



1. Organizational Approach to GIT:

The Nebraska Forest Service (<http://www.nfs.unl.edu/>) is located within the Institute of Agriculture and Natural Resources (IANR) at the University of Nebraska at Lincoln (UNL). The application of GIT for the Service is at an individual project level. The Service receives some GIT support from UNL's Center for Advanced Land Management Information Technologies (CALMIT) (<http://www.calmit.unl.edu/calmit.html>). GIS and remote sensing (RS) imagery have been used for some years by four or five main office staff. The State Forester is administratively responsible for all Service programs, including GIT. Of the five District offices, only one one-person office currently uses GIS. There are no policies directed specifically at GIT usage by the Service at this time. GIS analysis has also been used for a variety of fire program efforts. Issues surrounding GIT use within the Service center on the significant commitment of time and money required for GIT training, equipment and maintenance capabilities.

2. GIT Applications and Data Utilized:

The Service uses ArcView™ with both digital orthophotos and satellite imagery, primarily for analyses related to the Rural Fire Protection and Control Program. **Fire** Program applications such as planning, analysis and reporting are the only areas where the Service uses GIT on a regular basis. Current uses include the creation of fire hazard rating information using maps generated in ArcView™, and some program analysis, like the locations of cooperating aircraft. One District office currently uses digital orthophotos as base maps for ArcView™ map preparation for management planning activities, tree planting plans and related work on **state lands**. One additional District has used non-GIS digital image processing and drafting to facilitate map preparation, revision, and archiving. It is anticipated that GIT use will become more commonplace throughout the Service as it develops more technical expertise, particularly through its forest inventory work. Current **forest characterization** efforts by the Service involve its work on a forest inventory program that has been undertaken with the aid of imagery provided by the U.S. Forest Service (USFS), where digital orthophotos and digitized aerial photos are used in conjunction with traditional aerial photos. GIS and GPS are used to direct field crews to sample plot locations and correct or record those locations. In addition to GIT assistance from CALMIT, the Service receives data through the Nebraska Department of Natural Resources (DNR) (<http://www.dnr.state.ne.us/>), data and general assistance from ESRI, and satellite data for the generation of vegetation cover maps, a component of the **fire** hazard rating system, from the EROS Data Center. The Service has also used GIT for **wildlife** applications in its work with CALMIT, which was the lead agency in Nebraska's Gap Analysis Program (GAP). Recently, a new, internal web-based reporting system regarding Service accomplishments was established. It includes a geographic reference for each reported accomplishment and will facilitate many future GIT applications. Geographic referenced reporting data will allow for typical GIS analyses involving various types of accomplishments, and may include such things as comparisons of various types of tree plantings with soil layers and/or proximity to riparian zones. Furthermore, display and evaluation of the distribution of cooperators by District, year, or type of service provided will be facilitated by the new system.

3. Statewide and Other GIT Linkages:

The Nebraska GIS Steering Committee (<http://www.calmit.unl.edu/gis>) is the primary GIS coordinating group in the state. The Committee is aided by a Coordinator, who serves as the lead office for GI/GIT coordination in the state. The state's Chief Information Officer (CIO) serves on the Committee, and works closely with the Coordinator. Additionally, the Committee assists in the support of a metadata clearinghouse, described below. The Committee is also the primary coordinating body in Nebraska, is a Cooperating Partner with the Federal Geographic Data Committee (FGDC) and supports the development of the National Spatial Data Infrastructure (NSDI). Through the representation of its Coordinator, the

Committee is also actively involved with the National States Geographic Information Council (NISGIC). Although the Service periodically contributes programmatic suggestions or requested comments to the efforts of these groups, there is no formalized, regular interaction between them and the Service.

The Nebraska Geospatial Data Clearinghouse is an FGDC compliant metadata clearinghouse for Nebraska-related geospatial data (<http://geodata.state.ne.us/>). The Clearinghouse provides only searchable metadata, with links to online data accessible on other agencies' servers. The Nebraska Department of Natural Resources (DNR) Clearinghouse also maintains an agency-specific FGDC compliant clearinghouse for natural resources geospatial data provided by DNR (<http://nr.sun.nrc.state.ne.us/gateway.html>).