MINUTES
GEOGRAPHIC INFORMATION COORDINATING COUNCIL
August 20, 2003

PRESENT

Chair, Dempsey Benton. Members: Tim Brewer (for Martin Lancaster), Bob Brinson, Carol Burroughs (for Carmen Hooker-Odom), Jean Crews-Klein, Hugh Devine, John Dorman (for Bryan Beatty), Terry Ellis, Dianne Enright, Mike Fenton (for George Bakolia), Derek Graham (for Mike Ward), Tom Gray, Jay Heavner, Bill Holman, Kelly Laughton, Tim Lesser, Dr. Lee Mandell, Joe McKinney, Rex Minneman (for Elaine Marshall), Carlton Myrick (for Gwynn Swinson), Tom Newsome (for David McCoy), Titus Pollard (for Charlotte Turpin), Forrest Robson (for Lyndo Tippett), Jerry Ryan, Rebecca Troutman, Norris Tolson, Chris Wease, Mike Wilkins, 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 August 20, 2003. Chair Dempsey Benton called the meeting to order. The Minutes of the May 14, 2003 meeting were approved.

Status and Discussion of Priorities Before Council

Priority #1—Common Understanding.
Tim Johnson, Council staff, reviewed the draft implementation plan for **NC OneMap** and the new logo. This will help achieve the Council's first priority: Define the vision, conduct outreach, develop an implementation plan; perform the implementation. The **NC OneMap** implementation plan is based on the vision and characteristics that were adopted by the Council in the May 2003 meeting. The plan sets timelines, assigns committee responsibilities, and establishes 14 steps:

1) Identify initial data themes to serve on **NC OneMap**
2) Finalize data content standards for those themes
3) Identify early partners
4) Reach community data sharing agreements with partners
5) Conduct an outreach campaign to seek statewide participation
6) Determine statewide data for achieving a complete base map
7) Evaluate policy issues related to serving sensitive data per state or federal directives
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**

Mr. Johnson said the first five steps will begin in September and should be completed by the November Council meeting. All Council user committees are involved, and the Statewide Mapping Advisory Committee (SMAC) is tasked to work on the data content standards.

Mr. Johnson, reading from a report submitted by Susan Johnson, the GIS Technical Advisory Committee chair, said the process to Service mark (a form of Trade mark) **NC OneMap** has begun. Mr. Johnson said that **NC OneMap** will work in partnership with the National Map initiative. The statewide data inventory will identify specific data gaps around the state, including the eight counties that do not have digital land records information.

Dr. Lee Mandell suggested that training be another component in the implementation plan. He asked what risks are inherent in this implementation plan. Mr. Johnson said the major risks are dealing with Homeland Security issues and keeping costs down. Dr. Mandell said CGIA should consult with Mike Fenton, Office of Information Technology, to assess risks and assumptions on funding. He thanked staff for working through his initial concerns about security, privacy, and free access from the local government point of view.

Ms. Troutman said she wanted staff to include costs and quantify the benefits to participants in **NC OneMap**. She referred to the promise that **NC OneMap** users can take availability for granted, which could imply that **NC OneMap** has no value. John Dorman asked if the data will reside in a central location. Mr. Johnson responded that **NC OneMap** will be distributed and data served by each data provider. Mr. Dorman suggested staff check with the private sector because there may be new technical approaches available.

Action #1: A motion was seconded and approved to accept the implementation plan for **NC OneMap** as modified by the above discussion.

Priority #2—Data Inventory

Zsolt Nagy, Council staff, said the Data Inventory team is constructing the Internet survey using the Survey Monkey tool. The data inventory will answer questions about specific state, local and federal geographic data that is available throughout the state. A comprehensive GIS coordinator contact list for state, local, federal, and councils of government is being prepared and a roll-out letter for county and city managers has been drafted and will be sent in September, with the survey to follow later in the month. Responses will be reported at the November Council meeting. Mr. Dorman asked if the data inventory questions includes the floodplain mapping survey questions that have now been released to 30 Phase 2 counties. Mr. Nagy said the floodplain questions are being integrated into the survey. Mr. Dorman was concerned that those 30 counties might have to respond to two different surveys. Mr. Nagy said CGIA is planning to pre-populate the Survey Monkey questionnaire for those in Phase 2 who have recently completed the floodplain mapping survey. Mr. Nagy said the data for floodplain mapping Phase 1 counties is now three years old and the data inventory will provide a more current picture. Mr. Dorman said that the data inventory will be an asset when Phase 3 counties are surveyed in 2004 for the floodplain mapping program. In that case, he acknowledged, he would like the data inventory responses to pre-populate the floodplain survey tool. Mike Fenton asked if there is any authentication procedure to ensure only one person responds per county. Jay Heavner asked if an Acrobat file containing the earlier floodplain mapping survey could be attached to the Survey Monkey email sent to a specific county GIS coordinator. Mr. Nagy said CGIA could supply a

county's responses from the Floodplain Mapping Survey, if requested. Mr. Benton stressed that staff should coordinate surveys as much as possible.

Action #2: Staff should address concerns raised about Survey Monkey functionality and flexibility, redundant data entry and data export.

Priority #3—Data Content Standards
Bill Holman said there were several content standards under review. He asked Gary Thompson, Chief of NC Geodetic Survey, to discuss two standards that focus on geodetic controls. Mr. Thompson said the NOAA technical memo "Guidelines for Establishing GPS-Derived Ellipsoid Heights" supports using global positioning systems for elevations. The National Geodetic Survey worked with North Carolina and California to test these guidelines. The time savings using GPS instead of differential levels was 70%, a significant efficiency.

Action #3: A motion was seconded and approved to adopt the NOAA Guidelines for Establishing GPS Derived Ellipsoid heights.

A second data content standard was the draft Geodetic Control Standard for the national Geospatial OneStop initiative. Mr. Thompson said the standard was adequate with one exception: The standard states that latitude/longitude coordinates are to be published in decimal degrees, instead of the more traditional degrees/minutes/seconds. Mr. Thompson said that a letter from the Council should explicitly suggest that the standard eliminate decimal degrees and use the traditional degrees/minutes/seconds for publication of latitude/longitude.

Action #4: A motion was seconded and approved to adopt the Geodetic Control Standard for the National Geospatial OneStop initiative with a letter from the Council commenting on the preferred traditional approach of degrees/minutes/seconds for publication of coordinates.

Ms. Troutman suggested that all standards be sent to Council members prior to the meetings. She also asked the SMAC chair to remind local government representatives to get the standards disseminated to local government personnel in advance of Council meetings.

Action #5: To broaden the opportunity for review of standards, the SMAC Chair is to remind local and state government subcommittee representatives to actively promulgate the standard to their community of interest.

Priority #4—Access and Distribution
Tim Johnson read from Susan Johnson's report on this item. The compilation of statute-restricted data is underway and questions will be submitted to State Attorney General's Office. The recommendations on Homeland Security Data Protection from the Rand Corporation should be available early this fall. Ms. Johnson represents the Council on a subgroup to the Federal Geographic Data Committee's Homeland Security Working Group. That group will issue draft guidelines on Internet geospatial data publication policies for public comment in early September.

Presentation: North Carolina's Multi-Hazard Threat Database

Mr. Benton introduced David Wray from the Department of Agriculture's Emergency Program Division. Mr. Wray said this division was formed almost two years ago because of the need to protect the $60 billion agriculture industry in North Carolina. GIS was initially used in Agriculture to promote animal health, disease management and epidemiology. This has been expanded to the multi-hazard threat database because the same principle of creating an exclusionary zone applies to any infected facility. GIS can provide detail as well as notify emergency responders through the Internet. Animal health information prohibits public access to this system, but some data could be shared. Emergency responders need to use GIS every day so it will be a familiar tool during emergencies. Mr. Wray said he is using orthophotography and street data provided by counties to the Floodplain Mapping Program, and he is acquiring parcel data from counties. He is also collecting information on backyard chicken flocks from local governments since those flocks pose a high risk for Newcastle disease. He is also gathering data from the Pesticide section of the Department of Agriculture. Other data collected by agencies on rendering plants, hospitals and bed capacities, hotels and restaurants, food safety establishments, nuclear plants, elevated bridges, and religious facilities were addressed-matched for the system. He mentioned there is still no statewide standard for street addressing, which varies from county to county. He showed a GIS response for foot and mouth disease in a simulation where five US farms were deliberately infected. The GIS helps to route trucks, quarantine infected farms, and provide data access to people in the field with portable wireless mobile devices to capture dynamic data.

Ms. Dianne Enright said the Multi-Hazard Threat is very data intensive and could provide help in developing **NC OneMap**. Dr. Lee Mandell asked why the Department of Agriculture is restricting access to this data. Mr. Wray said the state veterinarian can release animal health information at his discretion, for instance if human disease or floodplain problems are an issue. Mr. Benton asked about the proximity of animal facilities in the new floodplain maps. Mr. Wray says he is using the new floodplain maps as they are made available.

Dr. Mandell said this is an opportunity for the Department of Agriculture to collaborate on the Floodplain Mapping Project. He asked what the Department invested in the Multi-Hazard Threat system. Mr. Wray said there has been lots of progress in collecting data and there was urgency to acquiring it. The hardware and software costs are about $100,000. He mentioned his job is now to sit down with all Agriculture divisions to educate them about this database. There will be no public access or public web server.

Mike Fenton said if the data is hosted through a server in the Department of Agriculture, and does a disaster recovery plan and a back-up plan exist, which might include **NC OneMap**? Mr. Terry Ellis said **NC OneMap** would be a logical back-up. Mr. Wray said they were willing to share some data, but some local governments did not want their data redistributed. Mr. Benton asked about Agriculture's plan to re-collect parcel data from local governments. Mr. Wray said that is not scheduled but they expect to re-collect it every six months. Mr. Heavner suggested that the Multi-Hazard Threat link to all counties through **NC OneMap** for their updates. Mr. Johnson said **NC OneMap** will allow immediate access to current local government data.

Mr. Benton asked how the state should respond when federal agencies request data of state and local governments. Jerry Ryan said the National Imagery and Mapping Agency (NIMA), in partnership with USGS, plans to ask every state for large amounts of local and state geographic

data for Homeland Security purposes. Mr. Ryan suggested that the Council might want to consider a strategy for this impending request. Mr. Johnson said that in addition to Agriculture's Emergency Program Division, the Division of Emergency Management, Division of Public Health and CGIA should be involved in a working group to assess response to these pending large federal requests for digital data. Ms. Troutman said that one of the Council standing committees, either the Management and Operations, or the SMAC should recommend strategies to the Council on how to handle these requests.

Action #6: Management and Operations Committee was tasked to involve relevant state agencies to create a strategy for coordination of large federal data requests.

Committee Reports

Local Government Committee (LGC). Kelly Laughton said three new members joined the committee. The LGC developed and submitted questions to the NC Board of Examiners for Engineers and Land Surveyors (NCBELS) the first of August. The questions revolve around the interpretation of the law relative to local government GIS operations and the use of surveyors. NC Board of Examiners for Engineers and Land Surveyors will appear before the Council at the November 19 meeting. She said the LGC is recommending that the answers to the questions be put in writing for Web posting and distribution to local governments. Dr. Mandell said that the Council should request the answers prior to the November meeting to use the opportunity for further clarification by the Executive Director of NCBELS. Ms. Laughton that the first question to NCBELS is whether there are plans to amend GS89-C to adopt the recommendations of the 2000 Task Force on Model Law for Surveying as proposed by the National Council of Examiners for Engineering and Surveying (NCEES). Several states have adopted the revised Model Law which incorporates a series of recommendations concerning the responsibilities of the professional surveyor with respect to the use of GIS. It was pointed out that there is also a need for a written interpretation of the current law as to when, specifically, a surveyor must be used to gather data when that data will be used in a local government geographic information system.

Action #7: CGIA staff to request NCBELS to submit their answers by November 1st for wide distribution to local government agencies and Council members.

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. Most state agencies use ESRI products for their GIS.

***Federal Interagency Committee (FIC*)**. Jerry Ryan said the Executive Committee met by teleconference on June 20. The three actions items from that meeting include: (1) The request that the GIS TAC always invite federal people to serve on *ad hoc* teams when it reviews technical issues; (2) The offer of assistance to review the content of the Data Inventory; and (3) A proposal that the Council's Statewide Mapping Advisory Committee should form a work group to explore the potential uses and applications of the LIDAR elevation data resource that has now been generated through the Floodplain Mapping Program. Ms. Troutman asked for John Dorman's perspective, as head of the Floodplain Mapping Program. Mr. Dorman said that LIDAR data was collected in 65 counties in Phase 1 of the program and the field-verified elevation accuracy is plus/minus 20 centimeters. NC DOT has indicated that they could

eliminate one year of design work by using the LIDAR data. He said there could be multiple beneficial uses of this data.

Action #8: The SMAC to evaluate and take appropriate action on establishing a LIDAR work group.

GIS Technical Advisory Committee (GIS TAC). Tim Johnson summarized from the report prepared by Susan Johnson, GIS TAC Chair. The GIS TAC is working on a recommendation for the standard capture and storage of spatially referenced time-series data. This involves gathering information about how this task may be handled by numerous federal and other agencies.

Statewide Mapping Advisory Committee (SMAC). Bill Holman said HB483, Offensive Place Names legislation is now law. Dr. Wayne Walcott, UNC-Charlotte, chairs the NC Board of Geographic Names, the responsible body named in the legislation, which works with the US Board of Geographic Names. The NC Board of Geographic Names will consult with the Secretary of State's office on recommended name changes.

The SMAC presented a *proposed* Statement of Direction for High Resolution Digital Aerial Imagery. Mr. Holman called on Geodetic Survey's Gary Thompson to give the background. Mr. Thompson said the Floodplain Mapping Program and CGIA needed information about the age of each county's existing orthoimagery (aerial photography) and when the next flight was planned. This high-resolution orthoimagery, usually the responsibility of the county, provides the best base map for the highly accurate floodplain maps. However, some counties can not afford to buy this imagery on a regular basis. The Statement of Direction seeks to investigate opportunities to assist counties by grouping them together to save flight money and also incorporate the LIDAR data already acquired. The Statement of Direction directs the SMAC to put a program together to look for these cost-sharing opportunities. Dr. Mandell said that since the local imagery is so important to the state, he suggested the opening sentence of the Statement of Direction be amended to name the Local Government Committee along with the Council. He also suggested that cost-sharing aspects of the statement should be strengthened**.** John Dorman asked if the 50/50 cost share with USGS for the larger-scale one-meter resolution orthoimagery is still a viable option. That program helped North Carolina purchase wall-to-wall orthoimagery for the state in 1993 and again in 1998, but has been discontinued. Mr. Dorman said it was a good idea to capture statewide photography at five-year intervals, but the higher-resolution images available from local government are a better way to go.

Action #9: A motion was seconded and approved to adopt the Statement of Direction for High Resolution Digital Aerial Imagery as amended.

Mr. Holman indicated that the Land Records Management Program has revised specifications for local government orthophotography which will be presented at the November Council meeting. The proposed standards for parcel (cadastral) records and county boundaries are being reviewed. Forrest Robson from Department of Transportation is evaluating the roads and transportation standard.

Other Business

Memorandum of Understanding. Tim Johnson presented a draft Memorandum of Understanding between the US Geological Survey and CGIA to develop and test the technology and to explore related institutional issues of **NC OneMap** and The National Map, a federal initiative. The participants would be encouraged to document lessons learned to aid in the design and implementation process.

Action #10: A motion was seconded and approved to endorse the Memorandum of Understanding and the collaboration between **NC OneMap** and The National Map.

Long Term Water Supply Working Group. Mr. Johnson reported that the Long Term Water Supply Working Group is working on steps for implementation of the ten recommendations made in the previous report to the Council. Some of the recommendations will dovetail into the process of **NC OneMap** and will also benefit from the responses to the data inventory that will be conducted this fall. Dr. Mandell concurred that the integration of information from the data inventory will support this effort.

GIS Day LIVE. Mr. Johnson called attention to the Governor's proclamation declaring November 19th, GIS Day LIVE. In addition to activities by local governments, businesses and universities around the state for GIS Day, the state government GIS Day committee will produce a live 8-hour web-cast using the Internet and 15-20 video teleconferencing centers. Each Council member was given a poster for the Techno-Savvy Teacher Series, produced by Department of Public Instruction's Distance Learning System, which features the GIS Day LIVE activity. The GIS Day LIVE website is www.gislivenc.net

ADJOURNMENT

There being no other business, the meeting was adjourned. The next meeting will be held November 19, 2003, 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.