

Let's Talk About land and property information in 3D: What Should The Future Look Like?

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SUMMARY

These days, there is much talk about 3D: 3D cadastres, Building Information Models (BIM), 3D GIS, 3D visualisation platforms... technical initiatives that are driven largely by a recognition of the physical complexity of our built urban environment, the growing use of high-rise as the functional residential model in urban settings, the increasing number of stakeholders involved and the corresponding streams of information outputs – all of which demand better tools to facilitate analysis, understanding and ongoing management of the built urban environment. The surveying profession's position within the built environment industry is often understated; yet surveyors play a pivotal role in the development process having the (increasingly) challenging role of crafting the relevant individual and communal rights, restrictions and responsibilities associated with complex high-rise structures. An ongoing research project titled 'Land and Property Management in 3D' at the Centre for SDIs and Land Administration at the University of Melbourne is currently investigating the use of 3D technologies for land administration purposes, with a key aim of modelling legal and administrative cadastral information for complex multi-storey buildings in an urban context and linking this with a building's physical information. The project adopts four key themes of inquiry to support a move to 3D: institutional challenges, data sourcing, data modelling and data visualisation. The paper seeks to provide an overview of the project as well as key findings to date in terms of articulating the opportunities and challenges inherent in the uptake of 3D initiatives relative to the vision of what the future of the surveying profession should look like, potential areas of change, potential barriers to change and suggestions for a way forward. Ultimately, this paper seeks to use these findings as a platform for engaging the wider surveying community. How should the profession interface with these 3D initiatives? What are the cultural, technical and systemic issues that the profession needs to be thinking about? These issues require consideration and input from a cross-section of the profession if we are to craft a legitimate and appropriate response.