

The National Integrated Land System – A “Field to Fabric” Solution

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Key words:

SUMMARY

This presentation will show how the National Integrated Land System (NILS) is used to integrate survey data into a GIS. NILS's consists of a centralized GIS architecture, a geodatabase, and four custom applications; Survey Management, Measurement Management, Parcel Management and GeoCommunicator. The Survey and Measurement Management applications provide surveyors with tools for importing, analyzing, and manipulating survey data to create a measurement network, called the legal description fabric. Parcel Management uses the legal description fabric to create survey-based parcels such as tax lots, maps, planning parcels, etc. The survey and parcel data are vertically integrated to maintain and synchronize spatial and topological relationships. The GeoCommunicator, through web services, publicizes cadastral survey and land management information and data from NILS like federal surface management agency boundaries, federal surface management agency contacts, and land and mineral use record information. Additionally, the NILS custom applications include a set of workflow management tools that work with ESRI's ArcGIS surveying application allowing the BLM to standardize and automate many of their business processes. A demonstration of NILS's will show how survey data is developed from field to fabric in GIS and how the data is distributed and used by the public.