

New Zealand Property Mapping: Capital Asset Valuation on the Web

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Key words: Cadastre; GNSS/GPS; History; Land management; Real estate development; Spatial planning; Valuation

SUMMARY

Buying and selling property in New Zealand is a complicated task. There are many things to consider, including compensation values, litigation, energy and resource considerations, agribusiness valuation, and many other strategic factors. Many people turn to property advisors, professionals in the industry with stacks of historical records and detailed property information. The question is, how do the professionals access the right data when they need it? This often involves some combination of spreadsheets and large file cabinets. In this new era of GIS technologies, this should never be the case. Working closely with a New Zealand based capital asset valuation firm, I have developed a web application that revolutionizes the way they access their property data.

Utilizing the full potential of the ArcGIS API for JavaScript, combined with a variety of exciting web design technologies, I have developed a one stop solution for property information. The sleek intuitive display provides an interactive map as its focal point. From on-site photo attachments to file access using the Dropbox API, this website has it all. This project demonstrates how exciting web mapping can be.

On the back end the data is stored in a variety of related tables, providing the users access to complex property value calculations within the web interface. A series of forms are provided to work in conjunction with the map, allowing users to dynamically add and remove a variety of supporting property values until all assets are accounted for. By simply clicking on a property polygon, a user has instant access to details about silos, irrigation equipment, deer fencing, air strips, machinery, fertilizer bins, and the list goes on and on. And with any asset additions or removals, all parent information for the property and sales are automatically recalculated.

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The key to this application is making spatial data the backbone of the company's organizational structure. GIS is no longer just a tool that is used in conjunction with non-spatial technologies. By implementing this application as the core of their asset data management, the results have been profound. They now have significant improvements in logistics and overall data continuity. It's the type of project where anyone, regardless of their background, will witness the power of GIS.

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