Abstract

Building and Managing a ‘Survey Accurate’ Cadastre for GIS

Track: Surveying

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Land ownership is a fundamental layer in most GIS and many attributes are located with respect to parcel boundaries. The accuracy of GIS depends on the accuracy of the land ownership layer. Geodata software provides a cost effective solution to capture and convert survey records to create the property boundaries in a parcel network. In this way a coordinated and ‘survey accurate’ base layer is built for GIS.

The Geodata technology provides surveyors the basis for moving from a ‘metes and bounds’ to a ‘coordinate based’ cadastral system. The need for surveyors and land managers to transition to a coordinated cadastre has accelerated because of affordable GPS. It is now cheaper and easier to measure position than to use traditional survey methods. Software tools are therefore needed to bridge the gap between survey observations and survey records for GIS.

Through its software products Geodata provides functionality to surveyors and land managers to directly import and export their data to GIS systems whilst maintaining the precision of the survey data at all times. In addition software tools are available to translate data to and from most survey and design systems. There is also an automated process to shift from one reference cadastre to another and at the same time create a transformation file to preserve alignment of associated GIS layers. Using these unique software solutions the world of survey and GPS can more easily be aligned with the world of GIS.

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