



North Dakota

1. Organizational Approach to GIT:

The North Dakota Forest Service (NDFS) (<http://www.ndsu.nodak.edu/ndsu/administration/forest>) is located within North Dakota State University (NDSU) (<http://www.ndsu.nodak.edu/>), and has only recently begun to use some forms of GIT, and use of the technology is at an individual application basis at this time. GIS capabilities within NDFS are modest, and remote sensing (RS) use is limited to a single application. NDFS receives some technical assistance from North Dakota State University's (NDSU) Agricultural Engineering Department. The only GIT staff at NDFS is the Stewardship Specialist, who uses GIT on a part-time basis in one field office. This person handles all matters relating to GIT for NDFS, and uses GIS as a very minor component of regular duties. Future plans include expanding the use of GIT to other field offices with the acquisition of GPS units. There are no policies concerning GIT for NDFS. In terms of benefits, GIT use has allowed NDFS to focus program delivery, resulting in better implementation of federal grant monies for various applications. Problems regarding GIT center on the need for additional staffing.

2. GIT Applications and Data Utilized:

NDFS uses GIS for two applications: **fire** and **private lands** management. NDFS uses ArcView 3.2 for fire location mapping. Information from rural **fire** protection districts was used to generate fire location and size for the past ten years. NDFS acquires some data from the North Dakota Fire Dispatch office, including number of fires reported and size of fires in the state. NDFS has also used GIS for **private land** applications, such as mapping management plan locations and coordinating return visits to these sites. NDFS will coordinate the use of GPS within a GIT framework for future mapping of active management sites. In regards to RS, one effort was recently made to use satellite imagery but image acquisition costs were prohibitive to further use. However, NDFS does make use of aerial photographs from the U.S. Department of Agriculture's (USDA) Farm Services Agency for **land cover** applications, such as assessing the location of forestlands. NDFS also uses internal data, including historic files and management activity. In addition, the Upper Midwest Aerospace Consortium (UMAC) (<http://www.umac.org/>) and NDSU have provided statewide GIS layers for county and township boundaries, highways and waterbodies.

3. Statewide and Other GIT Linkages:

The Information Technology Department (ITD) serves as the lead agency for GI/GIT in the state. ITD is responsible for network planning for state agencies, higher education, counties, cities, and school districts, as well as for computer support services, software development, statewide communication, planning, and standards. ITD staffs a full-time State GIS Coordinator who chairs the GIS Technical Committee (GISTC), which is the lead coordinating group in North Dakota, and provides GI/GIT direction, communication and coordination services. North Dakota also has a State Mapping Advisory Committee (SMAC) that is appointed by the GISTC. The main focus of the SMAC is to set mapping priorities within the state and make sure there is no duplication or waste of resources. The NDFS receives informative mailings from these groups, but has no direct participation with them at this time.

The North Dakota GI clearinghouse is maintained by the North Dakota Geological Survey (<http://www.state.nd.us/ndgs/GISInfo/gis.html>). In addition to new and existing data, it is planned that the current data in the NDGS clearinghouse will reside in a GIS data warehouse, hosted by ITD. The GISTC and ITD are working with a consulting group to help in the design of the geospatial data warehouse.