MINUTES
GEOGRAPHIC INFORMATION COORDINATING COUNCIL
February 9, 2005

PRESENT

Chair, Dempsey Benton. Members: Bryan Beatty, Bob Brinson, John Correllus (for James Fain), Hugh Devine, Terry Ellis, Dianne Enright, Derek Graham, Tom Gray, Reggie Hinton (for Norris Tolson), Bill Holman, Susan Johnson, Bliss Kite (for Jo Anne Sanford), Kelly Laughton, Tim Lesser, Lee Mandell, Elaine Marshall, Joe McKinney, Carlton Myrick (for Gwynn Swinson), Anne Payne, Stephen Puckett, Forrest Robson (for Lyndo Tippett), Jerry Ryan, Rebecca Troutman, Chris Wease, David Wray (for Steve Troxler)

PROCEEDINGS

A meeting of the Geographic Information Coordinating Council was held on February 9, 2005 in the Board Room of the Department of Public Instruction in Raleigh, North Carolina. Chair Dempsey Benton called the meeting to order. The Minutes of the November 10, 2004 meeting were approved.   Chair Benton introduced new members Anne Payne, an appointment by the Speaker of the House, and Bliss Kite, who will represent the Public Utilities Commission.

Status and Discussion of Priorities Before Council

Priority #1— Stream Mapping Implementation Plan (Senate Bill 1152)
Dempsey Benton said that many Council members participated in the January 5, 2005 teleconference to review and discuss the implementation plan recommendations from the Stream Mapping Working Group. The final report incorporated member suggestions. Mr. Benton presented the report, "Implementation Plan to Improve the Mapping and Digital Representation of Surface Waters in North Carolina," to the Environmental Review Commission of the General Assembly in mid-January as required by the Study Bill.

Tim Johnson distributed the Executive Summary and briefed the Council on the recommendations contained in the full 120-page report. He recapped the Study Bill requirements and the number of stakeholders included in the process. The working group agreed that any new stream mapping data should be available through NC OneMap. Two graphics in the Executive Summary show existing GIS stream mapping and corrected stream delineation when combined with digital orthophotography and more accurate horizontal elevation data. In addition to building more accurate data, Mr. Johnson said there are long-term maintenance needs since some water features, such as lakes, appear and disappear over time. Decision makers can make erroneous decisions with a monetary impact because of inaccurate stream mapping. Better accuracy will assist regulatory programs on the local and state level. Working group members assessed the financial benefits for their own operations, for example the NC Ecosystem Enhancement Program (NCEEP) saw a huge benefit for stream map accuracy in both estimating linear feet of streams that need restoration and efficiencies in identifying stream mitigation credits. On the local level, the City of Durham stated that it would save staff time in the approval

of site plans, and estimated the savings at $216,000 per year. The NC Wildlife Resources Commission stipulated that environmental permit review time would be reduced by 15 minutes per permit, or a total of 686 hours (based on current levels of 2,746 permits requiring 1,568 days to handle). This translates to a savings of $20,595 per year. US Geological Survey would save $22,500 annually on their flood frequency statistics at an ungaged site on a stream, and NC Division of Coastal Management calculates that more accurate stream mapping would save them $23,702 in permit review calculations of coastal wetland impacts.

Mr. Johnson said the full implementation plan covers 5 years and is divided into 5 phases:
Phase 1: Complete the National Hydrographic Database (NHD) for North Carolina at a 1:24,000-scale, design the geodatabase and software tools, and continue public education of the uses and purposes of this new statewide digital surface water resource;
Phase 2: Incorporate the NC Floodplain Mapping LIDAR and breaklines into the database. It was noted that the LIDAR for the western part of the state will be flown this year;
Phase 3: Extend the Stream File from Phase 2 to a 20-acre drainage limit;
Phase 4: Extend the Stream File from Phase 3 to a 6-acre drainage limit, which includes 95% of all intermittent and perennial streams in the state; and
Phase 5: Long-term data maintenance, which begins in year 2, and continue quality assurance/quality control.

The costs of this implementation plan include data generation costs (mapping by county) and management of the project, and is estimated at $13,900,000 through Phase 4, which is the 6-acre drainage limit. The final implementation plan that was submitted to the Legislature included an appendix with letters of support from members of the working group. Mr. Benton said we hope to hear a favorable response from the Legislature this session.

The full report is available as a PDF file on the web site: www.cgia.state.nc.us/streammap

Priority #2—Content Standards
Zsolt Nagy, Council staff, said the cadastral guidelines have been reviewed by the North Carolina Property Mappers Association and comments have been received by the Statewide Mapping Advisory Committee. The revised document will be forwarded to the Local Government Committee for wide dissemination and response by March 30. The cadastral guidelines will be brought before the Council for action at the May meeting.

Mr. Forrest Robson stated that the road mapping (transportation) standard has been reviewed by the Local Government Committee and will return to the SMAC in April for further consideration before presentation to the Council for action at the May 11 meeting.

Priority #3—Access and Distribution
Susan Johnson said the federal access policy has not been formally adopted by the Department of Homeland Security. There has been no movement on this since the November 2004 elections.

Priority 4—NC OneMap Implementation
Mr. Johnson reported that 54 communities and more than 200 data layers are currently available through NC OneMap. There is a $2.5 million "earmark" from the US Department of Agriculture in the federal omnibus bill for digital orthophotography to be flown for 15 counties. Staff are currently working with the Governor's Washington, DC office on how to structure the USDA grant

proposals. Of the 15 Tier 1 counties of concern, the Floodplain Mapping Program has identified five counties that will be flown in their February-March flight window. Council staff will consult with the Land Records Management Program on the mechanics of working with counties to distribute money from this grant to pay for orthophotography flights. The Economic Development Intelligence System currently under development will tie into the NC OneMap network, as well as the multi-hazard portal being developed by the Floodplain Mapping Program in Crime Control and Public Safety. NC OneMap momentum has resulted in endorsements of this effort as an important tool for environmental and cultural resource review of highway planning projects.

Ms. Kelly Laughton said local governments are pleased that their data can be leveraged to handle multiple state users through NC OneMap, instead of requiring local governments to provide endless copies to individual users. Mr. Terry Ellis asked if the application viewers being developed by Floodplain Mapping Program and Economic Development Information System are duplicating the NC OneMap effort.

Sarah Wray, GIS Coordinator for the Floodplain Mapping Program, said FMP intends to use the NC OneMap spatial data backbone once its information technology capability has been expanded. Until then, FMP will need to act as host for the multi-hazard portal. Mr. Ellis said the initial concept for NC OneMap was to help fund the Center for Geographic Information and Analysis (CGIA) to get the technical support to host and manage this statewide initiative. Ms. Laughton said that the value of NC OneMap needs to be continually demonstrated so it is meaningful to larger groups while achieving an ease of use. Ms. Wray said Floodplain Mapping Program's information technology capabilities will be enhanced by a pending FEMA grant award to state and local governments to provide a proof of concept for the multi-hazard portal within a two month timeframe.

Mr. Ellis said Johnston County recently participated in an 8-county exercise involving a turkey flu virus and they used the NC OneMap network, even though the NC Department of Agriculture also has a separate multi-hazard threat database. Mr. Ellis said the participants prefer to go through NC OneMap to connect to the poultry information, rather than use a separate database. Mr. Benton said the Council's NC OneMap initiative needs to remain on course and the question of multiple portals should be considered by the Management and Operations Committee.

> Action #1: The Management and Operations Committee to consider NC OneMap and interrelationships to other state portals.

Priority 5—State Government Data Inventory
Mr. Zsolt Nagy said that at the November Council meeting it was suggested that staff undertake several actions to increase the inventory results. One task was to cross-check the former North Carolina Corporate Geographic Database list versus the data sets inventoried by the survey. Another task was to peruse state government web sites to uncover additional data sets that might be posted on the web, but not inventoried. Both of those tasks have been completed. The next step is to provide these results to the Local Government Committee and the State Government GIS Users Committee and then post the inventory results on the web by the end of March.

<u>Operation Summer Breeze—A Case for Geospatial Data Coordination in Charlotte-Mecklenburg</u>

Twyla McDermott, GIS Manager and Strategic Technology Planner for the City of Charlotte, said she could attest to the usefulness of NC OneMap in an exercise on biological terrorism. Summer Breeze was a two-day scenario June 22-24, 2004 that included emergency responders, and city/county staff in the greater Charlotte metropolitan area, which also is home to two nuclear power plants. The Charlotte-Mecklenburg governments have made a large investment in spatial data for analysis and planning functions as well as automated vehicle location and computer-aided dispatch. They have a five-tier GIS support network. Throughout the 36-hour exercise, all GIS activity was logged, as well as the set-up of GIS tools.

They found that the hospital data was out of date with incorrect names and addresses, and they did not have an accurate number of beds. They confronted some problems with HIPAA (Health Insurance Portability and Accountability Act) rules concerning individual descriptors in medical situations. These problems were revealed by the train wreck scenario. The crisis center set-up extended to Lenoir, an adjoining county.

Mr. Andy Goretti, Mapping Project Manager with the Mecklenburg County Land Use and environmental Services Agency, reminded the Council that this was in late June, while NC OneMap was still very elementary and had not been refined and officially launched. Even in that circumstance it was extremely useful. They projected the NC OneMap data onto a screen where they could zoom in/out on scenario locations. Ms. McDermott said that one of the scenarios was the loss of internet capability in the crisis center. They had laptops already loaded with data as their back-up.

The outcomes of the exercise: Create a GIS action plan. The postmortem revealed key areas for improvement including data connectivity, data management and regional data differences that require content standards to make sure everyone used the most accurate and current data. The HIPAA problem needs to be addressed since emergency situations cross boundaries. All items and their solutions will come through the GIS group. Mr. Goretti said that as a tool, NC OneMap made a measurable difference in this event, even though NC OneMap was just in its early demonstration phase. The Summer Breeze scenario was a great test of that tool, and new applications are on the horizon. Ms. McDermott said that the emergency scenario extended to Florida and through NC OneMap they could access Florida data in *The National Map*.

Ms. McDermott said a regional coordination effort is now underway to ramp up participation in NC OneMap and engineer data operations and data flow to replicate the data. The Regional Geospatial Partnership is between two Councils of Governments in South Carolina and North Carolina and is partially funded through a Federal Geographic Data Committee grant. This grant is providing funds to develop an organizational, technical and operational structure for sharing the most current/accurate data among the partners. Horizontal connectivity and getting financial payback for the stakeholders are expected outcomes. The focus is on the seven framework themes (transportation, land ownership, orthophotography, surface waters, elevation and bathemetry, governmental boundaries, and geodetic controls) as well as land use. Ms. McDermott said there are 14 priority layers across the two-state region and they will pursue phase II funding for that development. North Carolina linkages include NC OneMap and a dependence on the Council for data content standards. The partners expect to offer a regional

portal on top of NC OneMap. Mr. Goretti said shared regional portals across the state could be an add-on feature of NC OneMap. The group will develop a governance committee, a business plan, a marketing and communications strategy, and publish their strategic plan this summer.

Mr. Terry Ellis said a regional approach with access to data is key. He asked Secretary Bryan Beatty if there was any Homeland Security money available in North Carolina to develop NC OneMap and filter money down to the local government level.

Mr. Beatty said that North Carolina received about $35 million in 2005 for Homeland Security expenditures, less a $5.4 million earmark specifically for Charlotte-Mecklenburg. There will be a competitive grant process and letters were mailed February 8 to associations, such as the North Carolina League of Municipalities and NC Association of County Commissioners. The funding will be divided 50/50 between the Voice Interoperability Plan for Emergency Responders (VIPER) and multi-disciplinary proposals with a regional focus. Within each of the two funding categories, 80-percent will go to local governments and 20-percent is available to state agencies. The application review committee will include local governments, police and fire departments as well as the Governor's Crime Commission. Mr. Ellis asked if CGIA could apply for NC OneMap funding. Mr. Beatty said that state agencies are eligible to apply and grant applications are available on their web site. Mr. Ellis said NC OneMap uses a regional approach and Ms. Rebecca Troutman said that is in keeping with the Homeland Security grant guidelines. Mr. Benton suggested that interested regions team up with CGIA as a partner on NC OneMap.

> Action #2: CGIA to explore proposals that would involve a regional approach and aid the development of NC OneMap.

Report: *Ad hoc* Committee Review of the NCEES Model Law for Land Surveyors

Mr. Steve Puckett said Governor Easley issued a proclamation for Surveyor's Week in February. Mr. Puckett stated that when he travels as President of the NC Society of Surveyors he finds that many are impressed with North Carolina's work on floodplain mapping and GIS, and that NC OneMap is getting recognition. The *ad hoc* committee was charged with studying the National Council of Examiners for Engineering and Surveying (NCEES) model law and report their conclusions to the Council. Mr. Puckett reminded the Council that the NCEES model law group examines and adopts model legislation relative to the engineering and surveying professions that is then considered by individual state legislatures.

The *ad hoc* committee included Tim Johnson, Local Government Committee members Roscoe Reeve and Andrew Shore and the State GIS Users Group member Rex Minneman. The 9-page *ad hoc* committee report recommends the model law be presented for adoption by the North Carolina Legislature, with two wording changes noted (page 4: paragraph 3.2.b) (pages 8-9: section 210.14, paragraph B).   Mr. Puckett mentioned that the public still has the misperception that GIS overrides the field survey and the Council should call on the *ad hoc* committee for further outreach. Dr. Lee Mandell asked if the Local Government Committee was OK with the use of the word "authoritative" that is used extensively in the Model Law. He asked if the word "authoritative" needs to be defined. Mr. Puckett replied that the use of the word "authoritative" is already in the current statutes. Mr. Reeve said the roots of "authoritative" are in legal and evidentiary administrative rules, particularly for use in local government ordinances. Secretary

Elaine Marshall asked if "authoritative" needs to be defined as it is used in Chapter 8 regarding case law.

Mr. Benton asked about the next step required for the committee's recommendation number 3 which asks the Council to support the development of administrative rules that would be "developed along with the Model Law to clarify what is and is not the practice of surveying as it pertains to GIS." Mr. David Tuttle, the attorney for NC Board of Examiners for Engineers and Land Surveyors (NCBELS), replied that the changes and recommendations for adoption of the NCEES model law should be brought before NCBELS to include them in the administrative rules. The surveying community would go through NCBELS to adopt the administrative rule process and then it would be forwarded to the Legislature. The role of the *ad hoc* committee is to participate in the NCBELS discussion. Ms. Laughton, chair of the Local Government Committee, asked if that committee needed to ask the current volunteers whether they wished to continue on that task, or if other volunteers should be assigned.

> Action #3: The Council passed a motion to support the report of the *ad hoc* committee and forward the recommendations to NCBELS for the administrative rules process.

Committee Reports

Statewide Mapping Advisory Committee (SMAC). Bill Holman said that the offensive names issue has completely addressed the concerns of the General Assembly and a report has been filed with the US Board on Geographic Names. All members of the Legislative Committee received a letter noting the actions taken. Ms. Rebecca Troutman asked if every county involved was informed of the new names. Mr. Holman responded in the affirmative.

Mr. Zsolt Nagy mentioned that Gary Thompson is working on the orthophotography report. Thirty-four counties have indicated they will fly this season (January – March). Of that group, nine counties are being supported with a $14,000 average cost-share provided by USGS.

Don Holloway said the regional color orthophotography effort administered by Centralina Council of Governments involves a 9-county consortium with funding provided by federal, state, and the local governments, which is very unusual. The Floodplain Mapping program is a major player. He said that only three of the initial 12 counties in the consortium, Rutherford, Anson, and Cleveland, have dropped out but they will be flown as part of the Floodplain Mapping Program using digital cameras. He mentioned the contract was awarded to EarthData and Sanborne and the regional consortium is getting a very good price. All photography will use state mapping specifications. Many of the counties have added additional products to their flights. US Geological Survey is to be commended for its assistance. The NC OneMap funding through the US Department of Agriculture will really assist the Tier 1 and Tier 2 counties that have been identified in that project. Mr. Holloway also thanked the Council for its support. Mr. Benton said the consortium is an excellent case study of cooperation.

State Government GIS Users Committee (SGUC). Dianne Enright reported that the SGUC had to cancel its January meeting because of the weather. There was nothing to report on the ESRI group license, but there will be a report in May.

Local Government Committee (LGC). Kelly Laughton said that the committee met February 2 to discuss the Stream Mapping plan and the *ad hoc* surveyor and NCEES model law committee, which both had narrow windows for their efforts. The LGC discussed its structure and a need to generate ideas through working groups and how that might encourage more involvement.

Federal Interagency Committee (FIC). Chris Kannon said the group met January 14, 2005 at the Army Corps of Engineers in Wilmington. They are discussing an NC OneMap inventory of federal agencies. North Carolina has one of few FIC groups in the country and they want to reach higher levels of upper management within the state.

Management and Operations Committee (M&O). Tim Johnson said there was no report.

Presentation: Coordinating Geographic Information in South Carolina

Chuck Fallaw, Deputy CIO for Project Management and Planning in South Carolina, said that South Carolina is about to establish a coordinating council and hire a statewide GIS coordinator. They recently got the Governor's attention and are now included in the budget, even though no dollars are attached to this recognition. Mr. Fallaw mentioned that his group is here on a scouting expedition to investigate progress on NC OneMap. He mentioned that South Carolina does have a master purchasing agreement with ESRI and TeleAtlas that covers state government and schools. He mentioned that South Carolina has 9 different GIS users groups and they have a network of 14 ESRI business partners to provide technical assistance. As they pursued their coordination initiative they discovered the Savannah River site which includes 17 federal agencies that are working collectively on data. South Carolina may just be starting its statewide coordination structure, but its State Mapping Advisory Committee has existed for 25 years and holds a conference with the South Carolina and North Carolina Arc Users Groups.

OTHER BUSINESS

Floodplain Mapping Program: John Dorman said that FMP is working quickly to implement LIDAR Phase III in the mountains. Flying will begin next week. He mentioned that Phase I, the Cape Fear River Basin, is 90 percent complete and will be finished by June. He has plans to go to FEMA in Washington, D.C. in March.

North Carolina GIS Conference: Tim Johnson reminded the Council about the March 3-4, 2005 conference at the Benton Convention Center in Winston-Salem. We are expecting 800 people. The detailed conference program is now on the web, at www.cgia.state.nc.us/ncgis2005/

ADJOURNMENT

There being no other business, the meeting was adjourned. The next meeting will be held May 11, 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.