



## Connecticut

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

The Division of Forestry (<http://dep.state.ct.us/burnatr/prgaactiv.htm> - forestry) of the Connecticut Natural Resources Bureau (<http://dep.state.ct.us/burnatr>) is limited in its use of GIT at this time. The Division relies primarily on the GIT staff maintained by its parent agency, the Department of Environmental Protection (DEP) (<http://dep.state.ct.us/>), which is a leader in the use of both remote sensing (RS) and GIS in the state. DEP's Environmental and Geographic Information Center (EGIC) is the main source of GIT support for the Division, as well as the rest of DEP. Additionally, the Division also receives assistance and data provided by the University of Connecticut (UConn) (<http://www.uconn.edu/>). Currently, the Division uses GIT primarily on an individual application level, but DEP is working to develop GIT into all aspects of management for all Department agencies. A small number of Division staff, working out of both the Hartford Headquarters and several networked Field offices, use desktop GIS software, and have access to the agency's standard database and agency-specific extensions. Furthermore, DEP put an Intranet GIS application into service in late 2001, which allows any agency employee with access to a networked PC the ability to perform basic GIS services without the need for additional GIS software. Currently, 16 field foresters in five Division offices are utilizing this system. The State Forester authorizes equipment purchases and encourages the training of staff and incorporation of GIT in management and operational planning. No policies for Division GIT use exist at this time. Funding for GIT staffing, training and equipment purchase is a major obstacle to increasing GIT use within the Division.

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

The Division uses data provided by DEP and UConn primarily for **forest assessment** purposes in the administration of the Forest Legacy program and for some minor applications regarding services for **private landowners**. The Division uses GIS data from DEP, including data for transportation, natural resources, and open space, as well as land use and land cover data and digital orthophotos. UConn, in conjunction with state extension forestry personnel, is currently engaged in the use of remote sensing (RS) for mapping forest **land cover** fragmentation as part of the larger Northeast Access to Useable Technology in Land Use Planning for Urban Sprawl (NAUTILUS) project. This project uses satellite data such as LANDSAT Thematic Mapper (TM), SPOT and IKONOS together with vector GIS data to address sprawl in the Northeast, particularly as it impacts natural resources (<http://www.resac.uconn.edu/>). Additionally, DEP, in coordination with UConn and the U.S. Environmental Protection Agency (EPA), has sponsored the development of statewide land use and **land cover** data using LANDSAT TM and SPOT panchromatic satellite imagery from 1994-1995. Also, as mentioned above, the DEP has created an Intranet GIS interface using ArcIMS, which is accessible to all agency staff. The system is called ECO (Environmental Conditions Online) and provides Division staff the ability to perform basic spatial queries, create simple maps, as well as other basic GIS services on networked workstations, without the need for additional GIS software.

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

There is no official lead state GI/GIT coordination office in Connecticut at the present time. However, DEP and UConn have taken on many statewide coordination responsibilities through their own initiatives, so informally share this statewide GI/GIT role. In particular, UConn has established two centers that support GI/GIT development, distribution, and use. The first is the UConn Center for Geographic Information and Analysis (UCCGIA), a partnership of the Department of Geography (College of Liberal Arts and Sciences) (<http://www.uconncgia.uconn.edu/>) and the UConn Map and Geographic Information Center (MAGIC). Through MAGIC, the UCCGIA has taken a lead role in establishing a coordinated, online distribution system for state and regional digital GI.

The second UCONN center is in transition, but current plans call for programs such as NAUTILUS, which are supported by the University's Department of Natural Resource Management and Engineering, and the Cooperative Extension Service, which are both within the College of Agriculture and Natural Resources, to be organized within a new center called the Center for Land use Education and Research (CLEAR). Presently, no formal state GI/GIT council or equivalent group exists in Connecticut, however, DEP's Environmental and Geographic Information Center (EGIC) has convened interested parties together to pursue the creation of a formal state coordinating group. DEP will play a central role in this coordinating group, and will attempt to represent the needs and interests of the agency's many units, including the Division of Forestry.

Connecticut's official NSDI Clearinghouse Node is managed by MAGIC and supports online GI distribution (<http://magic.lib.uconn.edu/>). MAGIC has been an early pioneer in using the web to distribute GI, and it continues to make much data available for downloading, free of charge. The data available is from multiple producers, including state agencies like DEP and DOT, as well as federal entities such as the U.S. Geological Survey, the Natural Resource Conservation Service, the U.S. Census Bureau, and other sources.