

**MINUTES**  
**GEOGRAPHIC INFORMATION COORDINATING COUNCIL**  
**February 15, 2006**

**PRESENT**

Acting Chair, Susan Johnson. Members: Bryan Beatty, Bob Brinson, Rodney Bunch, John Correllus (for James Fain), Hugh Devine, Dianne Enright, Derek Graham, Kevin Higgins, Reggie Hinton, Chris Kannan (for Gerald Ryan), Bliss Kite, Kelly Laughton, Dan Madding (for Britt Cobb), Dr. Lee Mandell, Elaine Marshall, Anne Payne, Mark Prakke (for Carmen Hooker-Odom), Stephen Puckett, L.C. Smith (for Lyndo Tippett), Richard Taylor, Gary Thompson (for Bill Holman), David Wray (for Steve Troxler)

**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. Acting Chair Susan Johnson called the meeting to order, in the absence of Dempsey Benton. The Minutes of the November 9, 2005 meeting were approved. Ms. Johnson introduced two new members: Dan Madding representing Secretary Britt Cobb, Department of Administration; and Mark Prakke, representing Secretary Carmen Hooker-Odom, Department of Health and Human Services.

Status and Discussion of Priorities Before Council

*Priority #1—NC OneMap Implementation*

Tim Johnson reported on new NC OneMap connections that include the towns of Brevard and Fletcher, Brunswick and Madison counties, NC State University, and Land of Sky Council of Governments. He said 18 more connections will be completed in spring. The Council supported two grant proposals submitted for the 2006 National Spatial Data Infrastructure Cooperative Agreement Program competition. One project, "Empowering Local Incident Response Communities using Open GIS Web Services and Interoperable Client Applications for Framework Data," is a collaboration between The Carbon Project, a private sector company, and the Department of Environment and Natural Resources ITS Division, Wake County, the City of Charlotte, and US Environmental and Protection Agency. The second proposal, "Future Directions with Fifty States: A Business Plan to Sustain NC OneMap," was submitted by the Center for Geographic Information and Analysis (CGIA) with support from the Local Government Committee and US Geological Survey as collaborators. The awards will be announced in March.

*Priority #2—Access and Distribution*

Susan Johnson summarized the history and purpose of the federal "Guidelines for Providing Appropriate Access to Geospatial Data in Response to Security Concerns." She reported that this was a Department of Homeland Security initiative that sought to develop risk analysis guidelines for government agencies to use in deciding whether or not to publish geographic data on the Internet. Numerous federal agencies, the military, and state and local government agencies participated in developing these guidelines. The purpose of the Guidelines is to provide a

specific methodology for balancing security risks with the economic benefits of publicly available geographic data.

The Guidelines are organized to help each agency first determine whether they have the authority to change data. If the answer is yes, the next step helps the agency assess the security risk. Answers to questions pertaining to data uniqueness and whether the same data can be found through other sources could decrease the security risk of publishing that data set. The agency next determines if the benefit derived from data availability through Internet and other publication sources outweighs the risk. Ms. Johnson said that if the data needs to be safeguarded, the Guidelines help the policymaker consider which safeguards are appropriate.

She said the Guidelines are not a “cookbook” that gives advice on specific types of data layers and whether they should be restricted, or published. The Guidelines do not determine the procedures for safeguards, and they do not address restrictions on downstream data users who acquire data sets directly from cities or counties on CDs. They also don’t help in the review of past decisions made under different circumstances and environments. Ms. Johnson said what the Guidelines do is to provide a methodology for policy makers to make these decisions today. This is in contrast to the practice after September 11, 2001 where decisions to remove data from Internet availability were often made by technocrats. She asked the committees to report from their perspectives.

Dianne Enright, representing the State Government GIS User Committee, said that members thought the Decision Tree was a good tool. However, she questioned who, actually, makes decisions about the availability/restriction of State government data since data holdings are not well known. She said all state data needs to be documented with metadata. She suggested the Council could create a subcommittee to consider any data set that a state government agency wants to restrict. That committee could be composed of policy-level participants and GIS technicians in state government.

Chris Kannan, representing the Federal Interagency Committee, said his committee endorses the Guidelines.

Kelly Laughton, representing the Local Government Committee, said the LGC unanimously voted for the Guidelines. There were some comments relating to wanting a “cookbook” to identify types of data sets for appropriate release or possible restriction analysis.

Gary Thompson, representing the Statewide Mapping Advisory Committee, said the comments of that committee were favorable.

Dr. Lee Mandell said there is definitely a need to publicize and promote the guidelines. He said he liked Kelly’s idea about a “cookbook” that can give policy makers a short overview, especially drawing the distinctions between data and security risk. Secretary Marshall asked about the implications to the State if the Guidelines are approved. Ms. Johnson stated that if the Council approves the Guidelines, there would need to be publication and broad dissemination throughout the statewide GIS community. She mentioned a workshop or training plan could be another component.

Secretary Marshall asked if adopting the federal Guidelines would place the State under the rules of the Freedom of Information Act (FOIA) instead of North Carolina's public records laws. Ms. Johnson said the legal framework for North Carolina stays the same; federal rules are not imposed on the State. Dr. Mandell said the North Carolina public records law says that certain data sets don't "have to" be disseminated, which also means they could be, if that decision is reached by the appropriate parties.

Ms. Johnson said the originator of the data ultimately makes the decision in context of the world we operate in. It is possible for one county to decide not to disseminate property tax information, and the adjacent county makes theirs available on the Internet. These Guidelines are focused on the decision to make information available electronically, mainly on-line. Ms. Anne Payne pointed out that CD distribution would also be involved.

Mr. Derek Graham said if the Council adopts the Guidelines for North Carolina, we could be specific in how we disseminate the information. He mentioned that the examples in the Guidelines were very good, and we could provide similar North Carolina examples for local governments. Ms. Johnson asked if he meant a case book approach that the Council could publish. Ms. Payne said the examples could also reference North Carolina public records law. Dr. Mandell said that approach will be very helpful to cities and counties. They need illustrative examples, especially regarding infrastructure, that are tied back to statutes. Ms. Johnson asked Secretary Beatty if the Department of Crime Control and Public Safety had some good examples.

Secretary Beatty said from the Homeland Security and Public Safety standpoint his department would be helpful in reviewing proposals or examples. Ms. Laughton said the Local Government Committee includes representatives of several professional organizations so workshop sessions could be organized for their meetings. She said there has to be a distinction made between public records and non-public records as policy leaders make decisions.

Action #1: The Council adopted the "Guidelines for Providing Appropriate Access to Geospatial Data in Response to Security Concerns." The Center for Geographic Information and Analysis (CGIA) was charged to collaborate with Council committees to develop a communications plan, conduct workshops, and create a casebook of examples for local government use, referencing applicable Public Records Laws.

### *Priority #3—North Carolina Geographic Data Inventory*

Zsolt Nagy remarked that CGIA is directed by statute to operate a GIS data clearinghouse and the Council has directed CGIA to conduct data inventories on a regular basis. A statewide inventory of local government and state government data took place in 2003: 96 of 100 counties responded, as well as 92 cities. CGIA is leveraging work on the new 2006 inventory by using a national tool developed by the National States Geographic Information Council (NSGIC). The tool, called *Ramona* (Random Access Metadata tool for Online National Assessments), used content borrowed from the earlier North Carolina inventory as well as inventory projects conducted by Indiana and Maryland. North Carolina, through the Local Government Committee, joined 12 states in testing the *Ramona* prototype in December. Money for the project came from the National Oceanic and Atmospheric Administration because federal agencies need information about local government and state data assets. Mr. Nagy said that *Ramona* is referenced for "Geospatial Guidance" in the Department of Homeland Security's Grant Program.

Anyone can use the inventory tool to find out about data within the state. There are numerous features to this on-line inventory. Status maps for the seven Framework data layers, such as orthophotography, can be produced with contact information. The answers to data layer questions will automatically generate a minimal metadata record. The directory created from the User Profile will remain on the inventory web site, and can be updated as people change jobs. Calling the cities and counties surveyed in 2003 for updated contact information revealed that approximately one-third of the respondents had left their positions.

Local government in North Carolina will be the focus of the initial launch in March. Dr. Mandell asked if he could see the list of 140 cities the inventory is targeting, in case there are others to be added based on League of Municipalities information. Mr. Nagy said the list will be sent. Mr. Dan Madding asked if state agencies will be inventoried. Mr. Nagy said they can certainly participate and a secondary effort will target all state agencies.

Action #2: CGIA to provide the municipal listing for the 2006 inventory to NC League of Municipalities for review and to identify any additions.

#### Presentation: GIS Collaboration—A Perspective from the Albemarle Region

Mr. Rodney Bunch, Assistant County Manager of Pasquotank County, introduced his GIS Coordinator, Julie Stamper. Pasquotank's county seat is Elizabeth City (population 17,686), which is the largest city in the region. Ms. Stamper said this northeastern region is isolated from Virginia and even most of North Carolina, and still depends on two-lane highways. The total population of the 10-county region (Dare, Tyrrell, Washington, Hyde, Chowan, Perquimans, Pasquotank, Gates, Camden, Currituck) is 150,047. The beginning of GIS collaboration was related to E-911 requirements that needed computer-aided dispatch capabilities for Camden County, which had no GIS at that time. Ms. Stamper assisted from Pasquotank and added neighboring areas in Perquimans County until parcel and street centerlines data were created and merged for the three counties. The importance of using statewide data standards established by the Statewide Mapping Advisory Committee was evident when she was combining data sets from numerous counties.

Ms. Stamper said the Albemarle Regional GIS Group has informally grown over time, and now includes GIS staff from Camden, Perquimans, Currituck, Pasquotank, Washington and Dare counties, as well as the cities of Nags Head and Elizabeth City.

The value of data sharing was apparent after Hurricane Isabel. Perquimans lost power for two weeks, and Pasquotank was able to provide all maps for emergency services. Pasquotank developed the first website with every community's GIS data on it, and Perquimans and Camden counties have now created their own. Pasquotank also provides the link to NC OneMap and hosts data for the region.

Another advantage to partnering is the ability to pool resources and fly orthophotography at the same time to save money. The group is considering the purchase of pictometry imagery, which provides oblique views of buildings. Concerning the possible 2007 regional acquisition of orthophotography, Ms. Stamper said the group is committed to finding a way to pay Hyde County's share for imagery and parcel data creation.

Mr. Madding said that with limited resources Pasquotank County has done very well for that region. Richard Taylor said he especially liked the reference to E-911 as being a key to this story. He mentioned that Hyde County has a surplus of E-911 funds that could be used for this purpose.

Mr. Bunch acknowledged Julie Stamper's contribution to the regional effort. Ms. Johnson said it is a great example of collaboration.

### Committee Reports

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

***Statewide Mapping Advisory Committee (SMAC).*** Gary Thompson reported that the Committee met on January 18 with 17 people attending. The SMAC heard reports from the user committees and there was discussion about the National Geospatial Program Office Partnership Agreement and the need to develop a 3-year plan. Mac McCullough from US Department of Agriculture spoke about plans to collect statewide (leaf-on) aerial imagery in summer 2006. The committee heard a status report by NCSU Libraries on the Digital Preservation Partnership with Library of Congress and CGIA. He asked Mr. Nagy to discuss orthophoto planning and regional partnerships.

***Orthophotography.*** Mr. Nagy said the Centralina Council of Governments cost-share has been a success and CGIA expects delivery of imagery for 15 counties soon. About 50 percent of the cost-share has been paid out to communities. In December a last-minute cost-share opportunity was announced by US Geological Survey for 2006-2007 aerial imagery. Staff from CGIA and USGS talked to 25 counties before Christmas and submitted a proposal to the National Geospatial Programs Office that will provide a 20 to 25 percent cost share to the local governments. Mr. Nagy said he is hopeful this funding will occur, and he thanked Steve Strader and Chris Kannan of the National Geospatial Program Office for their help and support. Mr. Kannan said that if the *Ramona* inventory tool had been active and populated in December, it would have helped to identify candidates for cost-share. Mr. Thompson said the Orthophotography Work Group continues to make progress.

***Global Positioning System Standard.*** Gary Thompson brought the draft GPS Standard before the Council. The 47-page document includes an executive summary, distributed to the Council, and the position statement on the various types of GPS equipment, the major uses of GPS receivers, and data documentation standards. He said the complete standard is available on the GICC website ([www.cgia.state.nc.us/gicc](http://www.cgia.state.nc.us/gicc)). He asked all user committees to review the standard and report back to him so he can return to the Council in May with a recommendation to adopt. Ms. Johnson said there is always stress over the cost of mapping grade equipment, versus the cheap recreational grade equipment that local governments can better afford. Mr. Thompson said that enhanced recreational grade GPS receivers can be used for some data collection applications in this proposed revision of the GPS standards. OPUS-GIS is a GIS version of the successful OPUS (Online Positioning User Service) developed by the National Geodetic Survey. OPUS-GIS will reduce the cost of GPS software and allow more uses of enhanced recreational grade GPS receivers. He mentioned that the state government is establishing a loaner pool of GPS equipment in the Department of Environment and Natural Resources.

Action #3: The State Government GIS Users Committee, the Local Government Committee, and the Federal Interagency Committees will review the GPS Standard and provide comments by April 12 to the Statewide Mapping Advisory Committee.

Mr. Thompson said the SMAC is working on content standards for governmental boundaries and a minor revision to the parcel guidelines adopted last year.

*National Agriculture Imagery Program (NAIP).* Mr. David Wray, representing the North Carolina Department of Agriculture and Consumer Services, said the federal Farm Service Agency conducts the NAIP program, and plans to fly a true-color orthophotography product at 1- to 2-meter resolution this year. Since this is leaf-on photography, it is flown July through August, at an estimated cost of \$735,000 for the flight. Mr. Wray mentioned that the photography product could be available by the September hurricane season. If North Carolina contributes to the federal program, we will be considered a partner and will receive MrSID compressed files and uncompressed GeoTIFF files. As part of the partnership, North Carolina would provide LIDAR elevation information captured through the Floodplain Mapping Program and high resolution orthoimagery.

To date, Mr. Wray has received commitments of \$119,000 from state and local government agencies toward the full-color product, and there is high interest in capturing the color-infrared spectrum photography at that same time, which would cost an additional \$80,000. The last time North Carolina was flown was 1998, in color infrared. He said the state's full cost for these two products would be \$206,000. He said this data could be available through NC OneMap for the entire state. Ms. Johnson asked what the Council could do. Mr. Wray said the Council could help promote this purchase for the true-color leaf-on photography. If North Carolina wants to piggy-back the color-infrared at the same time, we will need to release a Request for Proposal in April, after the federal agency makes its vendor selection on April 15<sup>th</sup>. Mr. Kannan said the SMAC may need to review the Statement of Direction on Digital Orthophotography to include this type of leaf-on product. Mr. Wray said he is also looking at the process in his Department of Agriculture and Consumer Services to receive local government payments for their promised shares.

Mr. Wray asked that the GICC consider adding leaf-on color infrared (CIR) imagery to the 37 priority layers for NC OneMap.

*State Government GIS Users Committee (SGUC).* Dianne Enright reported that the SGUC met in January and heard presentations on weather and open source GIS. She reported that November GIS Day activities included a GISLiveNC Internet webcast that involved several schools and the NC Museum of Natural Sciences, and a large well-attended GIS exhibit at City of Raleigh offices on Fayetteville Mall that featured Wake County, City of Raleigh and state government agencies.

The ESRI enterprise license is well received and the ESRI training classes are full. The SGUC has established a local roads data committee that is composed of NC Department of Transportation, SGUC and SMAC members.

**Local Government Committee (LGC).** Kelly Laughton said one of the issues of concern was the continuing burden of data requests counties receive from multiple state agencies. She said the state needs a strategy to establish one single point of contact, especially for parcel data. She suggested that CGIA, as staff to the Council, could manage a coordinated approach.

She said that Steve Strader of the National Geospatial Programs Office talked to the committee about the partnership agreement and the LGC wants local government included in development of strategic plans. Stressing the importance of developing a business plan to sustain NC OneMap, Ms. Laughton said the LGC wrote a letter in support of CGIA's grant proposal. She mentioned that Advisory team (A-team) has been activated twice, once to comment on a federal task force draft document entitled "Federal Enterprise Architecture Geospatial Profile," and once to beta-test the *Ramona* inventory tool.

At the last LGC meeting, Dan Frey, GIS Coordinator with the NC General Assembly Information Systems Division, discussed voting precinct boundaries and how the General Assembly and US Bureau of the Census work together to add voting precincts to the Census TIGER data files. The LGC offered to help involve county GIS staff in the precinct boundary program for next census.

**Federal Interagency Committee (FIC).** Chris Kannan said the FIC had a successful meeting in Wilmington, hosted by the Army Corps of Engineers, and discussed the Federal Geographic Data Committee guidelines that were just presented. They showed high interest in the National Agriculture Imagery Program discussed by Mr. Wray. Mr. Kannan said that the President's 2007 budget includes a plan to establish three new lines of business, one being geospatial. "... to identify opportunities for optimizing and consolidating Federal geospatial-related investments to reduce the cost of Government and improve services to citizens through business performance improvements. The Line of Business taskforce will analyze cost benefits, alternatives and risks, define roles and responsibilities, expected outcomes, performance measures, milestones, and timelines. The Federal Geographic Data Committee will continue to develop the National Spatial Data Infrastructure and full implementation will require Federal agencies to play a critical role; therefore, the establishment of the Geospatial Line of Business will ensure sustainable business model for Federal partners to establish a sustainable business model for Federal partners to collaborate on geospatial-related activities and investments."

**GIS Technical Advisory Committee (GIS TAC).** Susan Johnson said there was no report.

**Management and Operations Committee (M&O).** Tim Johnson said the committee discussed the operational aspects of NC OneMap. The five-year operational budget cost \$6 million (\$1.2 million annually) for the server hardware and software, staff to maintain the system and local government links, technical assistance for metadata creation, and telecommunications fees. The Committee researched alternatives and considered four funding models:

- (1) Deed Transfer Excise/Revenue Stamp funding model.
- (2) Division of Motor Vehicles funding model.
- (3) Equitable Allocation of Funds from State Agencies.
- (4) Direct Funding through the State's General Fund.

Options 1 and 2 are associated with taxes on real estate or personal property. The Deed Transfer Excise/Revenue Stamp option could not be considered until the 2007 session of the General

Assembly. Attempts by other groups to secure this as a revenue stream have not found favor with the General Assembly. One view is that counties have done their part in funding orthophotography and other key data layers and the State should fund the operational cost of NC OneMap.

In Option 2, the revenue stream used a portion of the interest charged on late payment of taxes assessed on registered motor vehicles. The NC DMV used this mechanism to fund implementation of a new computer application for motor vehicles, but it does not relate to NC OneMap, and using this model did not seem appropriate. Interest on delinquent property tax payments was a similar source, but these funds are collected for use by local governments.

In Option 3, a work group composed of members of the Council and Office of State Budget and Management (OSBM) would need to work out a method to assess all state departments an equitable share. If divided equally among 28 departments and offices, this would be approximately \$50,000 per year agency. OSBM would need to determine what is “equitable” for each department based on data use factors.

The Management and Operations Committee considered option 4 as the best option since it calls for the operational costs of NC OneMap to be funded as a line item in the General Fund. Option 3 was the preferred back-up strategy.

Mr. Johnson said the Management and Operations Committee felt the Council should be on record as supporting the use of the Enterprise IT fund for NC OneMap. Ms. Johnson said if NC OneMap is to flourish, it needs to be supported by the General Assembly. Mr. Steve Puckett wanted to know if business groups such as banking, food stores, and other services could participate in NC OneMap, which could help in the event that a catastrophe shuts down communications.

Action #4: The Council accepted the Management and Operations Committee recommendation for pursuing NC OneMap operational funding through a line-item in the General Fund.

#### Presentation: *One North Carolina Naturally* and the Role of GIS

Richard Rogers, Director of the Office of Conservation and Community Affairs, Department of Environment and Natural Resources, said the use of GIS is essential for the comprehensive conservation plan for North Carolina. The plan coordinates with multiple state agencies that acquire conserved lands. The GIS allows integration of parks, game lands and private lands, including working farms and forests. He mentioned that 90% of the land in the state is private.

He said a few facts instigated the comprehensive conservation plan: population is projected to grow 50% by 2030, expanding from 8 million to 12 million in North Carolina; every new resident takes up two acres of undeveloped land; and 383 acres of forest and farmland are converted to development every day in North Carolina. Conservation provides clean water and clean air for us all. He mentioned that the annual \$62 billion in farm products, \$1 billion in fishing, and another \$13 billion in travel and tourism are essential to the North Carolina economy. He said the *One North Carolina Naturally* program does not want to stall growth, but accommodate it. NC OneMap and the data included in it are critical to this program as a decision-support tool. There are two-million acres under permanent conservation, with 98 counties participating in open



space planning. Mr. Rogers said that NC OneMap needs to move forward so more integration of planning can occur, and orthophotography is important to that mix.

### Other Business

*Stream Mapping (Hurricane Recovery Act).* Mr. Joe Sewash, CGIA's project manager for the Stream Mapping Project, reported that local governments were briefed by contractors and CGIA; the database design is complete; software tool development of horizontal alignment, attribution and conflation prototypes are under committee review; the horizontal accuracy study data are under review and additional survey field work is anticipated; and four issue papers are drafted and in review stages. The National Hydrography Dataset (NHD) at 24,000-scale production and indexing has been completed and accepted by US Geological Survey. This was one of the eight major milestones submitted to OSBM, and the third one met in this project.

Upcoming activities include physical database implementation, now with USGS; data production is ready to begin on the Pigeon basin and is on track for May delivery, and when the data base is fully populated, interested people can view it through an application viewer.

*Floodplain Mapping Program.* Mr. John Dorman said orthophotography was collected digitally at a 6-inch resolution in the counties flown this Winter, and awaiting finalization: 10 counties have been delivered, two will be delivered soon, and six more will be delivered by the end of May. He said public Digital Flood Insurance Rate Maps (DFIRMs) are increasingly available, with more counties completing their preliminary reviews. The Roanoke, Catawba and Cape Fear basins are undergoing FEMA review. By July 2006 there will be eight river basins in the DFIRM process. Phase I is completed.

*NC Wireless E-911 Board.* Mr. Richard Taylor said among the powers and duties the legislature assigned to the 911 Board last session (2005) was to consider a statewide plan for wireless 911 to include GIS mapping. There is now a Request For Information being developed by the Wireless E911 Board prior to issuing a Request for Proposal. He welcomed thoughts from the GIS community.

### ADJOURNMENT

There being no other business, the meeting was adjourned. The next meeting will be May 17, 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](http://www.cgia.state.nc.us/gicc), then click on "Meetings." The individual "Presentation" icons follow the Agenda and Minutes.

### ***2006 Meeting Schedule***

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