

# How reality modelling and digital twins advance urban development

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WFEO

New technologies have significantly changed the way that Geospatial professionals conduct their work. Barely in our thinking a few years ago, technologies such as UAVs, drones, 3D surveying, laser scanning, and 3D imaging are now essential to our work. There are products and solutions that leverage these capabilities, enabling innovative ways to automate, analyze, and visualize your work and providing exciting new deliverables.

This presentation will discuss how we can rapidly build a highly precise 3D geometric model of existing terrain or city infrastructure. We will see how the use of digital imagery captured from any source, including UAVs, aircraft, or handheld digital cameras, in conjunction with point-cloud data can be utilized to deliver spatially enabled reality models. We will then also review the tools that enable web based visualisation of such models. Then we will explore see how reality models can support the management of a “City Digital Twin” for contextual understanding of the City infrastructure to facilitate planning, design, construction and operations of City assets.