

**MINUTES**  
**GEOGRAPHIC INFORMATION COORDINATING COUNCIL**  
**November 19, 2003**

**PRESENT**

Chair, Dempsey Benton. Members: Tim Brewer (for Martin Lancaster), Bob Brinson, Carol Burroughs (for Carmen Hooker-Odom), John Correllus (for James Fain), Hardee Cox (for Lyndo Tippett), Jean Crews-Klein, Hugh Devine, John Dorman (for Bryan Beatty), Dianne Enright, Mike Fenton (for George Bakolia), Derek Graham (for Mike Ward), Linda Haywood (for Mike Wilkins), Jay Heavner, Kevin Higgins, Reggie Hinton (for Norris Tolson), Bill Holman, Susan Johnson, Tim Lesser, Lori Key (for Terry Ellis), Joe McKinney, Rex Minneman (for Elaine Marshall), Carlton Myrick (for Gwynn Swinson), Stephen Puckett, Silvia Terziotti (for Jerry Ryan), Rebecca Troutman, Chris Wease, David Wray (for Britt Cobb)

**PROCEEDINGS**

A meeting of the Geographic Information Coordinating Council was held in the Board Room of the Department of Public Instruction in Raleigh, North Carolina on November 19, 2003. Chair Dempsey Benton called the meeting to order. Stephen Puckett, a recent appointment by the Governor, was introduced. The Minutes of the August 20, 2003 meeting were approved.

Status and Discussion of Priorities Before Council

*Priority #1—NC OneMap.*

Tim Johnson, Council staff, reviewed the timeline and progress on the 14 steps in the implementation plan for **NC OneMap**. The first five steps were tasked for completion by this meeting:

- 1) Identify initial data themes to serve on NC OneMap—The Framework layers (orthophotography, cadastral, roads, municipal boundaries, ETJs, county boundaries, surface waters, geodetic control, elevation) have been selected as the foundation data. Another 27 important data themes were itemized in the handout. Mr. Johnson requested feedback from Council members so the list could be final by the February 2004 meeting.
- 2) Finalize data content standards for those themes—The geodetic control standard was approved by the Council in August: an elevation guideline will be presented at this meeting. Work is continuing on the other themes.
- 3) Identify early partners—Current municipal and county government partners include: Buncombe County, Cabarrus County, Haywood County, Henderson County, Johnston County, Mecklenburg County, Wake County, York County (SC), City of Greenville, City of Salisbury, City of Raleigh. Others are invited to participate in the **NC OneMap** prototype viewer.

- 4) Reach community data sharing agreements with partners—Staff are working in cooperation with the Floodplain Mapping Program to create one agreement that meets both needs.
- 5) Conduct an outreach campaign to seek statewide participation—The **NC OneMap** Service Mark application is being filed with the Secretary of State. CGIA staff exhibited at the NC League of Municipalities fall conference and presented at meetings of the NC Property Mappers Association, National States Geographic Information Council, Urban Regional Information Systems Association, NC Association of Environmental Professionals, and the International City/County Managers Association. New promotional materials have been developed.
- 6) Determine statewide data for achieving a complete base map—The statewide data inventory (in progress) will reveal the significant data gaps.
- 7) Evaluate policy issues related to serving sensitive data per state or federal directives—The General Statutes have been analyzed. Susan Johnson, the GIS TAC chair, will report.

Mr. Johnson said work is continuing on steps 1-5 and 7. Step 6 will be achieved when the data inventory results are known. Regarding steps 8 through 14, he suggested that we should accelerate the timetable for consideration of the cost projections and funding issues (steps 13 and 14), and he asked Rebecca Troutman and Dr. Lee Mandell to contribute to that discussion and they agreed to do so.

- 8) Build and launch the web mapping site for **NC OneMap**
- 9) Develop long-term plan to host **NC OneMap** for 24 x 7 operations
- 10) Derive the full potential set of data content for **NC OneMap**
- 11) Continue to develop and/or adopt content standards
- 12) Develop a schedule for launch beyond early partners
- 13) Prepare and present cost projections for statewide **NC OneMap**
- 14) Seek funding for full implementation of **NC OneMap**

Zsolt Nagy showed the prototype **NC OneMap** regional demonstration viewer, [www.NCOneMap.com](http://www.NCOneMap.com). The earliest county partners included Mecklenburg, Wake, Henderson, Johnston, Cabarrus, and Buncombe as well as York County, South Carolina. This created a strong Internet presence and gave **NC OneMap** important exposure as part of *The National Map* initiative. Mr. Nagy said the website has a “What’s New” section to learn about recent data additions. When the map viewer is selected, a map of the area surrounding North Carolina is displayed. You can select any location and access federal data and state data. When you select an area in North Carolina and zoom in, there are numerous state data offerings and local government data for counties and cities that are **NC OneMap** partners. The larger-scale local government data is tapped through the partner’s servers so the user has access to more data sets from the legend. Mr. Nagy said the inclusion of York County, South Carolina shows that data can connect across state lines as well as across county jurisdictional boundaries. The goal is to have seamless local data across the state. Some partners, Wake County, Johnston County, York County, Mecklenburg County, and City of Raleigh, have made their data available for download to the **NC OneMap** user. To Find-View-Get data through the **NC OneMap** viewer is a project goal, as is the participation of 100 counties and 140 cities. Mr. Nagy pointed out that some of the western rural counties are currently participating as well as urban counties.

The ability to “cast” geospatial data on the fly includes the capability to use **NC OneMap** as a base for the overlay of new and specialized data, such as imagery of a disaster area. He showed an example using Hurricane Isabel photography. He explained that **NC OneMap** offers various technical solutions and solves the problem of conflicting measurement units (metric vs. English) and datum conversion. **NC OneMap** provides the most current data direct from the source and local governments can choose and change what they want to share. Mr. Benton asked how **NC OneMap** will evolve in the next six months. Mr. Nagy said there are formal issues involving data gaps and participation across the state. Finding the resources to fill those gaps, as outlined in the implementation plan, and addressing the institution issues will be key to the next stage of **NC OneMap**.

*Priority #2—Data Inventory*

David Giordano, staff, reminded the Council that the data inventory was sent via email to all 100 counties statewide and 141 cities in October. Reminders were sent on November 6 to complete the web-based survey. At this time 69 cities and 60 counties have responded. At the request of the Floodplain Mapping Program (FMP), the Center for Geographic Information and Analysis entered responses into the Survey Monkey tool for all Phase 2 counties that had just completed FMP surveys. Mr. Giordano posted the following initial results:

<b>% Yes</b>	<b>Question</b>
15	Restrict access to data
70	Charge for data
38	Restrict distribution of data
28	Create metadata
27	Make data available for download
67	Have internet mapping
63	Produce orthophotography
87	Produce street centerlines
85	Produce cadastral

Mr. Giordano said staff would follow-up with the local governments that have not responded. He asked if Ms. Troutman, representing the NC Association of County Commissioners, and Dr. Mandell, representing the NC League of Municipalities, could assist. Ms. Troutman said they could.

*Priority #3—Data Content Standards*

Bill Holman said the new Digital Orthophotography standard was on track and Rex Minneman of the Land Records Program office was taking the lead. The committee expects to bring the standard before the Council at the February meeting, as well as the Cadastral standard. Ms. Troutman reminded the Statewide Mapping Advisory Committee that the orthophotography and cadastral standards need to be broadly available to the local government community for comment prior to the February Council meeting. Mr. Holman said that would occur. Mr. Holman called on Gary Thompson to discuss the National Digital Elevation Program (NDEP) Guidelines. Mr. Thompson said that the guidelines establish good practices for geodesy and quality control of elevation data.

Action #1: A motion was seconded and approved to adopt the National Digital Elevation Program Guidelines as presented.

#### *Priority #4—Access and Distribution*

Susan Johnson reported that the compilation of statute-restricted data has been completed and is provided in the handout. The GIS TAC will inventory the results to determine which restrictions are and are not a critical from a geospatial data access standpoint.

Ms. Johnson reported on the Federal Geographic Data Committee's Homeland Security Working Group. The Access Policy Subgroup issued a status report provided in the handouts. She said the principal method for determining data sensitivity requires custodians to consider the usefulness of data to a potential terrorist for selection of targets, planning or executing an attack; the uniqueness of your data and whether it is available from another source; and the cost/benefits of restricting data versus the resultant economic cost. She gave an example about data usefulness: the availability of a building footprint viewable in a GIS versus the security guard's watch schedule. One disturbing fact is that the decision to restrict data is often made at the technical level instead of the policy level. A decision matrix will be produced and disseminated. Mr. Benton said this matrix could be a useful guideline, especially at policy levels. Carlton Myrick asked if there were methods for recording who requested data and what was provided. Ms. Johnson responded that no one is keeping a tally of who is asking for what data. The Department of Defense (DOD) has a strategy to protect sensitive data, like the location of a fuel depot. The DOD makes a grid and colors a cell indicating there is something sensitive somewhere in that cell, but does not identify any specifics.

#### Presentation: NC Engineering and Surveying Act (G.S. 89C) and Implications for Local Government GIS

Mr. Benton asked the Local Government Committee (LGC) representative, Joe McKinney, to provide the context for the issue before the Council. Mr. McKinney said the implications of changes that occurred in the statutes in 1999 had made an impact on local government GIS. Then in 2000 a task force began development of a national model law that more clearly defined a line between GIS and surveyor products. This model law was adopted August 2003 by the National Council of Examiners for Engineering and Surveying (NCEES). The LGC wanted to know if North Carolina plans to follow the recommendations of that task force and to make sure that the GIS community, through the Council, and the surveyors' community, through NC Board of Engineers and Land Surveyors (NCBELS), were working together.

Andrew Ritter, Executive Director of the North Carolina Board of Engineers and Land Surveyors (NCBELS) said it has been four years since NCBELS has addressed the Council and he appreciated this opportunity. Mr. Ritter said the LGC presented a list of questions concerning the impact of G.S. 89C on local government GIS, research institutions and Councils of Government. Some of these issues were first raised in 1999 with the former Executive Director, Jerry Carter. The GIS/GPS rules written at that time had input from NCBELS Counsel David Tuttle and Gary Thompson, Chief of North Carolina Geodetic Survey. He said that the nine-member Board of NCBELS does not have full expertise in GIS.

Frank Tyndall, Chairman of the Engineering Committee of the Board, said NCBELS was established in the 1920s to protect the public, through G.S. 89C, and the Board's rules are its purview. GIS is regulated according to G.S. 89C. The Local Government Committee questions dealt with policy and history. Their questions were presented to the NCBELS board in September and the final answers are in the meeting packet. A number of questions focused on

whether North Carolina would adopt the NCEES national model law. Mr. Tyndall mentioned that the NCEES is an advisory organization to all 50 states, and can only make recommendations. It is up to each individual state to evaluate the model law and endorse or not, and it is a lengthy process. It took three years from the creation of the task force to the adoption of changes in the NCEES Model Law, and it will take more time for North Carolina to review and then request any changes to G.S. 89C in the 2005 Legislative Session.

Mr. Ritter said NCBELS is studying the new model law now and will seek input from this Council and the NC Society of Surveyors and others next spring. The spring of 2005 is the next opportunity to make changes in the law. He said that local government GIS operations only have to put a disclaimer notice on their data stating they can not attest to its accuracy, since attestation is reserved for licensed surveyors.

Mr. McKinney thanked Mr. Ritter and NCBELS for the answers stating that they were much clearer and alleviated many local government concerns. He asked if North Carolina adopts the model law, would that also clarify some of the misinterpretations? Mr. Ritter said the choice is to make everything black and white or to leave grey areas up to the discretion of the users. Jay Heavner said the local government tax office gets visits from taxpayers who believe in the accuracy of aerial surveys even when they have a surveyed deed that says, for example “46.2 “more or less acres.” He says the taxpayer doesn’t see the *more or less* acres. The rural public wants the X-Y corner of their property measured from the aerial survey, even though the tax offices does not represent them as the precise boundaries. Mr. Ritter said GIS tax maps are often produced as evidence against a surveyor’s attested survey data. Mr. Heavner said different surveyors can also disagree about a particular property.

Dr. Hugh Devine asked how the Model Law addresses certification of positional accuracy. Attorney David Tuttle said certification is through the signing, sealing, dating of the work and attesting to its accuracy, which can only be done lawfully by a professional licensed surveyor. Dr. Devine asked about using global positioning systems (GPS) to collect data and whether that person can attest to positional accuracy. If that is not possible, he suggested the law should stipulate that only professional licensed surveyors can attest, and all GIS operations should use a disclaimer. Mr. Benton thanked the presenters for the work. Mr. Ritter said the Board would like to return next spring to present the suggested changes and seek Council support.

## Committee Reports

***Local Government Committee (LGC).*** Joe McKinney reported for Kelly Laughton and said the last meeting discussion focused on the NCEES Model law and North Carolina G.S. 89C surveying law. The other issue of primary interest is seeking legislative funding for cost-share funds to assist local government in obtaining high resolution imagery. The LGC is striving to get the word out about **NC OneMap** and supports visits by CGIA to interested local governments to demonstrate the capabilities and possibilities of **NC OneMap**. The LGC had supported the use of the Survey Monkey tool for this data inventory, and it is functional, but has some limitations. The LGC would support a web-based tool, similar to the Indiana tool, for future surveys. Joe also said that the Council should mention the need for funding for high-resolution orthophotos in the next annual report to the legislature and Governor.

***State Government GIS Users Committee (SGUC).*** Dianne Enright reported that the SGUC has formed a work group to consider a statewide licensing structure for ESRI software and will also consider a state purchase of statewide road centerlines. The fall meeting included presentations from several road centerline vendors that have North Carolina product available. The meeting featured a presentation on **NC OneMap**. Mr. Benton asked if state agencies are considering consolidated purchases as a way to save money. She said yes.

***Federal Interagency Committee (FIC).*** Silvia Terziotti reported for Jerry Ryan that the federal group, led by US Geological Survey, hosted its first LIDAR workshop in October. The LIDAR work group was formed under the Statewide Mapping Advisory Committee.

***GIS Technical Advisory Committee (GIS TAC).*** Susan Johnson said the earlier **NC OneMap** access report covered GIS TAC activity.

***Statewide Mapping Advisory Committee (SMAC).*** Bill Holman said the SMAC meets the month prior to all Council meetings. The subcommittee on Offensive Place Names provided a draft letter to counties in the handouts that detailed an approach for complying with HB483. He explained that the legislation stipulates that the Council's Board of Geographic Names is to work through the Secretary of State's office to legally change offensive place names. Mr. Holman says the NC Board of Geographic Names committee, chaired by Dr. Wayne Walcott of UNC-Charlotte, is working with Haley Montgomery from the Office of the Secretary of State. Sixteen places or features have been identified in various counties. Rebecca Troutman said she was concerned about the tone of the letter, and she asked if every county affected could be telephoned before they receive the official letter. Chris Wease said it is the role of county commissioners to name creeks and mountain tops since that is how the name gets established. Rex Minneman said that place names do sometimes change. This mailing will make certain that the name on the official federal list and local government list is the same. Mr. Holman said it probably would be a good idea to let the specific local governments know that the letter is coming since the law requires a 90-day response. He asked Ms. Troutman to suggest changes in the text of the letter.

Action #2: SMAC to revise Offensive Names draft letter and incorporate concerns raised by representative from NC Association of County Commissioners. Counties to be contacted by telephone.

Mr. Holman said the LIDAR workgroup did meet and their report was in the handouts. The next workshop is February 2004.

Gary Thompson reported on the Orthophotography Implementation Planning committee. The purpose of this committee will be to help local governments with orthophotography and find state funding sources to assure the capture of orthophotography on a regular basis. Mr. Benton asked if the group was taking a multi-jurisdictional approach. Mr. Thompson said the group was looking at the Land Records Program past approach with local governments as a model. Mr. Thompson asked the Council to authorize this group to seek state funding. Mr. Dorman amended the motion to include the creation of a business plan.

Action #3: Council authorizes the Statewide Mapping Advisory Committee's orthophotography working group to coordinate with local governments and seek funding to acquire digital orthophotography. The working group should create a business plan.

**Management and Operations Committee.** Tim Johnson said that committee is reviewing the **NC OneMap** implementation plan and will look at the funding issues sooner. Regarding the Homeland Security requests, agencies are acting independently and there might be value in more collaboration when approaching federal funding sources. A committee is being put together that will include Dr. Jim Kirkpatrick from Dept. of Health and Human Services; Dr. Ken Taylor of Division of Emergency Management; Dr. Robert Dickens, Department of Agriculture; and Susan Johnson, representing City of Charlotte and Mecklenburg County. He asked if local government GICC members had received any direct federal resources for Homeland Security. Mr. Myrick said to share this concern with Secretary Bryan Beatty, Crime Control and Public Safety.

### Hurricane Isabel Response and Floodplain Mapping Program

John Dorman said there was an unexpected opportunity to collect data before and during the Hurricane Isabel event. Sarah Wray, staff in the Floodplain Mapping Program, showed numerous images captured and reported that several federal agencies partnered with Division of Emergency Management in advance of the storm:

- USGS/NASA wanted to use LIDAR to conduct Experimental Advanced Airborne Research
- FEMA / NC Orthophotos
- NOAA Orthophotos, they had a new camera to test
- Radarsat, SPOT, IKONOS imagery were also made available
- Coastal and Riverine High-Water Marks

The NOAA true-color orthophotos, about 900 images, were collected along the Outer Banks and are available at the NC Geodetic Survey website, [www.ncgs.state.nc.us/](http://www.ncgs.state.nc.us/). Joint efforts between NOAA, USGS, NPS and State of North Carolina are working toward orthorectifying the images. FEMA partnered with the State of North Carolina to collect post-storm black-and-white orthophotography images from 27 counties at 1:400-scale and 2-ft pixels. Ms. Wray said the state partnered with FEMA to get disaster imagery turned around quickly for disaster assessment. The images can be viewed on the **NC OneMap** web site [www.nconemap.com](http://www.nconemap.com) and are being offered to those counties. Other agencies interested in copies of the orthophotographs may contact Ms. Wray.

In the high-water marks survey, 12 crews were deployed on September 23 and they were able to collect information and photos for a total of 295 high-water marks (162 coastal, 123 riverine). The LIDAR data helped with pre- and post-dune analysis, erosion calculations, and to update flood studies and maps. The NOAA true-color high resolution digital photos provided better damage assessment. The black-and-white orthophotographs in 27 counties provides a complete coverage resource that can help in building code analysis, tax adjustments, and refining their property maps.

Mr. Dorman said the advancement of technology and the digital camera made available by the federal agencies as well as North Carolina's richness of geodetic control points across the state made this possible. He said NOAA really supported North Carolina and he requested a letter of thanks be sent from this Council.

Action #4: Council chair to write a letter to NOAA thanking them for expedient Hurricane Isabel response and making orthophotography available to state agencies.

## OTHER BUSINESS

Geospatial Preparedness Act. Mr. Johnson called attention to the federal bill H.R. 3186 that focuses on geospatial preparedness and establishes a new office. This bill is in the House Science Committee. The Council may wish to consider supporting this bill at a later date.

GIS Day LIVE. Mr. Johnson mentioned that today is also the fifth annual celebration of GIS Day. North Carolina is producing a 9-hour web-cast with statewide, national and international audiences, using the facilities of the video conference center of the Department of Public Instruction. Council members Dianne Enright and Derek Graham presented earlier today. Mr. Johnson mentioned the hard work of educators Rita Hagevik and Cris Crissman, Diana Hales, and the teachers and students who made this program possible. The GIS Day LIVE website is [www.gislivenc.net](http://www.gislivenc.net)

Mr. Johnson also mentioned that Eastern Carolina Council of Governments and the Center for Geographic Information and Analysis were both awarded grants by the Federal Geographic Data Committee under the 2003 Cooperative Agreements Program to support geospatial initiatives. Both grants will be used for metadata training and outreach to local governments.

Mr. Benton urged members to post the 2004 meeting schedule on their calendars.

## ADJOURNMENT

There being no other business, the meeting was adjourned. The next meeting will be held February 18, 2004, 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](http://www.cgia.state.nc.us/gicc), then click on "Meetings." The individual "Presentation" icons follow the Agenda and Minutes.*