

MINUTES
GEOGRAPHIC INFORMATION COORDINATING COUNCIL
November 9, 2005

PRESENT

Chair, Dempsey Benton. Members: Jon Beck (for Joe McKinney), James Bennett (for Rebecca Troutman), Bob Brinson, Rodney Bunch, Britt Cobb (for Gwynn Swinson), John Correllus (for James Fain), John Dorman (for Bryan Beatty), Terry Ellis, Dianne Enright, Derek Graham, Tom Gray, Dr. Rita Hagevik, Reggie Hinton, Bill Holman, Susan Johnson, Bliss Kite, Kelly Laughton, Dr. Lee Mandell, Elaine Marshall, Anne Payne, Stephen Puckett, Gerald Ryan, L.C. Smith (for Lyndo Tippett), Richard Taylor, Sandra Trivett (for Carmen Hooker-Odom), David Wray (for Steve Troxler)

PROCEEDINGS

A meeting of the Geographic Information Coordinating Council was held on November 9, 2005 in the Board Room of the Department of Public Instruction in Raleigh, North Carolina. Chair Dempsey Benton called the meeting to order. The Minutes of the August 10, 2005 meeting were approved. Mr. Benton welcomed a delegation from Pennsylvania that was on a fact-finding trip relative to building a coordinating council in their state. He welcomed representatives from numerous federal agencies who had attended a meeting of the Federal Interagency Committee earlier in the day. Mr. Gerald Ryan said that 20 federal agencies located in North Carolina, including the Eastern Band of Cherokees, participated in the meeting.

Status and Discussion of Priorities Before Council

Priority #1—NC OneMap Implementation

Mr. Johnson reported on NC OneMap outreach activities since August that involved staff and GICC members at national and regional meetings. Chris Kannan spoke at the National Association of Black Geologists and Geophysicists Conference in Raleigh; Kelly Laughton spoke at the Geographic Information Systems for Local Government conference in State College, Pennsylvania; Anne Payne spoke at the International Urban and Regional Information Systems Conference in Kansas City; and Dr. Lee Mandell gave a presentation at the Southern Municipal Conference's IT Summit. He commented that staff are available to speak to groups of stakeholders. He mentioned that the Federal Geographic Data Committee awarded a grant to the Center for Geographic Information and Analysis (CGIA) to take over operating responsibility for the Internet Viewer application and future enhancements of the NC OneMap web application. To date, the USGS EROS Data Center has provided that function as a partner with North Carolina.

Priority #2—Data Content Standards

Bill Holman said the Statewide Mapping Advisory Committee will report on progress on the GPS standard later in the agenda.

Priority #3—Access and Distribution

Susan Johnson reported that the federal “Guidelines for Providing Appropriate Access to Geospatial Data in Response to Security Concerns” is officially released. This is a comprehensive guideline for local and state governments to use to decide which data could be publicly shared in order to derive the economic benefits of that data source, and which data should have restricted access. She asked for guidance concerning the Council’s formal adoption, since so many agencies are involved. Dr. Mandell asked if the final version was different from the draft. Ms. Johnson said there was nothing new. Mr. Benton suggested that everyone should carefully review these guidelines. Dr. Mandell suggested that each user committee vet with their agencies and members. She recommended that the Council members vet these guidelines with their respective constituencies so the Council can consider adoption at the February 15 meeting.

Action #1: The final version of the “Guidelines for Providing Appropriate Access to Geospatial Data in Response to Security Concerns” was provided to the Council. Each Council member and Council committee was asked to review these guidelines and be prepared to discuss and consider them for adoption at the next GICC meeting on February 15, 2006.

Presentation: Building the Defense Installation Spatial Data Infrastructure (DISDI)

Col. Brian Cullis is the Executive Manager for the Defense Installation Spatial Data Infrastructure in the Office of the Deputy Under Secretary of Defense for Installations and Environment. He said the Department of Defense is seeking to transform how it does business, and his agency is one year old. Support is building for a national data infrastructure vision.

He showed a map of 63 defense sites in North Carolina. He said that each of the defense installations that were considered for base realignment around the country developed just like 350 separate cities with unique geo-bases. Metadata, where available, was an asset for decision makers. He commended North Carolina metadata reports generated from local and state data providers. The base realignment team had to visualize the exclusion zones for all installations, and a secured signature was required from each base commander and each data layer had to be signed by a responsible party. Col. Cullis said the military installations should be seen as “seeds” across the nation, and with GIS partnering between base installations and local and state governments, those assets could be brought together. Military Ocean Terminal at Sunny Point, for example, has the best boundary in North Carolina, and it will save tax dollars if the Army, Marine Corps and Air Force all use the same boundary data. He said sharing the DISDI imagery asset with other agencies can result in \$20 million cost avoidance.

His current task is to build a practical case for the Department of Defense for Installations and Environment to share geo databases. In tackling what to share, and with whom, Col. Cullis showed a diagram that indicated that agencies gain the most when they share at the interface with other jurisdictions. That is how to organize the issues and challenges and it also provides the filter for state and local governments adjacent to these military “cities.”

Mr. Benton thanked Col. Cullis and asked what North Carolina can do to help. Col. Cullis said he wants to use North Carolina as a template with several federal agencies. He reminded the Council that each federal agency does have a different culture, but they are walking down the same path. Mr. Benton said that some counties have aged local orthoimagery products and perhaps DISDI can be of assistance. Mr. Steve Puckett asked about the problems of sharing

military information around the world. Col. Cullis mentioned that DISDI only functions with unclassified information. Mr. Bill Holman said the Department of Environment and Natural Resources and the Clean Water Management Trust Fund are concerned about base encroachment issues and fly ways in North Carolina and want better maps to help preserve that space.

Committee Reports

All Council committee representatives reported on their group's activities.

Statewide Mapping Advisory Committee (SMAC). Bill Holman reported that the Committee met on October 12. The SMAC discussed the proposed NC OneMap geospatial appendix to the State Homeland Security Plan and the proposed partnership agreement between the GICC and the National Geospatial Programs Office. Progress reports were offered on the Surface Waters Mapping project, the Landslide Mapping effort in the mountains, the Floodplain Mapping program, NC OneMap activities, and the Library of Congress project underway at North Carolina State University in cooperation with the Center for Geographic Information and Analysis. The NC Department of Transportation road names policy that was reviewed by the SMAC is now in place. The status of orthophoto mapping across the state and a review of proposed revisions to the Global Positioning Standard were also on the agenda.

Aerial Imagery for North Carolina. Mr. Holman discussed the "Imagery for the Nation" initiative proposed by the National States Geographic Information Council. The SMAC drafted a resolution, "Aerial Imagery for North Carolina," in support of the national initiative. The resolution states the Council's history of supporting the acquisition of high-resolution imagery on a scheduled basis and its commitment to facilitate cost-sharing among federal, state, and local government agencies. Mr. Benton said he assumed that the state and federal standards would be the same. Mr. John Dorman asked how this initiative ties into the National Digital Orthophotography Program (NDOP). Zsolt Nagy responded that over the past ten years the funds for the NDOP have diminished and there are discussions underway about the future of the program. The "Imagery for the Nation" complements that program and also gets the private sector involved. Dr. Mandell said it is important to leverage all partners for the purchase of aerial imagery. Mr. Nagy reminded the Council that an earlier Statement of Direction adopted by the Council did specify the goal of a three-year cycle for refreshing aerial imagery across the state.

Action #2: The Council adopted the resolution "Aerial Imagery for North Carolina" as presented by the Statewide Mapping Advisory Committee.

Gary Thompson reported on the statewide orthophoto planning and said that 34 counties were flown during the flying season in 2005, and most are in the process of quality control. In some of the flights new digital cameras were used and the results were comparable to the existing technology. Mr. Nagy mentioned that of those 34 counties, the USGS \$200,000 cost share for orthophotos provided financial assistance to nine counties in the Centralina Council of Government area, plus Wake and Johnston counties. In the western part of the state, there is activity under the landslide hazard mapping program and a request for proposals has been issued to fly Buncombe, Haywood, Henderson, and Macon counties. He also noted that the Floodplain Mapping Program is paying 100% of the cost to acquire orthophotography for 13 western counties.

Global Positioning System Standard. Gary Thompson reported that the GPS subcommittee reviewed the earlier standard and recommended a complete revision. They will bring the draft to the next SMAC meeting and then to the full Council in February. He said new alternate technologies to GPS would be added as well as an information section on datums and real-time correction sources, such as Wide Area Augmentation System (WAAS), Nationwide Differential GPS (NDGPS), and NC Real Time Kinematic Network. The theme of the initial GPS standard in 1994 and the last revision to the standard in 1999 was to collect data once for multiple users. In those previous years, recreational grade units were not recommended for state government use, which has generated many questions. He said the new standard will revisit the recreational grade units, recommend software to run the GPS receiver, and will not recommend using WAAS for differential correction. The North Carolina Geodetic Survey is working with the National Geodetic Survey (NGS) to test and develop OPUS-GIS, which is a GIS version of an Online Positioning User Service. If OPUS is successful, this will result in big cost savings. He also mentioned that the state is developing a loan pool of GPS receivers. In conclusion, Mr. Thompson said because of rapid technological changes, the standard should be reviewed annually and updated if needed. Mr. Benton asked if NC Geodetic Survey could help folks get competitively bid hardware to reduce costs. Mr. Thompson said that OPUS-GIS will open up the use of low-end receivers because of greater accuracy. Dr. Mandell asked when the standard would not have to focus on accuracy issues. Mr. Thompson said within a few years the equipment will be more precise and therefore reduce positional error. Mr. Dorman said advances in GPS technology have saved time and money for the Floodplain Mapping Program.

Stream Mapping. Mr. Holman said work is progressing on the digital representation of North Carolina's streams in 19 counties in the western part of the state. The Legislature committed \$2.7 million for that work as part of the Hurricane Recovery Act of 2005. The SMAC offered a resolution to make the case for full funding to complete this as a statewide project.

Action #3: The Council adopted the resolution "Implementation Plan to Improve Mapping and Digital Representation of Surface Waters in North Carolina" as presented by the Statewide Mapping Advisory Committee.

NC State Homeland Security Strategy. Mr. Holman reported that a committee met and proposed a draft appendix to the 2005 State Homeland Security Strategy in order to recognize the importance Geospatial Information and Technologies for situational awareness, location-based intelligence and asset management. Mr. Holman said the draft appendix was submitted to the Department of Crime Control and Public Safety by the September 30 deadline. He said a discussion with Secretary Bryan Beatty is to be scheduled. Mr. Dorman said he is trying to add geospatial data into the 2006 updated plan and there is the potential to have it presented to the State Emergency Response Commission. He said he thinks Secretary Beatty wants that. Mr. Holman agreed to follow up with Secretary Beatty. Mr. Benton suggested that that the SMAC report back at the February meeting.

State Government GIS Users Committee (SGUC). Dianne Enright reported that the SGUC met in October and heard presentations from Department of Transportation on its IT and GIS structure, as well as their local roads data set. The ESRI enterprise license is well received and the first three ESRI training classes are full. Dr. Mandell asked if ESRI training opportunities were also promoted to local government for their participation. Ms. Enright said they were. She

mentioned the current banding of IT positions throughout state government will incorporate all GIS personnel. She mentioned that the SGUC will participate in a GIS Day open house at the City of Raleigh offices on Fayetteville Mall on Wednesday, November 16.

Local Government Committee (LGC). Kelly Laughton said the committee met November 1. The committee supports the GIS Technical Advisory Committee's proposal to add the US Survey Foot to the revised Statement of Direction of Horizontal Reference, Datum and Unit of Measure. The LGC also supports the NSDI Partnership Agreement that intends to align state, federal and local interests. She further stated that the LGC recommends that the agreement include word changes that reflect the GICC's commitment to seek input from the LGC, especially in developing the Geospatial Strategic Plan called for in the agreement. The LGC also encourages cost-sharing strategies.

Ms. Laughton said that the LGC recently established an "A" Team. This Advisory Team is charged with disseminating standards as they are developed by Council committees to provide more time for local government input. She mentioned that the "Alert Program" has also been established to send email alerts to all LGC member organization list-serves to get vital information into the right hands in the local government community.

Federal Interagency Committee (FIC). Gerald Ryan said the FIC had a successful meeting in the morning, bringing together managers from 20 federal agencies with operations in North Carolina. He thanked the Chair, Dempsey Benton, for personally inviting each agency to attend. He noted that the LGC "Alert Program" might be a good model to copy for the FIC community to improve communications. Mr. Ryan indicated that the FIC leadership would work to build on the progress of today's meeting.

GIS Technical Advisory Committee (GIS TAC). Susan Johnson discussed the revised draft Statement of Direction for Horizontal Reference, Datum and Unit of Measure. The initial statement was passed in 1998 and established the State Plane coordinate system, the NAD 1983 datum, and metric units as the state standard for digital geographic information. The use of metric units, however, was not widely adopted by local governments that preferred to stay with the US Survey Foot as their unit of measure. This revised Statement of Direction recognizes that preference. The NC Geodetic Survey has notified the National Geodetic Survey to supply data in both units of measure. The revised Statement of Direction incorporates both meters and US Survey Foot.

Action #4: The Council adopted the "Statement of Direction for Horizontal Reference, Datum and Unit of Measure" as presented by the Technical Advisory Committee.

Management and Operations Committee (M&O). Tim Johnson said the committee discussed specific options to seek funding for the operational needs of building and sustaining NC OneMap. System design and development of enterprise architecture, along with business continuity, and disaster recovery are the major components to be considered. Unfortunately, grant sources are not adequate for these types of needs, and the committee agreed that state funding will be essential. The committee said that connecting remaining local governments should be the priority instead of new development of data layers. The committee will continue to pursue funding options and bring recommendations to the Council.

The Committee also considered the Council's enabling legislation (G.S. § 143-725 through 727) to see if there were any conflicts between that legislation and Senate Bill 991 that sought to improve State Government Information Technology planning, increase accountability, reduce cost overruns and provide assistance to state agencies. The Committee found that the GICC legislation is synchronized with SB 991. The Council is responsible for making geospatial data more readily available through developing policies, identifying resource needs, and establishing cost-effectiveness strategies such as cost-sharing for orthophoto acquisition. One key section of SB 991 refers to the evaluation and estimation of significant unmet needs for IT resources over a five-year horizon. The GIS community, through the "NC OneMap Strategic Plan and Financing Strategy," has thoroughly identified those needs. The Council, through CGIA, received approval through the SB 991 defined process to proceed with its work on NC OneMap. It will keep the General Assembly and Chief Information Officer aware of the NC OneMap funding needs.

NSDI Partnership Agreement. The National Spatial Data Infrastructure Partnership Agreement will function like an "umbrella" where funds could be moved to the Council as the authority in North Carolina for geospatial data. It will facilitate alignment of resources with those needs expressed through the documents that the GICC adopted at previous meetings. This agreement streamlines the existing process. Both the Local Government Committee and the State Government GIS Users Committee support this partnership, and the Management and Operations Committee recommends the Council approve the partnership managed by the USGS National Geospatial Programs Office. Mr. Benton asked if the Local Government Committee was agreeable to the proposed changes to the agreement. Ms. Laughton said that the LGC was in support of the changes. Ms. Laughton said the LGC wants to work with this partnership as part of the strategic planning and decision making process. Dr. Mandell asked about fiscal responsibility. Mr. Johnson said the Center for Geographic Information and Analysis would handle the contracts, payments, and disbursements on behalf of the Council.

Action #5: The Council adopted the "National Spatial Data Infrastructure Partnership Agreement" as presented by the Management and Operations Committee.

Presentation: GIS Corps Response to Hurricane Katrina

Anne Payne said the GIS Corps is a volunteer group of GIS professionals who are providing expertise to underserved communities. The GIS Corps has provided service in their brief existence to Peru, the Dominican Republic, tsunami aid in Indonesia, and Afghanistan. Thirty-three volunteers were deployed September 1, 2005 to Mississippi and Louisiana after Hurricane Katrina. The volunteers coordinated and integrated geospatial information within emergency management operations.

Michelle Alexander, with the City of Charlotte Department of Transportation, said she left on September 4 for Jackson, Mississippi's emergency operations center. She joined others who worked in a mobile coach, dubbed the "Brain Bus," which was provided and staffed by the University of Mississippi and equipped with satellite communications, computers and map printers, and a power supply. Ms. Alexander said they had to create their own organization through the chaos. The most important task was to aid in the location of missing persons through latitude/longitude locations of where structures used to be. Some local data was unavailable since government buildings were flooded. Workers created early maps of cell towers with signal coverage areas that were essential to assist in evacuations.

Twyla McDermott, with the City of Charlotte, worked in Wiggins, Mississippi, north of Gulfport. She said there was only state data they found in a CAD system that could be extracted: no local data was available. They worked with the US Postal Service letter carriers to get damage assessments. The US Navy Command was the gatekeeper for this assessment. There was no internet, no phone, and often no power. Ms. McDermott said it was clear that, "It is all about data." State level data is insufficient for work on-the-ground. The personnel from local governments did not know about state data and there was no horizontal integration (city-county-state), and no metadata to be found. Where does the data live? Ms. McDermott said there needs to be more education about "Sharing the power of Where" on how GIS works and helps in these situations. She said several things are needed: creation of deployment manuals; recommendations for model language in emergency operations plans; and regional data collaboration manifestos.

John Dorman said that Mississippi wants to follow North Carolina's work in the area of emergency response. He said that the Federal Emergency Management Agency was looking at a National Incident Management Service without a GIS component. But after Hurricane Ophelia that lesson was noted.

Council Member Information Items

Dr. Mandell reported on the new Information Technology Advisory Board which was created through SB 991. The Board met recently. The Board's mission is similar to the GICC in that it advises the state's Chief Information Officer. Dr. Mandell was encouraged by the initial work of the Board.

Other Business

Stream Mapping (Hurricane Recovery Act). Mr. Joe Sewash, CGIA's project manager for the Stream Mapping Project, reported that the 19 counties involved in the western portion of the state are divided into 8 sub-basin areas. A project advisory committee includes representatives of the Department of Environment and Natural Resources, Division of Water Quality, the Department of Transportation, Geodetic Survey, and Floodplain Mapping Program as well as Buncombe and Henderson counties. The Pigeon sub-basin will be the first production unit completed by May 2006. Then, the remaining sub-basins will be completed, one every 2-3 months.

Scheduled activities include addressing user requirements and data maintenance, horizontal accuracy study evaluation, and local government partner updates.

Floodplain Mapping Program. Mr. John Dorman said 55 counties are now complete with new Flood Insurance Rate maps, and 30,000 stream miles have been studied in North Carolina. The Yadkin River Basin will be complete by 2007; the Roanoke and Catawba river basins will be out in September 2006. The Floodplain Mapping Program is completing the scoping of the Broad and French Broad river basins at this time. Engineering studies and mapping have been initiated in 15 western counties. The LIDAR (elevation) data will be completed for Phase 3 (i.e., westernmost counties in North Carolina) in December 2005. Orthophotography for those counties that were flown last winter will be available in February 2006.

Mr. Benton asked if we are coordinating mapping across state boundaries since there are issues such as the one in the Catawba-Wateree area that includes Georgia and South Carolina. Mr. Dorman said yes and that there are interesting challenges when working across state borders.

GISLiveNC, November 15, 2005. Dr. Rita Hagevik mentioned that the GISLiveNC streaming video web cast is from 9 am to 1 pm on Tuesday, November 15 and will feature middle and high school students presenting projects using GIS and GPS, as well as state and local government presenters. The theme is “Open Spaces, Wild Places” and will feature the Department of Environment and Natural Resources web site for One North Carolina Naturally and the map viewer for “Lands Managed for Conservation in North Carolina.” Mr. Benton said that the map viewer on conserved lands was also featured at the DENR booth at the North Carolina State Fair in October.

Tim Johnson called attention to the “Maps in Our Lives” new exhibit that runs through January 2007 at the Library of Congress. He stated that the 2007 North Carolina GIS Conference dates have been set for March 1-2, 2007 at the Benton Convention Center in Winston-Salem.

ADJOURNMENT

There being no other business, the meeting was adjourned. The next meeting will be held February 15, 2006 from 1:00-3:00 pm at the Department of Public Instruction Board Room, Room 755, 301 N. Wilmington Street, Raleigh.

PowerPoint presentations and reports 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.

2006 Meeting Schedule

Wednesday, February 15, 2006	1:00-3:00 pm
Wednesday, May 17, 2006	1:00-3:00 pm
Wednesday, August 16, 2006	1:00-3:00 pm
Wednesday, November 8, 2006	1:00-3:00 pm