



### ***1. Organizational Approach to GIT:***

The Arkansas Forestry Commission (AFC) (<http://www.forestry.state.ar.us/>) has used GIS internally and with others in Arkansas, however, has not been able to implement GIT enterprise-wide due to declining resources. The AFC relies upon the University of Arkansas at Monticello (UAM) Spatial Analysis Lab (SAL) and the University of Arkansas at Fayetteville (UAF) Center for Advanced Spatial Technologies (CAST), both described below, for data and technical expertise. At this time the Commission does not have staff exclusively dedicated to GIT, but does use it in both its headquarters and district offices. The Commission's Assistant State Foresters of Resource Protection and Resource Management, in consultation with the Deputy State Forester, approve projects and expenditures, and help to coordinate GIT resources to resolve related problems. No policies regarding the AFC's use of GIT exist at this time. Major impediments to the full adoption of GIT within the AFC's state headquarters, as well as district offices are budget support and skilled expertise in both software and data applications. In 2002 and 2003 the agency has a major goal to acquire additional GPS resources to assist with forest health field data collection.

### ***2. GIT Applications and Data Utilized:***

The AFC uses GPS collected field data and integrates that data into ArcView for several applications including **fire**, management on both **state lands** and **private lands**, **forest assessment**, **wildlife**, **wetlands**, **forest health** and **urban forestry**. Both SAL and CAST provide data and technical expertise to the AFC, and have worked on projects involving computer aided dispatching (CAD) to aid in fire mapping and response using data layers from various GIS analysis projects. Forest fire response is a major mission for the AFC. Current forestry applications include the AFC's work with SAL to use LANDSAT Thematic Mapper (TM) imagery-based data in a statewide fire hazard mapping project that will include a CAD system for forest fire (<http://sal.uamont.edu/sal/>). This system will incorporate the Public Land Survey System (PLSS) and state highway county maps to develop a coordinate location system, and will allow the AFC dispatch center to map fire locations and file cause and incident reports. Further, the AFC serves a lead role in assisting county and rural fire departments in the delineation of district fire boundaries in the state. In a project with the University of Arkansas at Little Rock's GIS Lab, the AFC completed a review of all state district fire boundaries. This information is being digitized and will be available to support fire response efforts in the future. Additional applications involve working with CAST, the U.S. Forest Service (USFS) and private firms on various forest resource management programs. One example is the Arkansas Gap Analysis Program (GAP), conducted with assistance from CAST (<http://www.cast.uark.edu/main.html>). The AFC also coordinates closely with the Multi-Agency Wetland Planning Team (MAWPT) in efforts to develop a statewide GIS database that will include soils, topography, vegetation, GAP, hydrography, and ownership data to address wetland prioritization projects in the Arkansas delta (<http://www.mawpt.org/>).

### ***3. Statewide and Other GIT Linkages:***

Statewide GI/GIT coordination in Arkansas is served by two organizations, the Geographic Information (GI) Office in state government, and the Center for Advanced Spatial Technologies (CAST) (<http://www.cast.uark.edu/>). The GI Office is located within the Department of Information Systems and assists with the development of GIS programs and data for state agencies, counties, and cities in Arkansas. CAST is responsible for managing the state's GI/GIT clearinghouse, described below. CAST also conducts research and other work, including rapid delivery of satellite imagery, environmental studies and research on the deployment of spatial technology in archeology. The AFC works with the GI Office and CAST on many statewide GIT matters, one example of which is AFC's provision of personnel for in-the-field verification of GAP data layers. Arkansas currently has two groups dedicated to coordinating GI/GIT in the state, led by the

Arkansas State Land Information Board (SLIB) (<http://www.gis.state.ar.us/lib.htm>) formed in 1997. Some of SLIB's responsibilities include developing cost-effective programs for digital data development and distribution; directing available funds to mapping and land records modernization projects within Arkansas; and assisting local and state government in defining technical specifications and standards to use in the collection, distribution and reporting of spatial information. The SLIB is complemented by the Arkansas GIS Users Forum, which was the first GI/GIT group in the state and formed in 1990. The Forum (<http://argis.uar.edu/FORUM/>) was formed in 1990 to coordinate GI/GIT activities in the state, and continues to exist as an important mechanism to involve many users of GIT. The Forum's membership continues to provide support and advice to the SLIB. AFC also works with the SLIB and the Forum by cooperatively identifying state agency needs and the resources required to complete projects, coordinating efforts for in-common projects, and acquiring funding.

Geostor serves as Arkansas' GI clearinghouse (<http://www.cast.uark.edu/cast/geostor/>). This GI delivery system is unique, allowing any user to search, access, and retrieve data in virtually any format or projection through an Internet browser. The system exceeds over a terabyte of spatial data, all of which can be accessed by users at no fee.