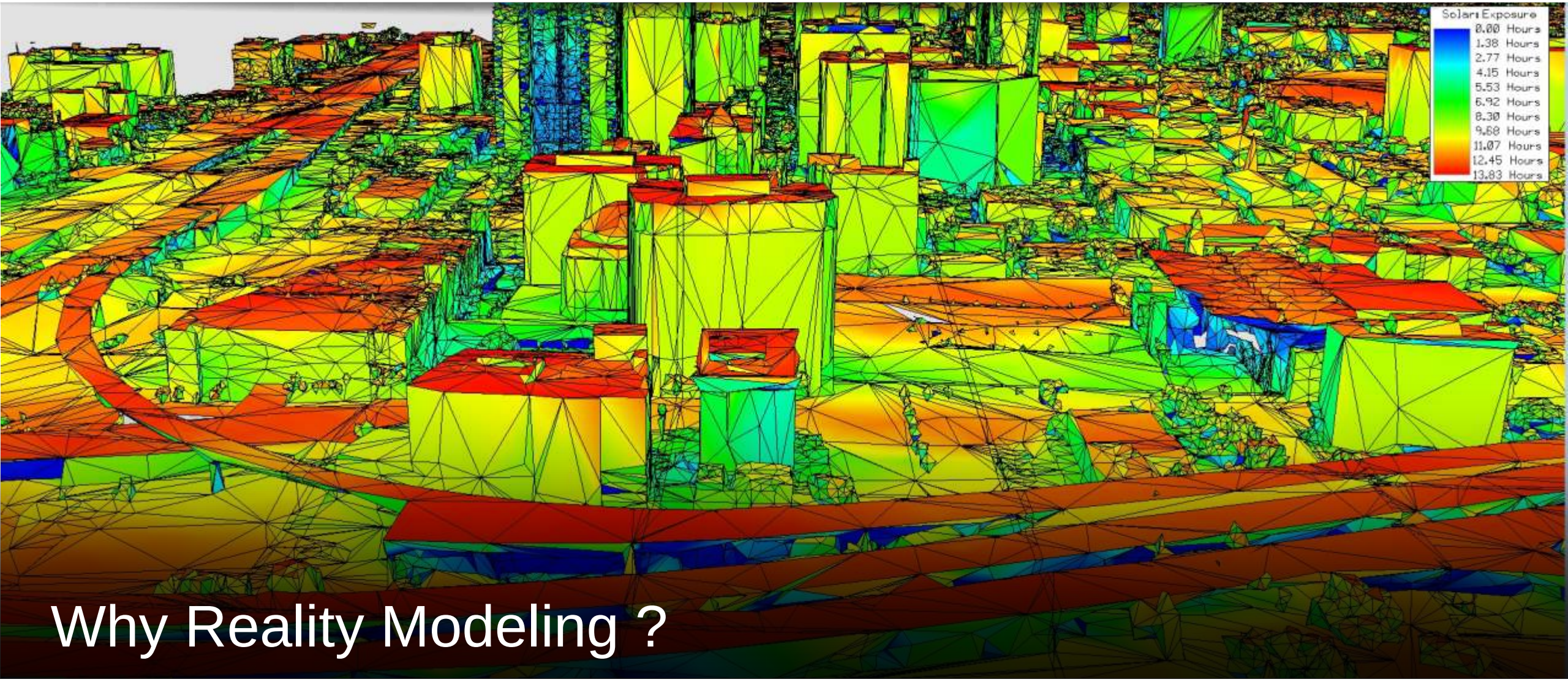

Why Reality Modeling ?

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Advancing Infrastructure

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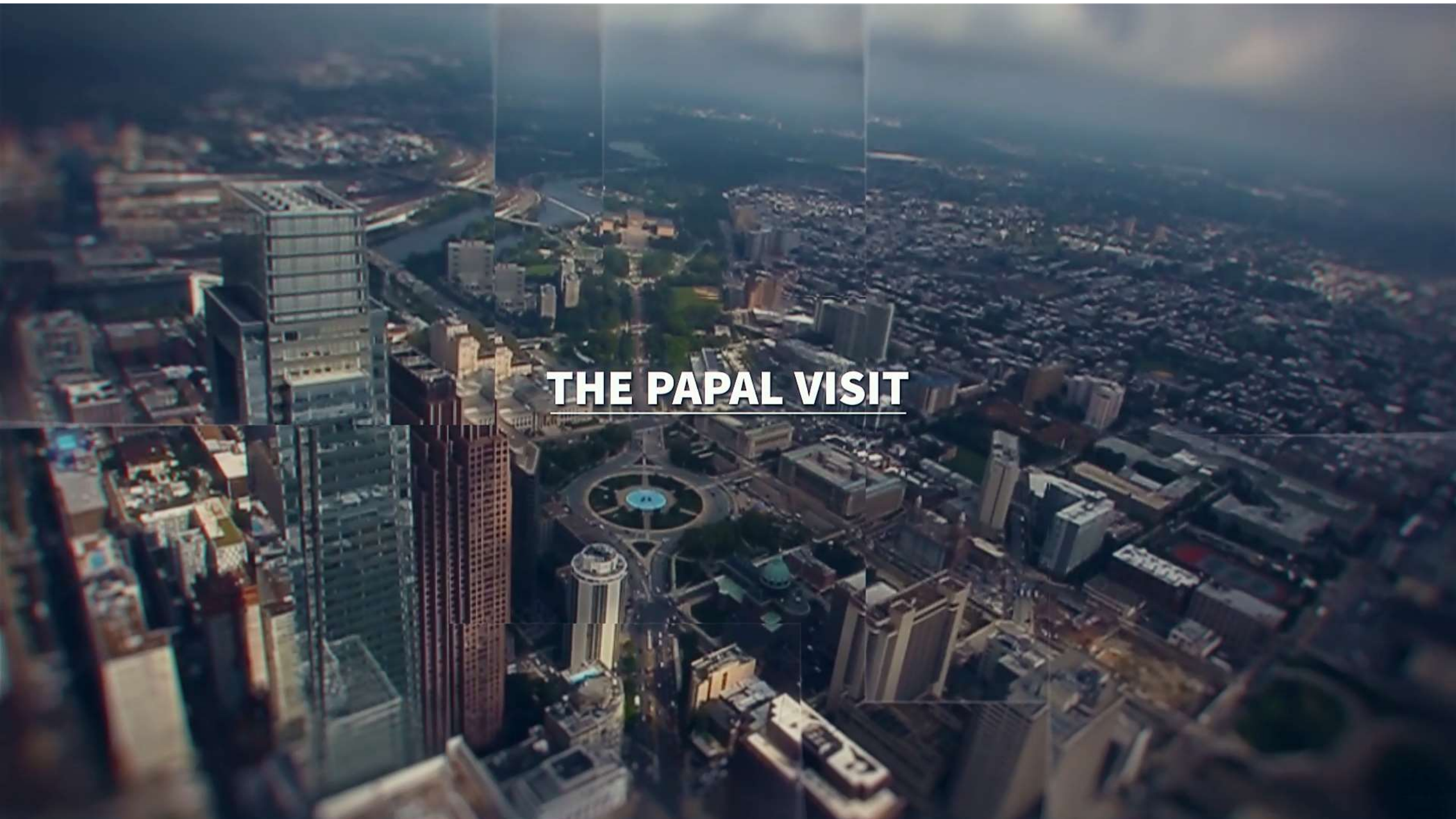
THE PAPAL VISIT

Reality Modeling

Capturing detailed existing conditions in 3D for contextual alignment within design and construction workflows

- No need to start from scratch
- Better decisions with precise real-world conditions

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Advancing Reality Modeling Data Collection with ContextCapture

Automatically generate high-resolution 3D reality models from laser scanners* and photos taken with:

- a digital camera
- a smartphone
- mounted on a drone
- or an aircraft with a dedicated multi-directional acquisition system.

* Coming in Fall 2016

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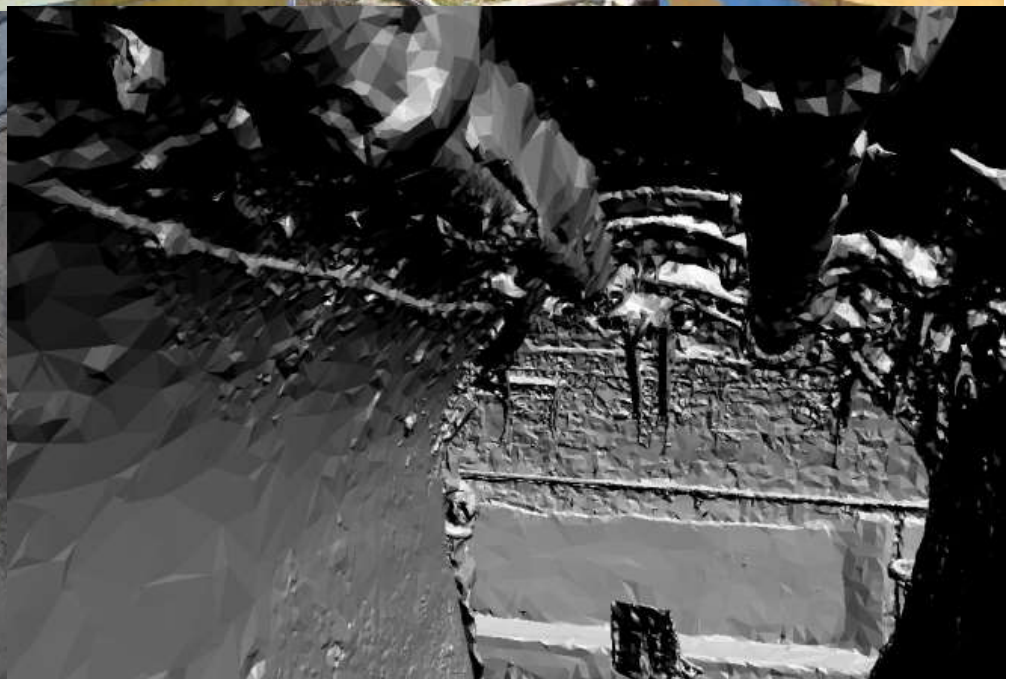
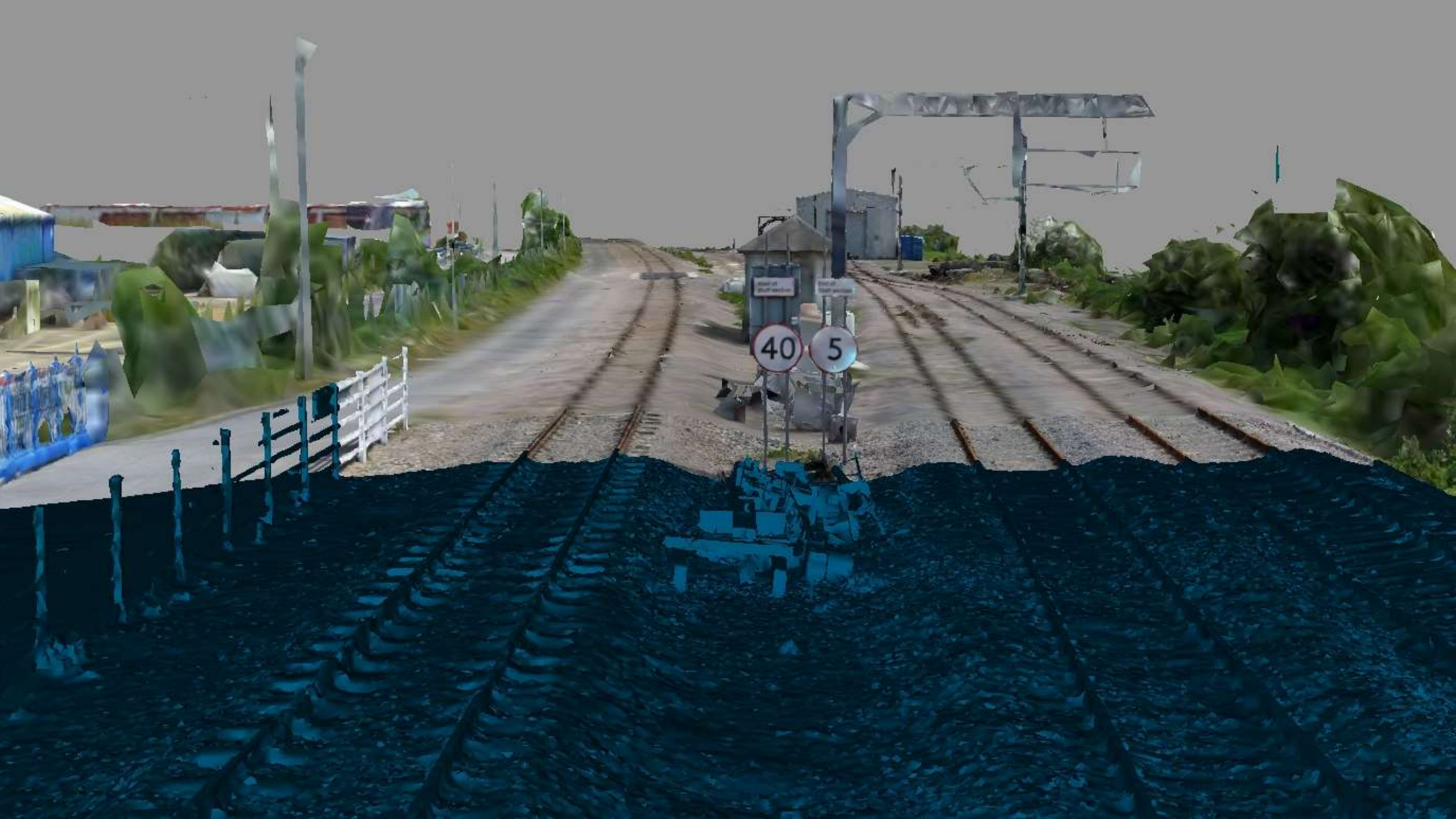


アジア航測株式会社
generated by smart3Dcapture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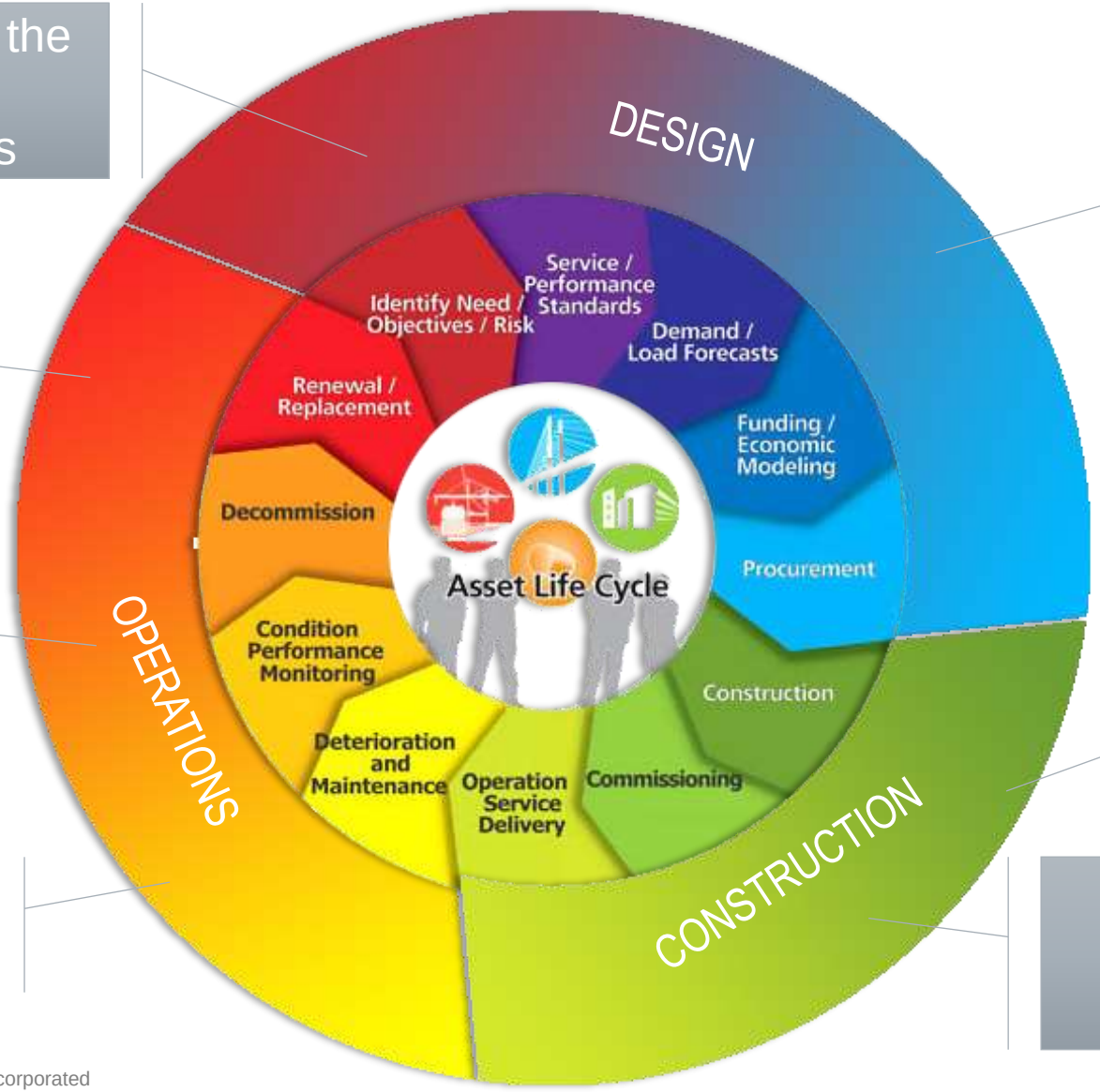
Reality Modeling for Advancing Infrastructure

Understand the existing conditions

3D Inspection

Surveying asset performance

Training and simulation



Risk management

Change detection

Archive construction information

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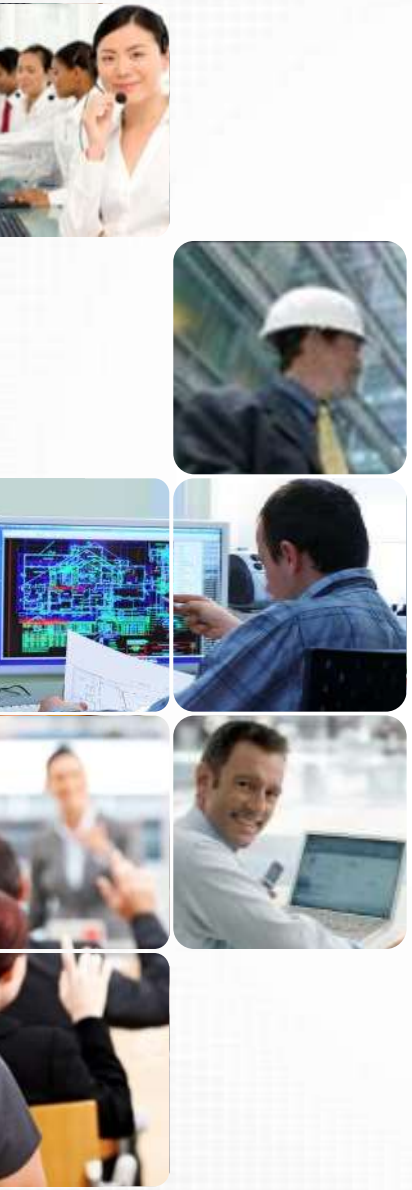

ContextCapture

Examples of 3D Models

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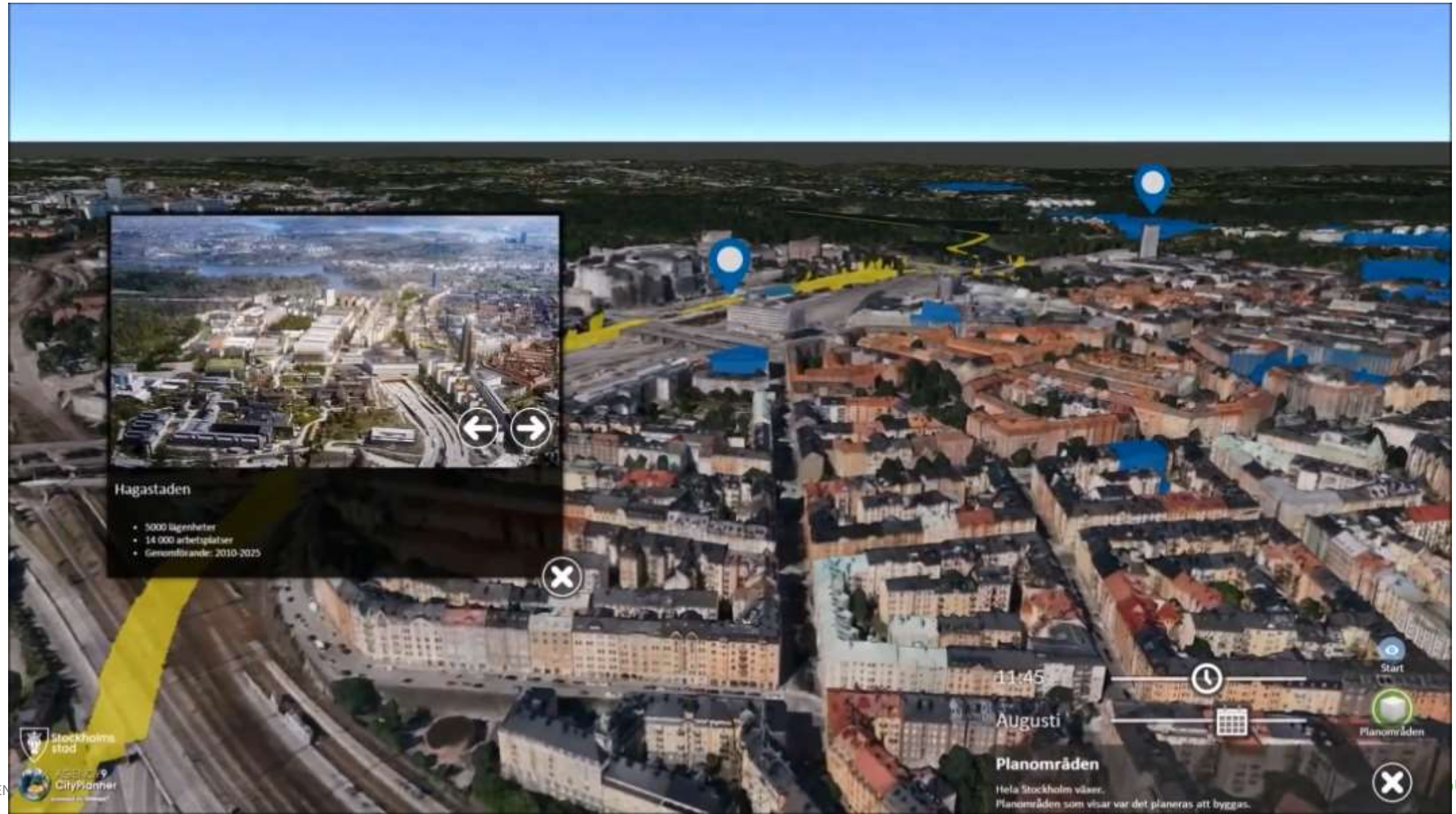
Bentley Sustaining Infrastructure

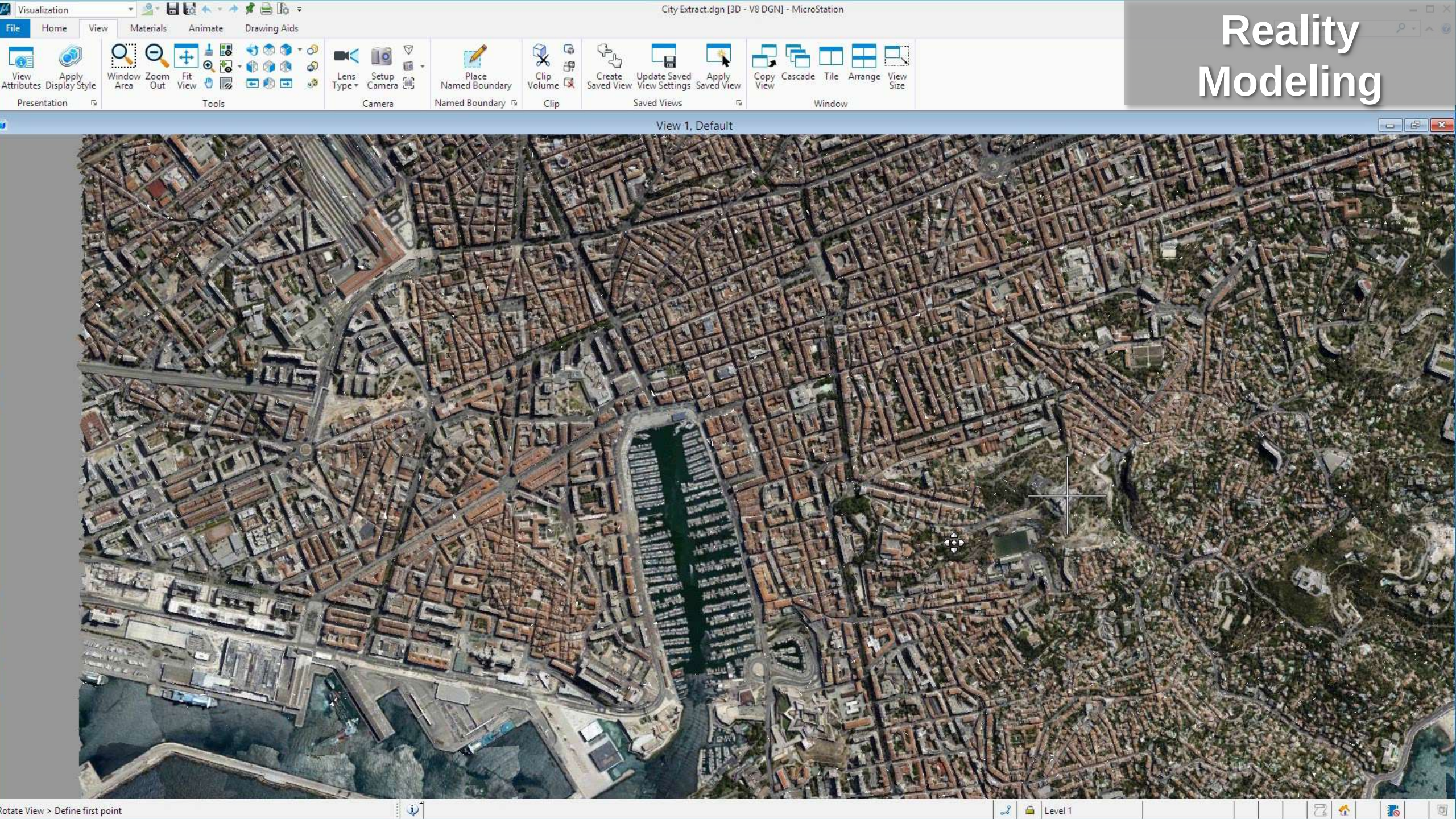
Infrastructure | Industrial Sites

Infrastructure | Cities

Transportation | Modeling of Existing Structures

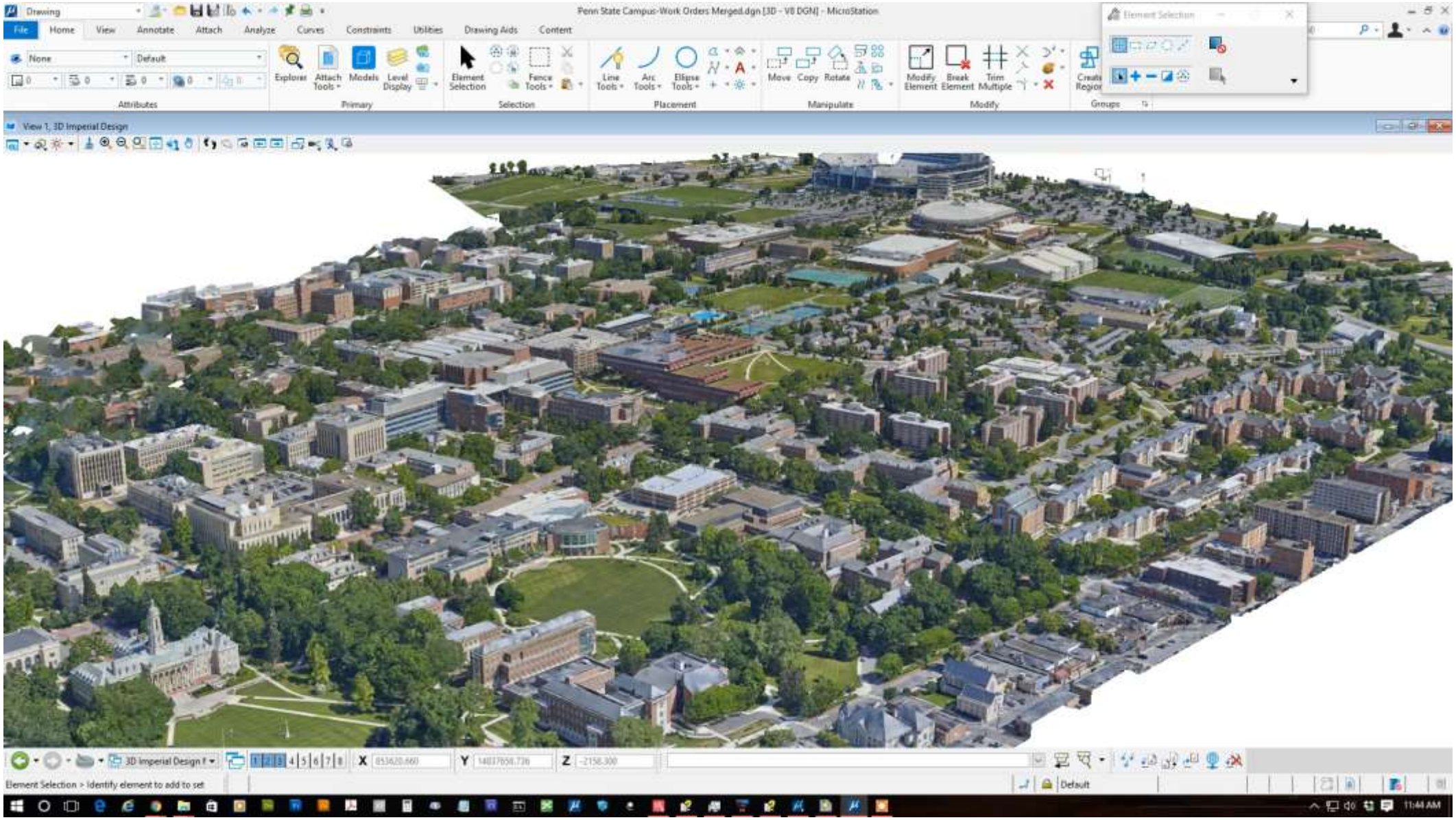
Planning | Integrating Development Projects in Existing Urban Fabric




Visualization
City Extract.dgn [3D - V8 DGN] - MicroStation
File
Home
View
Materials
Animate
Drawing Aids
View Attributes
Apply Display Style
Presentation
Window Area
Zoom Out
Fit View
Tools
Lens Type
Setup Camera
Camera
Place Named Boundary
Named Boundary
Clip Volume
Clip
Create Saved View
Update Saved View Settings
Apply Saved View
Saved Views
Copy View
Cascade
Tile
Arrange
View Size
Window
Reality Modeling
View 1, Default
Rotate View > Define first point
Level 1

Reality
Modeling
ADELAIDE 3D MODEL SAMPLE
EXPERIMENT IN LUMENRT
aero3Dpro
a 3D mapping service by aerometrex

GIS Integration



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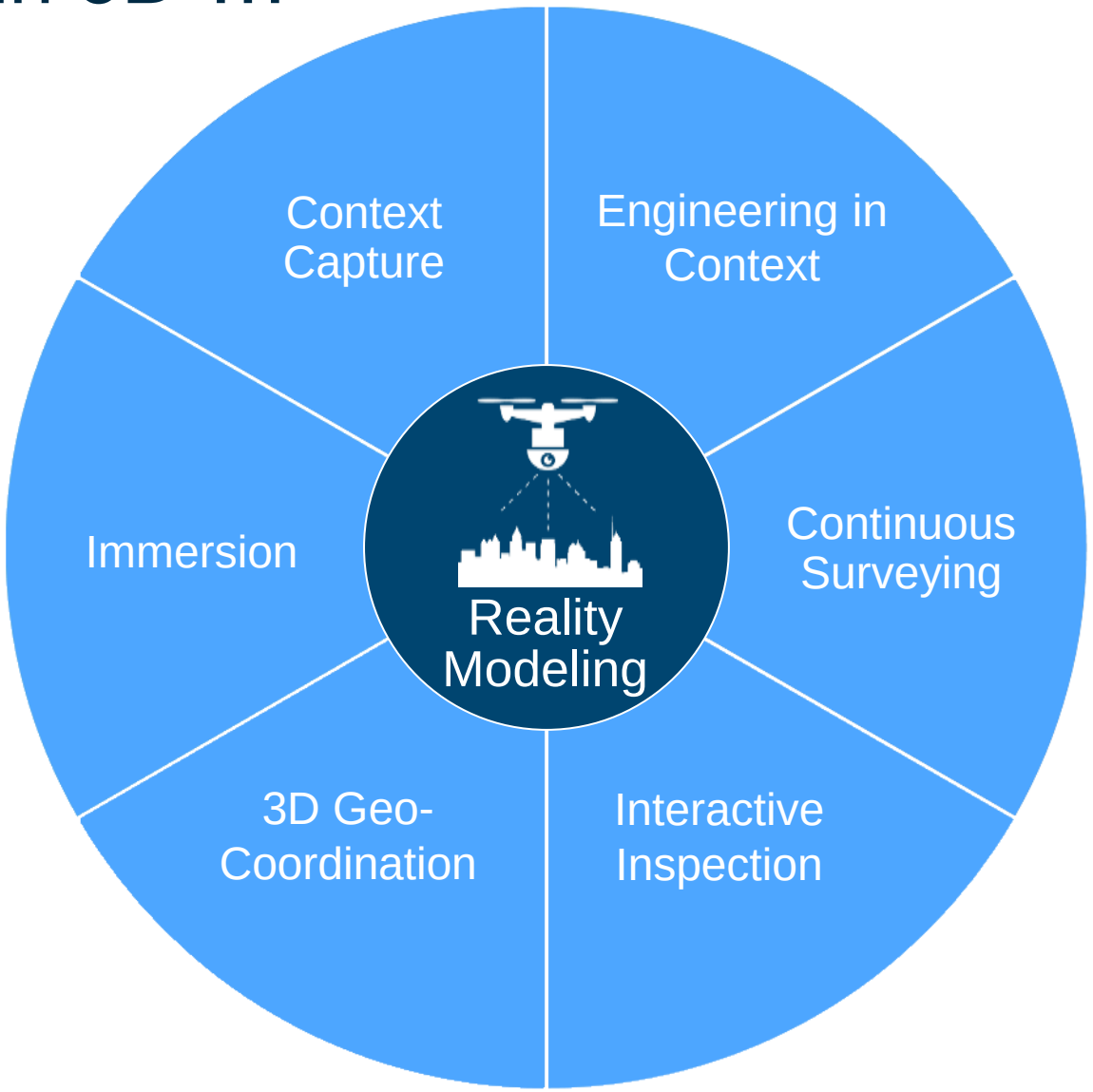
“Convergence in 3D”…



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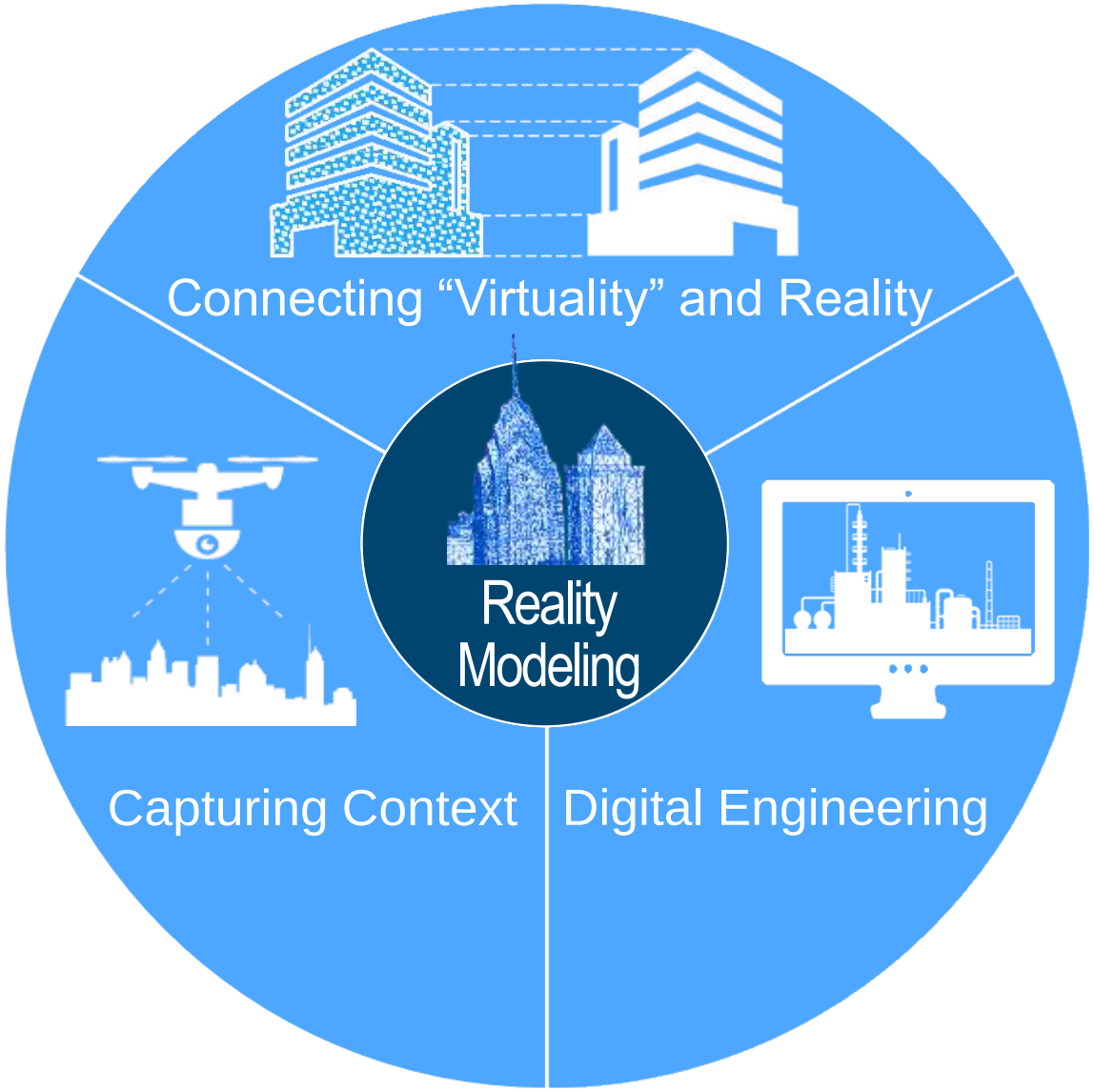
Enabling the Augmentation



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Advancing Reality Modeling for National Infrastructure

with Bentley solutions

Visit us at Booth 40 in the Exhibition Hall

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