

MINUTES
GEOGRAPHIC INFORMATION COORDINATING COUNCIL
November 10, 2004

PRESENT

Chair, Dempsey Benton. Members: Ron Alston (for Carmen Hooker-Odom), Jon Beck (for Joe McKinney), Bob Brinson, John Correllus (for James Fain), Hugh Devine, John Dorman (for Bryan Beatty), Dianne Enright, Derek Graham, Jay Heavner, Kevin Higgins, Reggie Hinton, Bill Holman, Kelly Laughton, Tim Lesser, Lee Mandell, Rex Minneman (for Elaine Marshall), Carlton Myrick (for Gwynn Swinson), Stephen Puckett, Forrest Robson (for Lyndo Tippet), Jerry Ryan, Danny Stallings (for Mike Wilkins), Chris Wease, Jonathan Womer (for David McCoy), David Wray (for Britt Cobb)

PROCEEDINGS

A meeting of the Geographic Information Coordinating Council was held on November 10, 2004 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 18, 2004 meeting were approved. Mr. Benton thanked Jay Heavner for his years of service on the Council. The Speaker of the House has appointed Anne Payne of Wake County for this seat.

Status and Discussion of Priorities Before Council

Priority #1— Stream Mapping (Senate Bill 1152)

Dempsey Benton called on Bill Holman, the chair of the Stream Mapping Working Group, to report on the group's progress. Mr. Holman mentioned that the Studies Act of 2004 requires the Council to report to the General Assembly on this matter by January 15. The members of the working group include the US Geological Survey, and state departments of Transportation, Commerce, Crime Control and Public Safety, and Environment and Natural Resources, as well as other stakeholders from federal, state and local governments. There have been three committee meetings since October 1. Tim Johnson, Council staff, said the committee will make recommendations on how to improve the digital mapping of perennial and intermittent streams, with a provision that resulting data be made available through NC OneMap. The committee expects to complete its process on December 14 and have a draft report and recommendations available for Council review by the end of December. Mr. Johnson said that a contractor, Watershed Concepts, is working with the committee and is creating the mapping specifications that must address the level of accuracy and level of detail required by the various stakeholders. The project website, www.cgia.state.nc.us/streammap includes the current state of digital stream mapping in North Carolina, the project benefits and project specifics. In addition to mapping specifications, the report will include costs, schedules and a timeline. Mr. Johnson said the report would be made available to Council members December 28 and a telephone conference could be set for the first week of January.

Bill Holman said this is a strong working group with great diversity among its 60 members. Mr. Benton said the Department of Environment and Natural Resources and the Clean Water Management Trust Fund agreed to pay a contractor to assist with this process because of the compressed timeline for this study bill. He said the Council's reaction to the draft report is critical and he suggested that a discussion be held via phone teleconference on January 5, 2005.

Action #1: The Council determined that draft recommendations from the Stream Mapping Working Group will be made available for Council member review on December 28. A Council member teleconference will be scheduled January 5, 2005 at 1:00 pm for discussion of the recommendations. CGIA will arrange a meet-me phone number for the teleconference. Final recommendations and a plan must be submitted to the General Assembly by January 15, 2005.

Priority #2—State Government Data Inventory

Zsolt Nagy, Council staff, said the state government data inventory was a follow-up to the local government data inventory conducted one year ago as part of the NC OneMap initiative. Sixteen departments in state government were contacted by phone to locate GIS usage within 67 divisions and sections. These individuals were sent the Survey Monkey inventory tool and 78% responded. The survey asked questions about hardware, software, databases, projections, and data distribution, as well as specifics about individual data sets. Forty-four of 56 respondents reported that their agency does produce GIS data or data with a spatial component. Sixteen agencies purchase licensed data, such as street centerlines, zipcodes, and imagery. That fact is important as the State Government GIS Users Committee considers joint purchases of licensed data to increase cost savings to state government.

State agencies are predominantly using ESRI-software with heavy database reliance on Microsoft Access and Excel software, as well as Oracle and SQL Server. One of the most compelling findings, Mr. Nagy reported, was the number of state agencies (20 of 42 respondents) that request GIS information from local governments. The same 42 respondents indicated that 5 of them charge a fee for data, 17 restrict access to their data, 8 restrict redistribution of their data, and 25 said their data is not available for download at this time. Twelve respondents have on-line Internet mapping and 21 would like to participate in data sharing on NC OneMap, but only two agencies are currently serving their data through NC OneMap.

Mr. Nagy provided a list of respondents by Department and Division, and a list of data layers. He said staff are not content with the response and plan to follow-up with both the non-responders and those who did respond but may not have reported all the data they actually produce. He suggested the Local Government Committee review the state data listings to see which data are the most valuable and should be easily available to local governments. The fact that multiple state agencies request parcels and digital orthoimagery from local governments makes the argument for NC OneMap where those requests can be handled on-line. Mr. Nagy said staff will further investigate the "other" category to find out which data those state agencies are requesting from local governments. Finally, Mr. Nagy said the survey would be summarized and results compiled on the NC OneMap web page for easy use. On the access issue, Stephen Puckett pointed out that some counties ask for a subscription fee to get data. Mr. Nagy said Columbus County has a subscription service, but a major characteristic of NC OneMap is to keep data free and accessible. John Dorman asked if the GIS data sets distributed by CGIA are

included in the inventory. Mr. Nagy said that CGIA filled out the survey for those data layers that CGIA actually produced, but not for the data layers produced by others and distributed by CGIA. Tim Lesser asked about the “not sure” responses to the survey as to whether their agency produced spatial data. Mr. Nagy said everyone was personally contacted about their division’s data before the survey was sent and were asked if they had GIS databases and/or databases with a spatial component. Mr. Benton pointed out that the survey indicates that two state government data sets are offered through NC OneMap, but 12 agencies have Internet mapping capabilities.

Action #2: CGIA will review both the list of responders and list of data layers inventoried in the state government data survey. CGIA will identify and complete the information gaps to achieve a comprehensive state government inventory. Findings will be discussed with the State Government GIS Users Committee and the Local Government Committee and will be posted on the website.

Priority #3—Data Content Standards

Rex Minneman offered the proposed amendment to the Digital Orthophoto Standard that would include digital sensors (cameras) in the specification, as well as the traditional aerial camera and film. He said the standard adopted at the August 18, 2004 Council meeting might be construed as not allowing digital cameras, therefore the amendment will clarify that change. For example, he mentioned that South Carolina is apparently not allowing the use of digital cameras because USGS can not produce camera calibration reports for them. Carlton Myrick asked if there is an industry standard for digital sensors. Mr. Minneman said currently the contractor must describe the process. Kevin Higgins asked if the process description is a temporary requirement until a methodology exists. Mr. Benton asked if USGS is developing a digital camera calibration report. Chris Kannan said that USGS is currently working on a digital camera calibration methodology. In the short term, the approach is currently *in situ* and the user will not receive a traditional report. For the long term, USGS is not sure when or if there will ever be a traditional calibration report. John Dorman said USGS is already using digital cameras and the Floodplain Mapping Program will be using digital cameras in the upcoming winter flying season, as long as they meet the same expectations.

Action #3: The Council adopted an amendment to include the use of digital cameras for production of North Carolina orthophotos in the Digital Orthophotography Standard, which was originally adopted at the August 18, 2004 GICC meeting.

Zsolt Nagy reported that the NC Property Mappers Association is providing feedback on the content of the Cadastral standard, the core information elements for the mapping of parcels. Mr. Holman said he expects to present the standard at the next Council meeting.

Priority #4—Access and Distribution

Tim Johnson reported for Susan Johnson that the “Guidelines for Providing Appropriate Access to Geospatial Data in Response to Security Concerns” have been finalized by the Federal Geographic Data Committee. John Dorman had been asked by Chair Dempsey Benton to make sure the Guidelines were brought to the attention of Secretary Bryan Beatty, Crime Control and Public Safety. Mr. Johnson reported that Ken Taylor, Director of the Division of Emergency Management, indicated that the Council should review a list being prepared of North Carolina restricted data sets (e.g. dams) since it could impact NC OneMap data access.

Priority #5—NC OneMap Implementation

Mr. Johnson reported that 50 communities and more than 200 data layers are currently available through NC OneMap, and usage of the web site continues to grow. At the August Council meeting the Management and Operations Committee was challenged to look at the \$12.3 million shortfall for the current fiscal year. The US Geological Survey (USGS) has offered \$200,000 toward updating orthophotography in 14 urban counties in the Charlotte and Raleigh-Durham regions for Homeland Security purposes. The Council has been tasked to develop the plan to allocate this sum among the 14 county governments. Mr. Johnson thanked Jerry Ryan, Chris Kannan and Stephen Strader at USGS for their support. Mr. Strader said USGS preferred to use the Council and staff structure rather than make individual agreements with each jurisdiction. By giving the grant to the Center for Geographic Information and Analysis on behalf of the Council, the issues of how to manage and apportion the funds will be determined by the whole Council. Jay Heavner asked when the money is expected, Chris Kannan said it should be available to North Carolina by the end of the calendar year.

Mr. Johnson said word has been received that there is \$2.5 million “earmark” as part of the NC OneMap initiative in the federal omnibus bill for digital orthophotography to be flown for 15 counties: Clay, Graham, Swain, McDowell, Burke, Mitchell, Richmond, Halifax, Martin, Hyde, Beaufort, Perquimans, Tyrrell, Ashe and Alleghany. The federal omnibus bill is expected to be passed by Congress soon.

He reported that Chair Dempsey Benton and staff will schedule an appointment with Secretary Beatty to discuss a funding request submitted to connect more local governments to NC OneMap.

Mr. Johnson reported that CGIA staff have put together a \$9.1 million 2005 Expansion Budget Request for the state legislature. These were the estimated costs to complete the LIDAR elevation data for the state as well as to support the acquisition of county orthophotography for one-quarter of the state: These items represent 90% of the expansion request. In addition there was money requested for NC OneMap database design, data model, and necessary equipment. Mr. Benton directly thanked Jonathan Womer, new Council member representing the Office of Budget and Management, for his support of NC OneMap. Mr. Benton said the Council would have several items before the 2005 legislative session, including the Expansion Budget request and the Stream Mapping recommendations. Stephen Puckett mentioned that the Council committee on the Surveyor’s Model Law has been organized which could affect the next North Carolina legislative session.

Library of Congress—Archiving At-Risk Geospatial Data

Steve Morris, Head of Digital Library Initiatives at NC State University Libraries, discussed a grant awarded to NCSU by the Library of Congress. NCSU and the Center for Geographic Information and Analysis partnered to consider how to manage the collection and preservation of digital geospatial data resources from state and local government agencies. The grant is through a new program, the National Digital Information Infrastructure and Preservation Program (NDIIPP) that funded eight projects in the nation. Two of those grants involve geospatial data. Mr. Morris said this 3-year project will be focused on North Carolina local government. The NC OneMap characteristics state that, “historic and temporal data will be maintained and available” and this grant will focus on those archival issues, including data failure, data content standards,

digital rights management, streaming data and other new transmission modes, secondary gathering and harvesting of data. Mr. Morris said the pilot project will focus on showing change over time, and local governments are a rich resource for data that could be put to new uses.

Partnership building and long term access to data are initial issues as well as content retention and transfer, and they all are elements in a preservation plan. The first step will identify available data resources through NC OneMap and then acquire these at-risk digital geospatial databases from state, regional, and local governments. These databases will then go through the full discovery process of the grant toward the development of a digital repository architecture.

Mr. Morris said he wanted to work with an advisory committee with the Council. Mr. Nagy said the Council needs to be involved because of the question of data preservation. Lee Mandell asked what types of data preservation challenges exist for geospatial data. Mr. Morris said geospatial data must deal with formats, versions of software, and large file size, as well as complex data structures, and data dictionaries. Dr. Mandell asked what the library would be preserving, snapshots of data? Mr. Morris said that is what the stakeholders group needs to discuss. Mr. Dorman said versioning is already an issue on the table with the Floodplain Mapping Program and he offered Digital Flood Insurance Rate Maps (DFIRM) as a test example. Mr. Benton asked how the Council should play an advisory role. Mr. Morris said he would like to present progress reports and get input from the Council's Statewide Mapping Advisory Committee and GIS Technical Advisory Committee.

Action #4: The Council agreed that the Statewide Mapping Advisory Committee and the GIS Technical Advisory Committee were the appropriate committees to be involved and receive progress reports on the Library of Congress NDIIPP grant awarded to NCSU Libraries.

Report: Floodplain Mapping Program, Phase III LIDAR data collection in western counties

Mr. Dorman said North Carolina has experienced more than 20 federally declared disasters since 1989, and the majority of disasters are related to flooding and have affected most of the state. The annual cost avoidance from flooding with the availability of new accurate flood maps is estimated to be \$56 million. Mr. Dorman showed the tracks across North Carolina of the 1999 Hurricane season (Dennis, Irene, Floyd) and the 2004 Hurricane season (Bonnie, Charley, Ivan-tice, and Jeanne). The Phase I river basins (Lumber, Cape Fear, Neuse, White Oak, Tar-Pamlico, Pasquotank) are fully funded and almost complete, 43 of the counties have received their maps. The Phase II river basins (Chowan, Roanoke, Yadkin, Catawba, Watauga, New) have been flown for the LIDAR elevation data, and 48 % of the counties have requested that data to save them money as they develop new orthophotography for their respective counties. Phase III river basins (Broad, French Broad, Little Tennessee, Hiwassee, Savannah) have not been started because of lack of funding. These westernmost Phase III counties have extremely old flood hazard maps with 8 counties having maps 20-plus years of age and none having flood hazard maps newer than 5 years of age. Four of the counties also have no elevation data available.

In the remaining data requirements for Phase II, new digital orthophotos (to be flown winter 2004-2005) are needed to replace aged-out photography for 12 counties: Alexander, Avery,

Burke, Granville, Martin, McDowell, Northampton, Watauga, Alleghany, Anson, Ashe, and Richmond.

The Phase III data requirements include complete elevation (LIDAR) data for 16 counties and digital orthophotos for Avery, Mitchell, Swain, and Yancey counties. Mr. Benton said CGIA put the acquisition of these orthophotographs and LIDAR into the NC OneMap expansion budget request through its home department, Environment and Natural Resources. Mr. Dorman said the Floodplain Mapping Program also included this acquisition in the Crime Control and Public Safety expansion budget request. Mr. Benton asked if there was to be a special legislative session on the hurricane damage in the western part of the state. Mr. Johnson said some of the counties identified in the federal omnibus bill for orthophotography are the same counties that Floodplain Mapping Program has targeted for funding. Mr. Dorman said even with new orthophotography, the LIDAR must be flown to get the elevation for the flood insurance rate maps.

Committee Reports

Statewide Mapping Advisory Committee (SMAC). Bill Holman said that three counties with offensive names issues have reached a conclusion. In the case of Carteret County, the county suggested that the feature Negro Creek be removed and not be renamed. That was unacceptable to the US Board on Geographic Names. The SMAC suggests changing the name to Carteret Bay. In the case of Currituck County, the replacement suggested for Negro Bay was the name of a living person, which is also unacceptable by US Board on Geographic Names. The SMAC suggests changing the name to Currituck Bay. In the case of Clay County which deferred renaming to the US Forest Service since the features were on US Forest Service land, the SMAC suggests changing the offensive names to Clay Knob, and Little Clay Knob.

Action #5: The Council approved the name changes recommended by the Statewide Mapping Advisory Committee for geographic features in Carteret County, Currituck County, and Clay County formerly designated by offensive names. The GICC will forward the replacement names to the US Board on Geographic Names.

Gary Thompson reported that the Orthophotography Implementation Planning committee is working with the Wake County/Durham County group on a regional orthophotography plan, as well as Jay Heavner's group in the Centralina region. The group will soon conduct another inventory to ascertain the age of digital orthophotography in each county.

Jay Heavner said the regional color orthophotography effort administered by Centralina Council of Governments involves a 12-county consortium. The photography will be flown in March 2005. EarthData was awarded the contract from a 9-vendor field. The costs per map tile were initially \$193.90/each, but have been reduced to \$179.96. He offered a comparison of the cost Mecklenburg paid this past year of \$235 per map tile. There are 6,606 map tiles in the region. He said they are very satisfied with EarthData as the vendor and he thanked the Centralina Council of Governments for putting the purchase together. He mentioned that the LIDAR would save each county approximately \$40,000 on the cost of processing their orthophotography, however two counties in the group of 12 do not have LIDAR available at this time. Another savings available to a cluster of counties is that the photography does not have to extend 2,000

feet beyond the county's jurisdictional boundary, since the neighboring county is paying for its own side of the border. Mr. Heavner said Rex Minneman from the Secretary of State's Land Records Management Program was a real help. He said this effort has also led to a larger consortium of 12 North Carolina counties and three South Carolina counties, led by Centralina Council of Governments, that are considering the creation of a regional database. He encouraged the Council to stay active in pushing for regional consortiums. Mr. Don Holloway said the plan to refresh statewide county-level orthophotography on a four-year cycle (one-quarter of the state per year) for NC OneMap would be an investment of approximately \$1,888,789/per year.

State Government GIS Users Committee (SGUC). Dianne Enright reported that the SGUC met October 14 and Jean Crews-Klein from the NC Rural Economic Development Center spoke about the current rural water availability study. The SGUC is still investigating the feasibility of a state government license for ESRI products and the next step is to meet with Jonathan Womer in the Office of State Budget and Management and the Office of Information Technology Services (OITS). Mr. Benton asked if other licenses, such as Oracle, could be a candidate for a group license as well. Dr. Mandell said OITS is considering aggregating these types of licenses as well.

Local Government Committee (LGC). Kelly Laughton said that the committee met November 3 and reviewed the progress of the Stream Mapping working group. Three members representing the LGC, Janet Lowe, Wright Lowery and Chris Moore, are members and six others from local government have attended the meetings. A concern was raised that if the Stream Mapping working group concludes that local governments must provide certain data, or otherwise contribute to this effort, consideration should be given to provide resources to the local governments, especially those that lack resources to fulfill new requirements. Ms. Laughton said the LGC is interested in the pursuit of a regional orthophotography effort and financing strategy on the four-year cycle. The LGC looks forward to progress on the transportation data layer standard. The SGUC and LGC are still working on the ESRI license possibility.

Federal Interagency Committee (FIC). Jerry Ryan said there was no committee meeting and the next meeting is the second week of January 2005.

Management and Operations Committee (M&O). Tim Johnson said that the committee had no report.

Other Business

Tim Johnson said that the Governor has issued a Proclamation naming November 17 as GIS Day in North Carolina. Diana Hales reported on an event sponsored by the Department of Public Instruction that includes a 6-hour web-cast using video conferencing that would tie several schools around the state and Georgia into a special GIS scenario, called Hurricane Zeus, using NC OneMap. The entire 6-hour program would be streamed live from the web site, www.GISLiveNC.net and Council members were encouraged to see how students defined and solved hurricane disaster problems.

Derek Graham said the Council will again sponsor the Herb Stout Award at the 2005 North Carolina Geographic Information Systems Conference. It is awarded to local governments for

their visionary use of GIS. The application details will shortly be on the conference website and he asked Council members to encourage their contacts in local governments to apply for this award. The 2005 conference will be March 3-4, 2005 at the Benton Convention Center in Winston-Salem and the theme is: Ideas, Information, Innovation.

Tim Johnson said the Council sent a letter endorsing the GIS Professional Certification Program, and had received a response that complemented the Council. The GIS Certification Institute indicated it would address the Council's concerns about applicant privacy and maintaining low fees.

ADJOURNMENT

There being no other business, the meeting was adjourned. The next meeting will be held February 9, 2005, 1:00-3:00 pm at the Department of Public Instruction Board Room, Room 755, 301 N. Wilmington Street, Raleigh.

All 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.

2005 Meeting Schedule

Wednesday, February 9	1:00-3:00 pm
Wednesday, May 11	1:00-3:00 pm
Wednesday, August 10	1:00-3:00 pm
Wednesday, November 9	1:00-3:00 pm