

National Integrated Land System

The National Integrated Land System (NILS) is a joint project between the Bureau of Land Management (BLM); USDA Forest Service (USFS); and state, county, and private organizations. NILS will provide a business solution to land managers who face an increasingly complex environment of complicated transactions, legal challenges, and deteriorating and difficult-to-access records.

As part of the NILS solution, the specialized fields of land surveying, land records management, and GIS technology are unified in an enterprise computer application. Field survey mapping and data tools, a measurement management engine to analyze survey data, and parcel management operations are implemented in the application. The integration of surveying, parcel management, and GIS provides land managers with a complete field-to-fabric technology solution.

Survey Management

Survey Management is a set of applications that provides surveyors with the ability to manage survey data. It provides a straight-forward workflow for importing survey-based data into the NILS survey fabric. Soon tools for exporting survey-based data will also be available. Users will be able to check out survey projects from the survey fabric to perform updates.

ASCII file reports containing survey-based coordinates will also be available. Survey Management provides surveyors with field survey tools to research survey data. Additional tools will automate setting up the survey project, recording the measurements, performing survey calculations, and integrating the survey with related data sets. The initial release of Survey Management was September 2002.

Survey Research - includes tools to locate survey record data on the Internet using Geodata.gov. Additionally, survey-based data from GeoCommunicator's Land Survey Information System can be used to determine search areas for survey corners.

Pre-Field Survey Setup - creates setup files and parameters to prepare the survey instruments. This includes incorporation of digital data sets.

In-Field Survey Setup - provides tools for determining station orientation and collecting readings, observations, and measurements.

Collect Field Data Observations -allows surveyors to sight features, traverse from point to point, capture readings, and process readings to derive measurements.

Perform Geodetic COGO and Layout - provides surveyors with geodetic coordinate geometry (COGO) calculation methods and procedures. Surveyors can perform computations in the field to locate and calculate coordinates for physical features such as monuments, buildings, and watercourses.

Integrate Data - integrates GIS, raster, and field data for data validation and decision-making while in the field. Additional survey management tools import the field survey data into the NILS survey fabric.

