

MINUTES  
GEOGRAPHIC INFORMATION COORDINATING COUNCIL  
November 7, 2007

PRESENT

Chair, Dempsey Benton. Members: Ken Ashe (for Bryan Beatty), Bob Brinson, Michael Brown (for Reggie Hinton), Rodney Bunch, Dr. Hugh Devine, Jim Dolan, John Gillis, Derek Graham, Bill Holman, Susan Johnson, Bliss Kite, Bill Laxton, Dan Madding (for Steve Troxler), Dr. Lee Mandell, Elaine Marshall, Joe McKinney, Anne Payne, Mark Prakke, Stephen Puckett, Allan Sandoval (for John Correllus and Dianne Enright), Julie Stamper (for Colleen Sharpe), Steve Strader (for Mary Combs), Richard Taylor, Dr. Bill Willis, Jun Wu (for John Farley), and Ron York

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. Chair Dempsey Benton called the meeting to order. He introduced John Gillis of Fayetteville as a new Senate appointment by the President *pro tempore*. Mr. Gillis works in a family-owned business. Mr. Benton introduced Bill Laxton, the Chief Deputy Secretary for the Department of Environment and Natural Resources, who will represent Secretary Bill Ross on the GICC. He congratulated GICC member Reggie Hinton who was just appointed as Secretary of the Department of Revenue and GICC member Susan Johnson who recently began her new position as Chief Information Officer for Charlotte-Mecklenburg Schools.

The Minutes of the August 8, 2007 meeting were approved.

Status and Discussion of Priorities Before Council

*Priority #1—NC OneMap Implementation*

Tim Johnson reported that the NC OneMap application developer position, recently created by the Legislature, has been filled. Since the August meeting, several data layers have been updated and are available as free downloads through NC OneMap: municipal boundaries, gamelands, and state property. He mentioned that the 2008 National Spatial Data Infrastructure Cooperative Agreements Program grant cycle has been announced, with a closing date of December 18 ([www.fgdc.gov](http://www.fgdc.gov)). He said if applicants wish to include a letter of endorsement from the Council, the draft proposal should be sent to staff by December 11. Applications should support NC OneMap.

*Priority #2—Stream Mapping Project Status Report*

Joe Sewash said the Phase 1 of the North Carolina Stream Mapping Project in the western part of the state (19 counties) was fully complete the end of August.

CGIA is working with stakeholders to conduct demonstrations and pilots. The first demonstration will involve integration of the stream mapping data set into U.S. Geological Survey StreamStats, a web-based tool that allows users to view drainage basin characteristics and other information on streams. CGIA and DENR Division of Water Quality partnered on a regional environmental priority grant proposal to EPA. The project will demonstrate linking DWQ databases to the higher resolution stream mapping geography.

### *Priority 3—Public/Private Partnership Working Group*

Susan Johnson, co-chair of the working group presented the final report. She recognized the work of her co-chair Herb McKim and members Ron York, Dr. Lee Mandell, John Correllus, Greg Thorpe, Marshall Dean, Andrew Vondrak, George Glenn, John Dorman and Tim Johnson. The working group discussed organizational and attitudinal issues, and acknowledged some barriers that can be overcome through close partnerships. Ms. Johnson said the data barriers include lack of adherence to a common set of standards in both private and public sectors; critical assets that are not being geocoded; and data sets containing inaccurate and conflicting information. There continue to be major hurdles around privacy and security, as well as the NC Surveyor's Law that requires data be certified by a licensed surveyor before private sector entities can share data with the public sector. The work group considered outbound versus inbound data from the private sector.

There is mutual public/private interest for NC OneMap to evolve into a contiguous, current and available map—not just a collection of individual counties. As an example, Ms. Johnson suggested that pipeline safety management using NC OneMap could be a major priority for the private sector. Regarding funding requests for NC OneMap, Ms. Johnson said the private sector has points of view that could be voiced during the legislative budget process. She said that a patchwork quilt of funding was not the appropriate funding model for NC OneMap.

Six key data layers have been identified as “essential” to business processes by the workgroup: cadastral, municipal boundaries, county boundaries, building footprints, street centerlines, and aerial photography. These data layers need to be available for all 100 counties.

Ms. Johnson mentioned that data aggregators, such as Microsoft and Google Earth, participated in different meetings of the working group. Google is already making its own deals with individual cities and counties, but the working group would recommend that this be pursued at the state level.

The specific recommendations to achieve the vision of NC OneMap, included:

- (1) Confirm NC OneMap as the authoritative source of geospatial data for the State of North Carolina and create requirements and incentives for all agencies to contribute data;
- (2) Provide incentives to local governments to adhere to data standards currently adopted by the GICC;
- (3) Create a source of support, coordination and funding within the Center of Geographic Information and Analysis to work as advocate, educator, and point of coordination for NC OneMap;
- (4) Create a funding mechanism to develop and maintain critical state and local data;
- (5) Establish formal data sharing agreements between CGIA and utilities for the collection and exchange of data with appropriate privacy and security protections;
- (6) Reconsider current NC Surveyor's Law requirement for surveyor certification on exchange of private sector data;
- (7) Consider development of a statewide standard for the digital recordation of development

plats/plans, which is currently available in only a few counties. Citizens are already using geospatial data and tools on their computers and the digital recordation could become a model business standard for all counties.

(8) Ms. Johnson said we need to promote NC OneMap to the legislature so they understand how this tool will develop and change over time, and prove why it is so necessary.

Ron York said George Glenn, Executive Director of the NC OneCall Center, will participate in a proof-of-concept pilot by building an underground locator map for Mecklenburg County that will increase the accuracy level from the current 500-ft boundary to a 10-ft boundary. To do that Mr. Glenn will convert the entire Duke Energy landbase to NC OneMap. Mr. York said from a utility perspective the ability to match data to NC OneCall has saved millions of dollars. The pilot will see how much they can shrink underground boundaries.

Mr. Herb McKim mentioned that human behavior lags technology. Gas assets and other utilities will soon implement georeferencing as infrastructure is built. GIS will become a core business practice. He said we have the ability to do it now and won't be as far behind in the coming years. He noted that progress here will have a huge impact on commerce in North Carolina.

Bill Holman asked if water utilities would achieve the same savings. Ms. Johnson said yes. For example, it will cost approximately \$5 million to map underground water and waste water lines in Mecklenburg County. Mr. McKim said all assets for water and utilities will be digitally managed within 10 years. Dr. Lee Mandell said the GICC is the only organization positioned to take the lead and set the standards, since growth of GIS will be either coordinated or not.

Secretary Marshall mentioned that there might be a conflict with existing state law relative to standards. She mentioned the Electronic Recording Council legislation [G.S. § 47-16] that covers electronic documents. She said there is no urgency expressed from Registrars of Deeds that digital recordation of plats is clearly needed. She mentioned that appropriate bodies need to be advised and consulted.

Mr. John Gillis said that from his private-sector perspective there is a struggle over access to information and that it has greater power when shared. He mentioned a grassroots project at the local government level in Cumberland County that matches data from GIS and plats which are then integrated with Google Earth from a hot link to the deeds and plats and the county-supplied parcels. He said the platform is not an issue. He supports the recommendations and recognizes that these are priorities that need to be addressed.

Dr. Bill Willis said that there are a number of challenges in the Public/Private Partnership report that assumes the work must be funded by the State legislature, which is not entrepreneurial. He said that the plan talks about maps instead of needs and asks for a piece of technology instead of articulating a value that will make business better. If there is a cost-reduction impact, then it does make business better.

Mr. Puckett said several counties say their data is not created with public funding and therefore are not required to share data. Dr. Lee Mandell said the philosophical underpinning of NC OneMap is that data are freely available to all citizens. The alternative is a two-tier system: open and closed access. Dr. Willis suggested that the quality of data for citizens and business could be at different levels. If NC OneMap needs a data repository, then we must figure out how to pay for it.

If the private sector participates, that indicates NC OneMap has value and has their commitment. Mr. Benton said, for example, the stream mapping program completed Phase 1 in the western counties, but did not receive legislative funding for continuation to Phase 2. There is an effort to find the needed \$3.5 million from the agencies that directly benefit from this program.

Mr. Benton said that the standing committees need to review the recommendations and report back. He said the discussion should be tabled until the next meeting. He added new GICC member John Gillis to the Public/Private Partnership Working Group.

Action 1: GICC standing committees to review “Public/Private Partnership Working Group Final Report” and provide comments to the Working Group with sufficient lead time prior to the February 13, 2008 GICC meeting.

Ms. Johnson agreed with Secretary Marshall that we need to collaborate with other groups that have similar goals. Mr. Benton said the Working Group should bring the recommendations back to the next GICC meeting after everyone examines the document.

Ms. Stamper asked if an LGC member should be included in the work group. Ms. Johnson said no, local government is already represented and the committees have been involved in the process.

### Geographic Information System (GIS) Study

Jim Dolan spoke on behalf of the NC Office of State Budget and Management (OSBM) regarding this study established by House Bill 1473, Section 6.13 (a) (b) (c). He said there are several intersections in the study. During October he talked to more than 60 people and thanked everyone for their responses. The Survey Monkey questions generated responses from 34 state agency, 22 cities, and 24 counties, and resulted in 50 updates and 16 new entries to the NC OneMap on-line GIS data inventory. Mr. Dolan said that the State Chief Information Officer, George Bakolia, plans to review the study results in January 2008 with expectations of producing a report for the General Assembly by February.

### Presentation: Library of Congress Partnerships for Managing Geospatial Data

Bill Lefurgy, the Digital Initiatives Project Manager at the Library of Congress, said the National Digital Information Infrastructure and Preservation Program (NDIIP) was established by Congress in 2000. It recognized that governments were generating huge amounts of digital data and had little experience in retaining digital information for the future. Originally \$175 million was allocated, which was then reduced by \$47 million, to establish partnerships across the country with universities, non-government organizations (NGOs), and state governments. NDIIP will report in two years to Congress on what worked with these partnerships and what should continue into the future. Mr. Lefurgy said of the original eight partnerships, two are focused on geospatial data: the National Geospatial Digital Archive project directed by Stanford University and University of California/Santa Barbara, and the North Carolina effort headed by North Carolina State University Libraries in partnership with the Center for Geographic Information and Analysis. He said that NC OneMap is an ideal representation of what the

Library of Congress was looking for because of the existing network, the diversity of participation and the appreciation of the value of the data, which benefits society.

The NDIIP goals are to make a difference in capturing/preserving digital data of all kinds, and to build a foundation or model for others as a national digital stewardship network. Mr. Lefurgy referred to it as a network of networks and noted that the Library of Congress knows it can not do this alone.

There is a need to lay a good foundation for a national digital stewardship network as a collaborative organization across many boundaries. He stressed that data preservation is larger than any single organization. The projects selected are focused on state and local data. He described the latest Library of Congress initiative; a multi-state collaboration to develop best practices for managing digital data for long-term value. There are four projects led by four states to facilitate collaboration between state librarians, archivists, geospatial officials, and chief information officers. North Carolina is one of the lead states. The projects work with state digital information, web publications, legislative documents, and geospatial records.

Mr. Lefurgy said NDIIP was pleased with North Carolina's progress and through us has received exposure to other state communities.

#### Local/State/Regional/Federal Data Sharing *ad hoc* Committee

Bill Holman said the *ad hoc* committee received additional response from the Local Government Committee on the draft presented at the August GICC meeting. The feedback prompted a few more changes in the final document presented today.

Anne Payne reviewed the changes in the ten recommendations to support sharing data:

- (1) Avoid formal agreements. A sentence was added on behalf of the LGC that says the data producer is the appropriate authority to decide if a formal agreement is necessary.
- (2) Web access to data. No change.
- (3) Secure access. No change.
- (4) Free data. No change.
- (5) Single point of data contact should be the NC OneMap on-line inventory. No change.
- (6) Regional solutions. Although regional approaches for data collection and data sharing should be used, when appropriate, a new stipulation was added that this approach only applies when the local agency does not have the technical capability or available resources to distribute its own data.
- (7) Official outlets. Added a clarification at the beginning stating that data is most current and accurate at the original data source, and added a stipulation that an official outlet for data must be named by the producer of that data.
- (8) Archival and long-term access. Ms. Payne said this item generated lots of reaction from local government and the GICC should provide guidance on this.
- (9) The NC OneMap brand. No change.
- (10) Outreach. This recommendation asks the NC Association of County Commissioners (NC ACC) and the NC League of Municipalities (NCLM) to promote these data sharing standards as well as the standing committees of the GICC. State government departments should formally endorse or issue directives that state staff will adhere to these policies and recommendations.

Ms. Julie Stamper, representing the Local Government Committee, said her committee was concerned about outreach by the NC ACC and NCLM, and that this won't work unless state government takes it seriously. Dr. Mandell, speaking for the NCLM, said their body can not dictate to its members, but they can promote these recommendations. In terms of state government, he suggested a direct reporting relationship between GICC members and their state agency would be ideal. He also said that number 8, archival and long-term access, is not a trivial item.

Bill Holman said that the interest in archival and long-term access guidelines requires more work; therefore, a new working group needs to be chartered.

Action 2: Establish working group to address archival and long-term access guidelines.

Secretary Marshall verified that NC OneMap was officially registered as a Service Mark with the Secretary of State's Office.

Mr. Benton said as Chair he would send a memo to state agency heads about the Data Sharing recommendations. He responded to item number 5 about the single point of contact and said that all state agencies should register in the NC OneMap inventory so the single point of contact for each data originator is noted.

Action 3: The Chair will send a letter notifying State agency heads about the Data Sharing recommendations.

Mr. Dan Madding said that NC OneMap is missing some technical functionality, and you can not search on a statewide attribute. Ms. Payne said the Data Sharing committee's charge was to address policy issues and not technology solutions. It recognized that there are still technical challenges to solve.

Mr. Holman said there was the question about the requirements of public records law when a local government provides data to the state. The GICC sought and received an opinion from the Attorney General's Office: The state must redistribute this data, if asked. The state can not refuse a request, but the state agency can emphasize that the requestor should contact the original source of that data.

Action 4: The GICC adopted the ten recommendations for Geospatial Data Sharing and requested that members and staff work to promote and implement the recommendations as outlined in the report.

Mr. Willis said there should be a chain of command for geospatial technical standards. IT projects are routinely reviewed, and if the GICC wants OITS to include guidelines or standards there is a mechanism to do that. Mr. Benton said that could be done.

Action 5: GICC staff to forward adopted standards to State CIO for ensuring that state agencies plan to adhere to those standards as part of their IT projects.

## 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 10 with 29 people attending. They heard updates on the Streambed Mapping Program and Floodplain Mapping Program, the Library of Congress Digital Preservation Partnership and Landslide Hazard Mapping. The SMAC participated in a roundtable discussion on the GIS Study with Jim Dolan from the Office of State Budget and Management. There were reports presented from the Working Group for Orthophotography Planning, and the Working Group for Roads and Transportation. Mr. Holman said there are four geographic name change requests being reviewed by the NC Board on Geographic Names; recommendations should soon be forwarded to the SMAC.

Working Group for Orthoimagery Planning. Gary Thompson said that 26 counties have applied for NC OneMap cost-share for acquisition of 2008 local orthoimagery. He said that if state agencies have money to contribute to this project for dispersion to counties, they should contact CGIA and provide details of the funds that are available. Seven counties in southeastern North Carolina will collaborate on a joint project and may add color infrared spectrum to their photography deliverables if an agency would like to partner with them and assist with funding. Mr. Thompson recommended that counties include funds for horizontal quality control for projects that receive NC OneMap funds. He said the photogrammetry workshops offered at several summer and fall meetings were successful and there would be more scheduled if the committee receives a request.

The working group should have a draft white paper on digital cameras by the February 2008 meeting. In a partnership with US Geological Survey, NC A&T University and NC Geodetic Survey are establishing a calibration range for digital aerial cameras.

Mr. Benton asked if some of the counties with the oldest photography were among the new cost-share group. Mr. Zsolt Nagy replied that all local governments had to have photography older than three years.

Working Group for Statewide Parcels. Zsolt Nagy said the National Academy of Sciences, National Land Parcel Data document makes the case for a national parcel data set. Although the idea was advanced initially in the 1980s, the technology has advanced and the barriers are more organizational than technical. Mr. Nagy presented the information as a catalyst to the SMAC to revitalize the working group for statewide parcels. Mr. Nagy suggested that co-leaders of the working group should be Rex Minneman from the Secretary of State's Land Records Management Section, and a member, recommended by the LGC, from the North Carolina Property Mappers Association.

***State Government GIS Users Committee (SGUC).*** Allan Sandoval said the SGUC met October 18 and had presentations on Job Tracking in ArcGIS, Seamless Integrated Roads dataset, composite locator geocoding, and tips. More than 40 people attended. There was a roundtable discussion for the GIS Study with the SGUC Executive Committee and Office of State Budget and Management. SGUC will be participating with City of Raleigh and Wake County in a GIS

Day showcase on November 14 in the former space used by the NC Museum of Natural Sciences on Bicentennial Plaza. The next general meeting is January 17.

**Local Government Committee (LGC).** Julie Stamper said the LGC met on October 25. The members had spirited conversations regarding the *ad hoc* Data Sharing Committee recommendations. She said she was very happy to see that most LGC concerns were addressed in the final recommendations presented today.

Ms. Stamper said the LGC did not endorse the Environmental Protection Agency (EPA) exchange network grant application because there was not enough time to thoroughly consider a proposal. She recommended that the revitalized SMAC working group for Statewide Parcels consider this option for next year. Ms. Stamper attended a national County Digital Coast Forum meeting in Washington sponsored by the National Association of Counties and NOAA. The group worked through the LGC to encourage local governments in coastal North Carolina to respond to a survey on how they use GIS and geospatial data. Ms. Stamper reported that one key finding showed a continuing lack of knowledge about available GIS data.

NC Board of Engineers and Surveyors. Mr. Thompson, Chief of NC Geodetic Survey and Chair of the NC Board of Engineers and Surveyors (NC BELS), introduced several NC BELS board members, Nils Joyner PLS, Glenn Haynes PLS, and Andrew Ritter, Executive Director of NC BELS. He said that the NC BELS began reviewing their rules last year for forwarding to their Rules Review Commission. The GICC had requested actions relating to GIS and surveying practices. One of those rule modifications [21 NCAC 56.1608] is moving forward. It will specify accuracy standards and GIS surveys in urban or suburban areas where 0.5 meter accuracy is adequate. However, relating to the NCEES Model Law, Mr. Thompson stated that NC BELS will not move to adopt new rules, but would rather consider this through their policy mechanism. The NCEES Model Law specifies inclusions and exclusions for GIS data relative to surveying. The NC BELS Board intends to update their policy on the inclusions and exclusions of surveying and publish it on their web site. Therefore, there will be a web listing of historical board policies.

He said the NC BELS presented and exhibited at the fall meetings of the Carolina URISA and North Carolina Property Mappers Association. NC BELS held discussions with representatives from the Councils of Government (COGs) and a committee from the GICC. As to academic degrees in GIS, Mr. Thompson said it would count towards the education requirement to become a licensed surveyor. There is now available an optional GIS module in the surveyor's examination that replaces the traditional boundary surveying component. Mr. Thompson said that NC BELS wants to be a partner with the GIS community and that their primary concern is protecting the public.

Ms. Stamper asked if NC BELS had accepted the provisions of the NCEES Model Law as recommended by the national task force. Mr. Thompson responded yes, as a policy. Ms. Stamper asked if all the provisions had been accepted. Mr. Thompson responded no. He said North Carolina was considered a Model Law state, in terms of education. Ms. Stamper asked if NC BELS had changed the definition of GIS to correspond with the NCEES model law. Mr. Thompson said that would require a statutory change. NC BELS will not begin work on the statutory changes they may present to the 2008 legislative session until after the New Year, when the Chair of the Board changes. One of the statutory changes could involve the current



situation that does not grant COGs an “industrial exemption” from requiring surveyor certification of GIS data. He said that legal counsels from NC BELS and the COGs will meet to discuss wording relative to the industrial exemption and the COGs statutory foundation. He said he will report on this at the next GICC.

Mr. Joe McKinney said he would like the GICC to establish a subcommittee to keep a continuing dialog with NC BELS on these issues, to help allay concerns within the local government community. Mr. Benton said a previous *ad hoc* committee can be reconstituted for that purpose. Ms. Johnson said to include a private sector representative in light of the private/public data sharing recommendations presented.

Action 6: Reconstitute the former *ad hoc* Surveyors’ Model Law Committee including stakeholders from the private sector.

***Federal Interagency Committee (FIC).*** Steve Strader reported that many federal agencies participate in disaster response, but FEMA is not a FIC member in North Carolina. There are efforts to bring David Lawson, FEMA/Region 4 in South Carolina, into the FIC group. Arranging meetings has been very difficult with the dispersed FIC membership, but Chair Mary Combs has decided on a schedule of six meetings per year that will alternate between the Executive Committee and full membership. The Executive Committee meets November 20.

***GIS Technical Advisory Committee (GIS TAC).*** Susan Johnson said that the GIS TAC recommends adoption of the U.S. National Grid [Federal Geographic Data Committee standard FGDC-STD-011-2001] for inclusion in NC OneMap. She stressed that this coordinate system is exclusively a data presentation format useful for everyday applications and public safety providers; it does not change any data or replace other coordinate systems. Over time, as people learn how to use the grid it will help them locate places. Mr. Minneman wondered if the requirement, “Procurement language for geospatial information services, systems, and products shall include a USNG functionality requirement,” meant that all GIS data must support display in that grid. Ms. Johnson answered, yes, it should, and vendors should be made aware of this. Ms. Payne asked if there is sufficient information for implementation of this standard. Ms. Julie Stamper said education and outreach was needed, and materials are being developed by Talbot Brooks, at Delta State University. Ms. Payne said the LGC and SMAC committees should be encouraged to conduct education.

Action 7: The GICC adopted the U.S. National Grid standard [FGDC-STD-011-2001].

### Other Business

***Interagency Leadership Team.*** Mr. Bill Laxton said the group composed of five state agencies and five federal agencies met in October. There was interest in conducting a pilot where the ILT can show that GIS is saving the state money, and actually quantify the savings. An example is the use by DOT on Cary Road near Kinston where GIS data saved five field trip verifications. He said Dempsey Benton sent a letter to the Governor in 2006 requesting \$8 million to update and maintain the essential state data sets, which did not get into the Governor’s budget at that time. The ILT is going to use information from the pilot and submit another budget request in 2008, although scaled back to 25-percent.

*Floodplain Mapping Program.* Mr. Ken Ashe said the statewide project continues and 93 counties have received all or portions of new DFIRM maps. All counties should have new DFIRMs by late spring 2008. Based on the age of the maps and the NC Floodplain Mapping Program triggers for maintenance, 19 counties have been scoped to identify mapping needs and community requests. Of these 19 counties, five (5) have been identified that need new orthophotography to stay within FEMA specifications. Additionally, the Floodplain Mapping Program is restudying the coastal flood hazards for the entire coast which will include 20 to 22 counties.

## ADJOURNMENT

There being no other business, the meeting was adjourned. The next meeting will be February 13, 2008 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.ncgicc.org](http://www.ncgicc.org) Click on "Meetings." Presentations and documents presented during the meeting are available in a Zip file for easy download.