Geospatial Intelligence for Equitable Urban Futures: A City of Cape Town–Woolpert Collaboration

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SUMMARY

As the demand for accurate, transparent, and sustainable property valuation and revenue enhancement grows globally, the integration of advanced geospatial technologies offers transformative potential. Woolpert brings a unique perspective to solving urban challenges through its work in geospatial advisory, data-driven valuation support, and infrastructure asset management across the Africa region.

This presentation explores how spatial data, remote sensing, and digital twins are being leveraged to enhance property valuation, inform land use decisions, and support resilient urban development, driving smarter, more equitable property and valuations outcomes.

With spatial data provided by Woolpert and other contractors, the City of Cape Town has revolutionised property valuations and appraisals methods by leveraging geospatial data to transform the traditional field approach to a fully enabled desktop approach to the property appraisal function. This has been achieved by utilising high resolution oblique and nadir imagery coupled with surface models of change detection.

Lean thinking has enhanced data collection productivity with Improved data quality and reduced property valuation turnaround times, where urban informality is framed as an opportunity and Informality is recognized as a core characteristic of urbanization.

The adoption of spatially enabled processes enables Revenue Enhancement for the benefit of the entire city. Faster methods of finding changes and assessing properties from the desktop allows the city to keep up with the challenges of rapid urbanisation. The city has moved from a business-as-usual approach to a future view approach encompassing and recognizing the need to

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respond to the dynamic nature of the built environment in a faster and timeous manner.

This approach, and the benefits derived, provide close alignment with the goals of a Citizen-Centric Smart City, promoting human settlements that are environmentally sustainable, resilient, inclusive, safe and productive.

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