

MINUTES
GEOGRAPHIC INFORMATION COORDINATING COUNCIL
May 14, 2002

PRESENT

Chair, Dempsey Benton. Members: Bryan Beatty, Terry Ellis, Dianne Enright, John Correllus (for Jim Fain), Michael Fenton, Derek Graham, Thomas Gray, Jay Heavner, Curtis Hinton, Bill Holman, Sandra Trivett (for Carmen Hooker-Odom), Susan Johnson, Tim Brewer (for Martin Lancaster), Tim Lesser, Dr. Lee Mandell, Elaine Marshall, Kim Decker (for Meg Scott Phipps), Bill Ross, Gerald Ryan, Carlton Myrick (for Gwynn Swinson), Lyndo Tippett, E. Norris Tolson, Charlotte Turpin, Chris Wease

PROCEEDINGS

A meeting of the Geographic Information Coordinating Council was held in the Board Room of Department of Transportation Building in Raleigh, North Carolina on May 14, 2002. Chair Dempsey Benton called the meeting to order and asked members to introduce themselves. Secretary of State Elaine Marshall performed a ceremony to swear in the appointed Council members.

Legislation Establishing the Council

On behalf of Senator Eric Reeves who was unable to attend, Tim Johnson, the Acting Director of the Center for Geographic Information and Analysis (CGIA), read a prepared statement about the legislation that created this Council. Senator Reeves referred to the previous 10-year history of the Council that had existed through Executive Orders of two administrations. He pointed out that the work of the Council in building the North Carolina Corporate Geographic Database and that the important inter-agency cooperation fostered by the Council saves tax dollars and has helped build one of the most robust geographic information resources in the nation. Senator Reeves' remarks indicated that the Council must continue to provide guidance for development of cost-effective mechanisms for creation, maintenance and dissemination of strategic and commonly needed data among all public sector partners. To that end, Senator Reeves sponsored Senate Bill 895 in the 2001 session that established the Council by law.

Overview of Council Structure and Committees

Chair Dempsey Benton asked the members to review the draft bylaws for discussion and adoption at the August meeting. He called member's attention to the various standing committees that were detailed in both the legislation and bylaws. Mr. Benton appointed Dianne Enright as chair of the State Government GIS Users Committee and appointed Susan Johnson to serve as acting chair of the GIS Technical Advisory Committee. He asked Terry Ellis to serve as the acting chair of the Statewide Mapping Advisory Committee. He acknowledged that Council member Gerald Ryan also serves as the chair of the Federal Interagency Committee through a provision in the legislation.

Summary of Previous Council Achievements

Tim Johnson, CGIA staff to the Council, mentioned that the Council was instrumental in the state's progress in geographic information. The Council initially began in 1991 after the Office of State Budget and Management formed a task force to study geographic information expenditures throughout state agencies. The task force recommended that a Council be organized that would make policy and report to the Governor and the Information Technology Commission (predecessor to the Information Resource Management Commission). Another recommendation was to create multiple standing committees of geographic information users. The first activity of the Council was to develop a strategic plan for geographic information coordination in the state. Principal policy efforts included standards and procedures for the Corporate Geographic Database, a critical resource for all government agencies, and the establishment of the Global Positioning System base-station and data collection network. Mr. Johnson said the former Council became the second state to partner with the Federal Geographic Data Committee. This partnership at the national level gives North Carolina a strong voice in Washington. He said the new Council might choose to take a fresh look at the strategic plan and will create its own achievements.

Briefing on Power of Geographic Information Systems

Susan Johnson, City of Charlotte, stated that North Carolina has an outstanding reputation for collaboration in geographic information. She overviewed how geographic information systems (GIS) can help manage growth and protect the environment by using the best data available. The GIS technology allows more questions to be asked so decision makers can quickly look at the end result of multiple scenarios. She presented numerous North Carolina examples, from the relocation of fire stations in Wilson, to economic development in Catawba County, to the Neuse River Foundation's citizen river monitoring program, to crime tracking, redistricting, and disaster recovery that use geography easily visualized in the GIS. Ms. Johnson said public access to this data is key. The cost of creating these geographic data sets must be shared since no single government entity has funds to do it alone.

Orientation to Policy Issues

Zsolt Nagy, CGIA staff to the Council, discussed the North Carolina Corporate Geographic Database (CGDB) and the North Carolina Geographic Data Clearinghouse. Mr. Nagy said the CGDB should include the best data available, whether the data source is local government, state government, or federal government. It continuously evolves as the geospatial data community grows to include more government agencies, academia and the private sector. The CGDB contains both base map data (land ownership, transportation, surface waters, jurisdiction boundaries, elevation, geodetic controls, aerial imagery) and thematic data (data such as demographics, sewer service areas, water distribution, soil surveys, satellite imagery). CGIA manages the CGDB as a core function and it is a large collaborative program involving numerous government partners. Issues that will come before this Council include data accuracy, data

documentation and maintenance as well as policy issues relating to public domain, access, and “no fee” community data sharing.

Mr. Nagy suggested the technology issues, such as data storage, interoperability between hardware platforms and software vendors, and standards are the keys to creating a seamless and useable statewide map on the Internet. He also mentioned North Carolina’s commitment to build our component of the National Spatial Data Infrastructure, and our extensive federal/local partnerships committed to produce and provide accurate and current data to citizens, government and academic researchers.

Floodplain Mapping Program

John Dorman, Program Director for Floodplain Mapping, Division of Emergency Management, briefed the Council on the status of this statewide program. After Hurricane Floyd in 1999, the State of North Carolina entered into a Cooperating Technical State agreement with the Federal Emergency Management Agency (FEMA). Under this cost-sharing arrangement, North Carolina agreed to become the custodian for the Digital Flood Insurance Rate Maps (DFIRM). The project is organized by river basins, with the current work focused in the eastern portion of the state. The White Oak river basin has been completed with work in progress for the Neuse, Cape Fear, Lumber, Pasquotank and Tar-Pamlico river basins.

Mr. Dorman said that airplanes equipped with technology, called LIDAR, flew in narrow sweeps across the land. The pulses of light bounced back from treetops, buildings and the ground are processed to reveal true elevation conditions with an accuracy of 20 centimeters, which is also verified in quality control areas by surveying teams. The precise LIDAR elevation data, which replaces inconsistent data derived from topographic maps, is the foundation to accurately determine the floodplain. He said that all floodplain data, including the raw LIDAR elevation data, would be in public domain. The Flood Insurance Rate Maps follow FEMA conventions and guidelines. For consistency, the maps use 1998-99 statewide digital orthoimagery (aerial photography) from the Corporate Geographic Database, or more recent photography if available at a higher resolution from individual counties and cities. The maps will follow the same standards in each county and include local government street centerlines.

After the elevation data is finalized, the project’s next phase is to build a model to implement a real-time flood inundation and forecast mapping system for flood warnings. Partners on this phase include US Geological Survey and the National Weather Service. Congress has appropriated \$4 million for this work.

Mr. Dorman said numerous state agencies benefit from precise elevation data: DOT for preliminary highway design; DENR for floodway/floodplain boundaries and coastal erosion analysis; Division of Emergency Management for statewide mitigation planning, and man-made hazards mitigation, among others. North Carolina is the only state to have made a commitment to update elevation data using LIDAR technology and recompile floodplain information based on its greater accuracy.

Committee Reports

Dianne Enright, Chair of the State Government Users Committee (SGUC) said that Raj Butalia from DENR is the vice chair of the users group. The group continued to meet quarterly through 2001 and usually invited vendor presentations and showcased state GIS applications, such as the legislative redistricting application in the General Assembly and the Floodplain Mapping program.

Gerald Ryan, federal member and Chair of the Federal Interagency Committee (FIC), said that the FIC meets quarterly at different federal sites across the state. There is always a telephone conference connection available. Agenda items include high priority items from the Department of Interior as well as state data initiatives.

Terry Ellis, the former chair of the Statewide Mapping Advisory Committee (SMAC), said this group also meets at various locations in the Triangle. He said many local governments are using data from neighboring counties and cities and see the value of sharing data that is consistent across those jurisdictional boundaries. The SMAC membership reflects city, county, state and council of government agencies.

GPS Base State Network in North Carolina

Gary Thompson, Chief, North Carolina Geodetic Survey, discussed the Continuous Operating Receiver Stations (CORS) that differentially correct global positioning system (GPS) satellite signals to increase positional accuracy. Surveyors and other GPS users can use this network to get millimeter accuracy over long distances. In addition to the base station network there is a new On-line Positioning User Service (OPUS) that provides users easy access to the National Spatial Reference System through cell phones. This newest development will decrease costs by cutting the number of surveying staff, vehicles and cell phones needed to do road construction.

Discussion

Gerald Ryan said USGS has begun a new program, called the National Map. He said USGS will focus less on paper topographic maps, some are 25 years old, and is backing the creation of on-line digital maps. The National Map would be constructed from a system of local and state digital geographic data. This is a huge cooperative project.

ADJOURNMENT

There being no other business, the meeting was adjourned. The next meeting will be held August 21, 2002 at 1:00 pm.

All PowerPoint presentations are on the Council Web site: www.cgia.state.nc.us/gicc, then click on "Meetings." The individual "Presentation" icons follow the Agenda and Minutes.