



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

The Indiana Division of Forestry (DOF) (<http://www.in.gov/dnr/forestry/>), located within the Department of Natural Resources (DNR) (<http://www.in.gov/dnr/>), is a moderate user of GIT. DOF's use of GIT is dispersed and uncoordinated. In addition, DNR does not have a GIS or GIT coordinator at the department. Within DNR, each division manages their own GIT program, and some divisions have full-time, dedicated GIT positions. Although DOF is not one of the divisions that has such staff, it does have limited access to GIT expertise from the divisions that do. Some of the DOF's program areas using GIT receive limited support from their federal collaborators on an ad hoc basis. However, DOF does not receive any formal support from any federal or state agencies in any other regard. DOF's Software Specialist purchases and installs software and hardware for most of DOF's GIS related initiatives and offers advice on database design issues when requested. However, individual program areas within the DOF decide whether or not to become involved in GIS related projects. Currently, four of nine state forest properties are using GIT under the supervision of the Property Specialist. The DOF has an additional four staff using GIT in various program areas, and GPS is used by staff in DOF's field offices. There are no formal policies regarding GIT within the DOF. The state's GIS Coordinator has established some reporting guidelines and standards, but the DOF has not fully incorporated them to date. DOF field office staffs use GPS and GIS, though there is no formal communication between GIS users, and no standards or reporting requirements in place within the DOF. Despite this, many DOF personnel, including the State Forester, senior staff members and numerous field resource managers are strong supporters of GIS and its continued development within DOF. Issues center on the need for funding, knowledgeable personnel, and more coordination and supervision. The DOF's limited internal knowledge hampers efforts to develop and direct GIS. Currently, a cap on creating new positions prevents creation of a full-time dedicated GIT position, and funding also limits staffing or contracting to conduct GIS work.

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

The DOF uses GIT for several applications, and makes use of a combination of GPS units, field data recorders, database software, and ArcView software in its GIS efforts. The DOF has access to a complete set of statewide digital orthophotos and digital raster graphics (DRGs). DOF data sources include U.S. Census Bureau TIGER files, DNR data, state universities' data, internal DOF GPS data, and data converted from DOF resource management files. There is no central repository of GIT data or metadata within the DOF, and GPS data collection for GIS use is done by DOF staff at individual field offices.

The DOF currently uses GIT for its State Forest program, Forest Insect and Disease program, Timber Utilization and Marketing program, and its Fire Management program. The State Forest program area is currently developing and using GIS for resource management on four of the nine state forests, with plans to expand as resources permit. Computer-based systems are being used to track **state land** management activities and associated natural and cultural features, thereby improving decision-making. The Division's Forest Insect and Disease program is using GIS in its Gypsy Moth Survey, as part of the U.S. Forest Service's (USFS) National Gypsy Moth Slow-The-Spread (STS) Project (<http://www.ento.vt.edu/STS/>). This **forest health** project provides GIS support and training to Division staff for this effort. The STS program runs ArcInfo GIS at Virginia Tech, with additional support from Michigan State. The Gypsy Moth Survey uses Magellan 315 GPS units, supplied by the USFS, in this effort. This equipment is provided during the survey window for Gypsy Moth, as well as other insect outbreaks in Indiana.

The Forest Utilization and Marketing program area is using Garmin GPS III units to locate and collect information on the primary and secondary wood-using industry in Indiana. This **economic** program also

uses ArcView 3.2 for analysis, reporting and mapping purposes on Indiana's forest resources with some Forest Inventory and Analysis (FIA) data and digital raster graphics (DRGs) and digital orthophotos.

The DOF's Fire Management program area is investigating GIS, and will be using ArcView 3.2 in the near future. Previous program efforts include a collaborative study of **fire** risk done with Indiana University's School of Public and Environmental Affairs (SPEA) in 2000. The subsequent analysis looked at wildfire fuel sources and occurrence. Potential future uses of GIT include mapping of volunteer fire departments (VFDs), field use of laptops and digital orthophotos for fire occurrences, and real time fire mapping of acres burned, location and fuel types, as well as other parameters.

A current project that will likely have application to DOF's Community and Urban Forestry program is the USFS's **urban forestry** pilot program at DOF for forest health and inventory monitoring. This program utilizes LANDSAT-7 data and is unique in that it establishes field plots in urban areas, rather than traditional forested areas.

In addition, the Cooperative Forest Management (CFM) program area is investigating using GIS for the mapping of **public** and **privately** owned managed lands for use as a management tool. A contract with Purdue University has been established for a federally funded pilot area study to see if the project will yield benefits sufficient to justify further work. The study is currently underway, and will utilize available data from forest management files, hard copy map records and GIS data from other arenas.

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

Two lead entities are responsible for GI/GIT in Indiana. The Indiana Geographic Information Council (IGIC) was created to guide the development of a statewide GI/GIT program. It was formed in response to, and is the lead coordinating body of, the Indiana GIS Initiative (INGISI), which is an informal group of representatives from various sectors using GI/GIT in Indiana ([http://www.in.gov/ingisi/about\\_us/ingisi.html](http://www.in.gov/ingisi/about_us/ingisi.html)). The Information Technology Oversight Commission (ITOC) has dedicated staff concerning information technology in state government. ITOC created the position of State GIS Coordinator in 2000. Indiana currently has two groups that coordinate GI/GIT activities in the state, including the IGIC, described above, and the Indiana Government GIS Task Force serving state government. Some of IGIC's coordinating duties include development of a strategic management plan; development and implementation of a statewide geographic data-sharing cooperative; policy and guideline recommendation; and support and advice to member organizations. The Indiana Government GIS Task Force was created by ITOC. It is comprised of state agency representatives, and serves as a forum for state agency cooperation and development of plans and strategies for the coordination of agency GI/GIT resources. Currently, no linkage exists between the DOF and these groups.

The Indiana Geographic Information Catalog is Indiana's metadata node on the NSDI. It has been hosted by the University Library of Indiana University-Purdue University Indianapolis (IUPUI) (<http://www.ulib.iupui.edu/subjectareas/gis.html#gen>). Initially supported by an FGDC CAP grant, it is a free web-based, dynamic catalog of Indiana GI/GIT data that is searchable by keywords, geographic area of interest and time period of content. The Catalog retrieves documentation (metadata) about GI/GIT datasets, including data quality and data distribution information. A strategic concept proposal is being developed that outlines a phased approach to implementing a web-based statewide GIS. The first phases of implementation are being supported by funding from the Indiana Land Resources Council, the Indiana Department of Transportation and the Federal Highways Administration.