MINUTES
GEOGRAPHIC INFORMATION COORDINATING COUNCIL
February 12, 2003

PRESENT

Chair, Dempsey Benton. Members: Bryan Beatty, Bob Brinson, Carol Burroughs (for Carmen Hooker-Odom), John Correllus, Hugh Devine (for Molly Broad), Terry Ellis, Dianne Enright, Michael Fenton, Derek Graham (for Mike Ward), Jay Heavner, Curtis Hinton, Kevin Higgins, Bill Holman, Susan Johnson, Chris Kannan (for Gerry Ryan), Kelly Laughton, Tim Lesser, Dr. Lee Mandell, Joe McKinney, Rex Minneman (for Elaine Marshall), Carlton Myrick (for Gwynn Swinson), Tom Newsome (for David McCoy), Forrest Robson (for Lyndo Tippett), Norris Tolson, Rebecca Troutman, David Wray (for Meg Scott Phipps), Chris Wease, Mike Wilkins

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 February 12, 2003. Chair Dempsey Benton called the meeting to order. The Minutes of the November 13, 2002 meeting were approved.

Report on Long-term Water Supply Issues and GIS

Dr. Mandell said he appreciated the time the working group put into this matter. The group included representatives from the NC League of Municipalities, NC Association of County Commissioners, the Rural Economic Development Center, Division of Water Resources, Division of Water Quality, the Division of Environmental Health, Public Water Supply, US Geological Survey, and CGIA. The group findings are contained in the handout distributed at the meeting. Tim Johnson reported that the Division of Water Resources is charged with preparing a North Carolina Water Supply Plan and updating it every five years with input from Local Water Supply Plans. A longer view that includes surface water withdrawals, discharges and interbasin transfers is contained in hydrologic simulation models for each river basin. The river basin models for the Cape Fear and Roanoke are complete. The cost for each river basin model is between $300,000 to $500,000 (there are 16 river basins within the state) and the Roanoke model is currently being developed. The working group said that some high-quality GIS data is lacking, and some of the data sets in the Corporate Geographic Database are not up-to-date. Water usage in the agricultural and industrial sectors is not well documented.

The working group concluded that the Council should take several actions: convene a meeting of stakeholders to identify the questions that state and local decision makers need to address; complete a data inventory to identify all digital data, and its quality, relevant to the state's water supply; estimate costs for developing critical missing datasets; and support the improvement of data reporting from paper to digital forms. Another issue was for the GIS TAC committee to consider the use of time-series data. Dr. Mandell said this work is essential for long-term economic development and because of long-range impacts. He said that the last recommendation of reporting to the General Assembly was timely since the Council must issue its annual report to

the General Assembly this spring. Rebecca Troutman suggested that the user committees should take these findings to their groups for feedback.

ACTION #1: User Committees to provide feedback/assessment of the recommendations contained in the report of the long-term water supply working group to Tim Johnson, CGIA staff, within 30 days because we need to move forward before the May Council meeting.

ACTION #2: The Council agreed to move forward with the report from the GICC to the Governor, General Assembly and Information Resource Management Commission regarding long-term water supply.

Status and Discussion of Priorities Before Council

Priority #1—Common Understanding.
Dempsey Benton asked Zsolt Nagy, CGIA staff, to report on the work relating to the Council's first priority of "Common Understanding." Mr. Nagy said the Management and Operations Committee discussed a common vision and agreed on certain characteristics of a statewide data resource: data are free to view; data are free to download; data are accessible 24/7; the resource will include seven framework data themes that are the foundation for state, local, and federal government users (cadastral, orthoimagery, surface waters, geodetic controls, jurisdictional boundaries, transportation, elevation); and the resource should include other critical/strategic data that support daily business processes of numerous organizations. These high-resolution data are derived from large-scale maps when possible, represent the most current version and are reliably maintained (and funded), based on published standards, and are accessible through the Internet.

There were numerous suggestions to replace the current names of the Corporate Geographic Database and North Carolina Geographic Information Clearinghouse. Each committee chair on the Management and Operations Committee polled its executive committee membership regarding selected names. The recommendation presented to the Council by the Management and Operations Committee is NC OneMap. Mr. Nagy referred to the handout that lists both the characteristics of NC OneMap and the proposed vision statement for this new entity. He mentioned that the 2003 NC Conference for Geographic Information Systems is February 20-21 and this would be an ideal time to reach a wide audience to launch this concept. He recommended that the Management and Operations Committee develop a high-level implementation plan and that the Council adopt the name NC OneMap and the draft vision statement.

In the discussion, Rebecca Troutman asked if the characteristics had been vetted with local governments. Mr. Nagy said the characteristics are not a finite list. Ms. Troutman said the redistribution of data without restriction could be a problem with local governments who are concerned with free redistribution to private entities who are currently paying for this data. Mr. Nagy said some counties do not currently wish to distribute data for free, but that could change. Ms. Troutman raised the counties' concern about cost-share with others who want to use their local data. Mr. Nagy said local data is generally the best data and that could yield state and federal cost shares in some instances, such as in the development of orthoimagery. Terry Ellis said that the state's Community Data Sharing Agreements that are part of the NC Floodplain

Mapping Program are already shifting the emphasis from local government cost retrieval to the broader vision of making it freely available. Mr. Nagy said almost 30 counties are now providing digital geographic data free on the Internet. Mr. Wease said Anson County allows some data to be searched for free on its web site. He said some data, such as infrastructure, would need to be protected. How would it be secured? He mentioned that some frequent users, like realtors, prefer the convenience of receiving county data on CD.

Dr. Lee Mandell said he did not like the name NC OneMap and said the Council needed more time to review the vision, characteristics and name. Mr. Benton said the Council could separate the proposal into the vision, characteristics, and name portions. Dr. Mandell said security issues and data confidentiality must be addressed under the characteristics and therefore NC OneMap could not encompass all North Carolina data. He said that all parts of the proposal should be considered a draft only.

Derek Graham made a motion that the Council adopt the name NC OneMap and the draft vision statement with characteristics. In the discussion Ms. Troutman said the vision should not open with the words "The State of North Carolina" since that implies only state government rather than the larger government community. She suggested rewriting that paragraph and dropping the "clean water and good roads" analogy. Chris Wease said the opening could refer to this Council instead of the State and it could ask readers for input on the draft vision. Mr. Joe McKinney mentioned that the vision statement and name should be presented as works-in-progress at the 2003 NC Conference for Geographic Information Systems the following week. The vision could be reworked based on feedback from the Town Meeting and other coordination sessions in the conference program. He mentioned that NC OneMap is an easy concept to grasp and covers the vision of one North Carolina that the Council is trying to promote. He said he liked the NC OneMap subtitle, "Geographic Data to Serve a Statewide Community."

Dr. Mandell made a substitute motion to present the name NC OneMap as a draft. The motion failed. Mr. Graham's motion was passed to adopt the name NC OneMap and to further stipulate the revised vision statement and characteristics as a "draft."

Mr. McKinney made a motion that the proposed characteristics should be reviewed by all standing committees that would then report at the May Council meeting.

ACTION #3: Standing committees are to review the characteristics of NC OneMap and report at the May 14th Council meeting.

Mr. Bill Holman said the NC GIS Conference is the ideal time to get comments from practitioners regarding the name and vision for NC OneMap. Ms. Troutman said she also wanted the NC OneMap characteristics to be vetted in the local government community. Mr. Benton said the current proposed characteristics could also have the word "draft" inserted in handouts for the NC GIS Conference with committee chairs as contacts.

ACTION #4: The standing committees are to present the name and the draft vision at the 2003 NC Conference for Geographic Information Systems so it can be placed back on the table at the next Council meeting.

Priority #2—Data Inventory

Tim Johnson stated that the two issues involved, data documentation and the support of an inventory, will be led by the Center for Geographic Information and Analysis. CGIA is investigating a questionnaire tool and will develop a domain of priority datasets. Staff will prepare a master list of data producers who will receive the questionnaire, reach agreement on the questions, and implement the instrument by September. Chris Kannan said USGS is also preparing a questionnaire and could share procedures with CGIA, and perhaps accelerate the schedule, if practicable. Ms. Troutman said the 2003 NC Conference for Geographic Information Systems is a good time for outreach to local government and garner support for the four priority areas.

Priority #3—Content Standards and Implementation Plan
Bill Holman said the Statewide Mapping Advisory Committee is assessing standards that it will bring to the Council in future meetings.

Priority #4—Access and Distribution
Susan Johnson said the GIS TAC is currently looking at the issues of data exchange, legal definitions of protected data, and time series data. The GIS TAC intends to bring back in May recommendations to resolve one or more of these issues.

Tim Johnson presented as a handout a Gantt chart of the 2003 Priorities work plan that establishes time frames for each of the four priority areas with relevant tasks and benchmarks. These items will be presented to the Council as they are achieved. A motion was approved to accept the work plan as the schedule.

Presentation: Mecklenburg County and the National Map

Mr. Benton introduced Chris Kannan from USGS and Andy Goretti from Mecklenburg County. Mr. Kannan said three metropolitan areas in North Carolina have been selected out of 133 urban areas nationwide to begin to populate the National Map. The concept of the National Map is to create seamless, integrated, geographic based information through an Internet access portal. Themes can include orthoimagery, cadastral (parcels), hydrography (surface waters), elevation, and land cover, among others. It follows a partnership model between federal, state, and local governments. Counties and other local governments usually have the best data available and in this case, the state through CGIA, provided an inventory of data. USGS and the National Imagery and Mapping Agency (NIMA) looked for North Carolina partners. Mecklenburg and the City of Charlotte immediately responded, resulting in a cost-share between the local and federal governments to update the county's five-year-old orthoimagery.

Andy Goretti said one interest in the National Map concept is that many communities must plan regionally, and therefore need geographic data beyond their own jurisdictional boundaries. This is the case in the Charlotte/Mecklenburg region that extends 833 square miles and into several adjoining counties and South Carolina. As a result of the partnership, both orthoimagery and LIDAR were collected in May 2002. He said the county commissioners were pleased because this was the first time that federal Homeland Security funds directly benefited local government. The LIDAR allows watersheds to be delineated with elevation accuracy. The aerial products were one-foot per pixel in true color that is highly usable data. The partnership evolved to integration of the data into a web portal and joined the map services of the county, state and

USGS. They demonstrated a prototype National Map viewer (found at http://gisdata.usgs.net/website/NC3/viewer.htm), which is served out of the USGS EROS facility in Sioux Falls and allows you to zoom to a portion of the nation to get to local data. Mr. Goretti said this type of distributed mapping is relevant for emergency operations center when it is not possible to get everyone into one location. The core of the National Map will be the local government parcel data that is now maintained digitally by many counties and cities.

Mr. Kannan said USGS and NIMA are engaged in a dialog about security issues. Their position is: If you can see a feature--if it is above ground or on the ground--it shouldn't be restricted data. Mr. Nagy said the National Map demonstrates that federal agencies are becoming more interested in local data. The prototype of this technology shows how you can pull data from several places and cast it into one map. He said that Henderson County now wants to join this effort. Rex Minneman mentioned that the Triangle, which is one of the 133 Urban Areas, does not include the whole of Wake and Durham counties. Mr. Kannan responded that NIMA determined the footprints for flying the orthoimagery and communities must negotiate. Michael Fenton asked if USGS plans to archive all the LIDAR. Mr. Kannan said the LIDAR conforms to the standards established by the North Carolina Floodplain Mapping Program and that data will be provided to the state. Kelly Laughton said the National Map portal should be a constructive example for creating the portal for NC OneMap. Mr. Kannan said future funding for more cost-sharing is always an issue.

Committee Reports

Local Government Committee (LGC). Kelly Laughton said the LGC met in January. Members support the concept of NC OneMap with easy access to data, data produced and maintained locally, data sharing, exchanging and documentation. NC OneMap will take many of the best features from the current Corporate Geographic Database, NC MapNet, and the Clearinghouse into the next generation for fuller access with no charge to participate. The LGC supports the data inventory CGIA is about to conduct as a way to identify gaps in the state and come out with creative ways to capture that data. Tim Lesser mentioned that there are many data gaps within local governments throughout the state and more training is needed. He said some local governments are not open to share their data and the cost-share question will need to be addressed. Ms. Laughton said the inventory should identify the gaps and lead to the next step.

State Government GIS Users Committee (SGUC). Dianne Enright reported that the SGUC Executive Committee concurred with the name of NC OneMap and the draft vision statement.

***Federal Interagency Committee (FIC*)**. Chris Kannan reported that the federal group would meet at the 2003 NC Conference for Geographic Information Systems the following week. The Executive Committee did meet about the name and vision of NC OneMap and provided input to CGIA.

GIS Technical Advisory Committee (GIS TAC). Susan Johnson said the GIS TAC met and had consensus on the name NC OneMap. She presented a work plan (see handout) that was developed at the meeting to address action items relating to the Spatial Data Transfer Standard and other data exchange standards, as well as a legal review of North Carolina statutes associated

with closed/protected data, and the RAND Corporation study regarding data protection for homeland security

Statewide Mapping Advisory Committee (SMAC). Bill Holman said the next meeting of a reconstituted SMAC has been scheduled for April 23rd.

News

Tim Johnson provided a copy of the 2003 NC Conference for Geographic Information Systems program, "A World of Spatial Partners" that would be held the following week in Winston-Salem. He mentioned that 600 had already pre-registered and all Council members were encouraged to attend. Regarding the North Carolina Floodplain Mapping Program, he mentioned that the Governor released funds to complete work in the Cape Fear River Basin area and to move ahead with LIDAR data collection for the Yadkin, Catawba, Chowan, Watauga and New river basins. The program is moving ahead. John Dorman mentioned that the Federal Emergency Management Agency (FEMA) has given verbal approval to a proposal that the NC Floodplain Mapping Program connect web services of 10 communities, CGIA and USGS in a multi-hazard initiative.

Governor's Crime Commission: Forecasting for Prevention with GIS

Jim Klopovic, the lead evaluator with The Governor's Crime Commission, Criminal Justice Analysis Center, discussed spatial forecasting for juvenile crime as a way to use GIS with greater efficiency in a policy area. He referred to the handout and said that you can predict future crime from past crime, but a neural methodology is a superior predictor: Something happens, we can examine what we can do to prevent it, and derive actions that could be taken. This can be visualized in a GIS system. A team was put together that involved North Carolina State University (NCSU), Crime Control and Public Safety, and the Department of Juvenile Justice to consider risk and resiliency. What factors precede criminal activity, and what are relative risks? Dr. Michael Vasu, Assistant Dean for Information Technology in the College of Humanities and Social Sciences at NCSU, explained that the neural approach develops more comprehensive geographic databases and integrates more crime correlates from Census and other sources that can then be analyzed at sub-county levels. He thanked Dr. Hugh Devine for GIS assistance. Mr. Vasu said this type of analysis promotes discussion among policy makers. As data continued to be developed, by working closely with Juvenile Justice, the spatial analysis function will continue to be improved. Mr. Wease said that GIS helps officials make more informed decisions.

Other Business

Chris Wease said the Council might want to consider and evaluate the risk versus the benefits of taking data off a website in response to Homeland Security concerns.

ACTION #5: Risk/benefit evaluation discussion to be placed on future Council agenda.

Terry Ellis mentioned that the software to create metadata records is no longer available for purchase. The vendor has gone out of business.

ACTION #6: CGIA staff to investigate metadata creation software options.

ADJOURNMENT

Chair Dempsey Benton thanked Curtis Hinton, whose appointment term has expired, for his participation on the Council. Mr. Benton said CGIA staff are to prepare a report to the Governor, Legislature and IRMC this summer. There being no other business, the meeting was adjourned. The next meeting will be held May 14, 2003 at 1:00 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.