Valuing Unregistered Properties with GIS

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SUMMARY

Fair and equitable valuation is dependent on situational knowledge of the area being valued, property data and technology, whether in spreadsheets or advanced regression models housed in statistical software packages.

Geospatial infrastructure supports valuation along all aspects of this spectrum. Mobile field collection of property locations and property characteristics create a dynamic base of understanding that enables visual and spatial statistical analysis. Using this data, valuers can visualize trends as well as create and refine refined valuation neighborhoods in which additional analysis can be performed. GIS provides several statistical tools from simple summaries to advance regression that can be built into models and automated to run whenever property values or characteristics are changed or added. Finally, all information collected can be shared with the public in the interest of transparency or with other agencies. The system can also be integrated with a registry to keep track of legal processes and documentation.

Application of geospatial infrastructure also serves to benefit from the valuation extension of the Land Administration Domain Model (ISO 19152:2012). A physical implementation of this schema is designed to guide for developing valuation departments understand which property variables to collect and how best to store them.

This paper will detail advancements in geospatial infrastructure and discuss the road ahead with geospatial technology and property valuation. An argument for adoption of an LADM valuation extension will be made and application of this schema will be related to collecting data, visualizing trends, identification of valuation neighborhoods and assessment valuation models with spatial statistical tools.