



Cooperating Technical Partners (CTP) Success Stories

The Complex Systems Research Center at the University of New Hampshire

Universities currently represent approximately 2 percent of CTPs. In 1999, the University of New Hampshire became the first university to become a CTP. **The Complex Systems Research Center (CSRC)** at the University of New Hampshire is a well-established information resource for government agencies, nonprofit organizations, and communities. At the State and regional level, the CSRC provides data and services to improve decision making relative to land use, growth management, and water resources planning. CSRC is a CTP and the host of the State's Geographic Information System (GIS) clearinghouse and the Geographically Referenced Analysis and Information Transfer (GRANIT) system. Additionally, the CSRC works closely with the New Hampshire Office of Energy and Planning (OEP) on the Map Modernization Management Support (MMMS) Program.

New Hampshire



CSRC and OEP collaborate on a number of activities, including attending [Flood Map Modernization](#) (Map Mod) community meetings and making floodplain maps and related data available to the public. The partnership is ideal because of the CSRC staff's familiarity with flood map data, existing relationships with key stakeholders (e.g., Regional Planning Commissions), and general expertise in GIS and geospatial services.

CSRC's CTP-related work began in 1999 with a pilot project to provide digital floodplain map conversion for three communities in Rockingham County, New Hampshire. This project allowed the CSRC staff to become familiar with FEMA's mapping requirements and to develop techniques that facilitated the rapid and efficient development of digital coverage. Since that initial project, CSRC has been involved in six other projects, ranging from development of basic data to production of preliminary Digital Flood Insurance Rate Map. Collectively, these projects have enabled CSRC staff to expand their expertise into new types of mapping.

In just a few years, CSRC has greatly increased its mapping capabilities and digitized the entire State, which consists of 10 counties. The Map Mod work has been a great success, and CSRC has been used as a model for other CTP agreements in the New England area.

Two of the biggest challenges in Map Mod have been finding the best available data and learning how best to process the older data. As with all GIS efforts, keeping up with the technology for GIS is



also a constant challenge. One advantage for a university CTP is its ability to hire and train geography/natural resource students to help with projects. Because CSRC is the State's GIS clearinghouse, the Center also had easy access to data and an existing relationship with other GIS users. This has helped a great deal in making data available to the public. CSRC also offers an Internet Mapping Service that allows the public to view and query data. GIS layers and preliminary Digital Flood Insurance Rate Maps can now be downloaded directly from the GRANIT system. The university serves as the repository for this data.

CSRC plans to continue this type of work in the future and has recently subcontracted with another mapping partner that will provide engineering support as part of its ongoing projects. CSRC hopes to continue map maintenance work within the State and is exploring opportunities to serve as a regional resource and distribution center for floodplain maps and data. The university could provide resources such as a location where communities can go for map output assistance, enhanced 3-D visualization services, training, and technical support. Map output assistance is very valuable to FEMA, because many local communities are not capable of printing digital PDF map documents. Another possibility for the future would be to create seamless statewide maps, similar to the current countywide maps that are no longer panel based.