MINUTES
GEOGRAPHIC INFORMATION COORDINATING COUNCIL
August 10, 2005

PRESENT

Chair, Dempsey Benton. Members: Bryan Beatty, Bob Brinson, John Correllus (for James Fain), Jeff Essic (for Hugh Devine), Terry Ellis, Dianne Enright, Michael Fenton, Reggie Hinton, Bill Holman, Susan Johnson, Chris Kannan (for Jerry Ryan), Bliss Kite, Kelly Laughton, Dr. Lee Mandell, Elaine Marshall, Dr. Ben Matthews (for Derek Graham), Joe McKinney, Eldon Meacham, Anne Payne, Stephen Puckett, L.C. Smith (for Lyndo Tippett), Richard Taylor, Sandra Trivett (for Carmen Hooker-Odom), Jonathan Womer, McKinley Wooten (for Gwynn Swinson), David Wray (for Steve Troxler)

PROCEEDINGS

A meeting of the Geographic Information Coordinating Council was held on August 10, 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 May 11, 2005 meeting were amended and approved. Mr. Benton commended the 2005 Annual Report and urged the members to read it. Mr. Benton welcomed new member Richard Taylor, Executive Director of the North Carolina Wireless 911 Board. Mr. Taylor is a Senate appointment and replaces Tim Lesser from the City of Winston-Salem. Mr. Benton thanked Mr. Lesser for his service.

Status and Discussion of Priorities Before Council

Priority #1—NC OneMap Implementation
Mr. Johnson reported 11-million maps have been rendered on NC OneMap since June 2004, with a monthly average between 800,000 to 1 million. More local government connections have been added, including the counties of Camden, Perquimans, Pasquotank, Stokes, and Washington. New cities connected include Elkin, High Point, Mount Airy, and Pilot Mountain. The Northeast Consortium has also made a connection. Connections pending include Greene, Catawba, Pitt and Stanly Counties, and Land of Sky COG. We were approached by Richland County (Columbia, SC) and Horry County (Myrtle Beach area) to become a part of NC OneMap. We expect to have approximately 70 of the 100 counties and most of the largest cities connected to NC OneMap resource based on a total investment of about $165,000.

Mr. Johnson reported on progress in the five-year funding strategy, especially in areas of data creation and acquisition that represent over 80 percent of the five-year budget. A $5 million investment from the General Assembly along with $1 million from U.S. Geological Survey will complete state coverage for elevation in the western portion of the state this year. Local government aerial imagery acquired this year through the work of the Centralina COG counties, the Floodplain Mapping Program, and U.S. Geological Survey actually exceeded the anticipated investment of $2.6 million. An investment of $2.7 million from the General Assembly will produce accurate surface waters delineation for 19 western counties in the Stream Mapping project.

FEMA and the General Assembly have invested $25 million in flood zone mapping for nine western river basins, including the Catawba, Roanoke, New, Watauga, French Broad, Little Tennessee, Broad, Savannah and Hiwassee. That leaves only the Yadkin River basin as unfunded at this time. Large data creation items not currently funded at this point are Building Footprints and Parcel Boundaries (for those counties without that base data in place).

Mr. Johnson reported that other funds were requested in this legislative session for system architecture, the data model and to finish making connections to all counties as well as additional cities and towns. (Note: The state budget had not been finalized as of this meeting).

Mr. Johnson congratulated the Department of Environment and Natural Resources—Information Technology Services and the University of North Carolina at Charlotte for their successful grant applications in response to the Federal Geographic Data Committee's recent competition announcement. The DENR-ITS grant will focus on establishing a "web feature service" for the geodetic control layer that will allow more advanced queries of this data layer via NC OneMap. DENR-ITS will be collaborating with the DENR NC Geodetic Survey. The UNC-Charlotte project partners with the City of Charlotte and Mecklenburg County to provide metadata training and outreach assistance in the region.

Priority #2—Data Content Standards
Bill Holman said the Statewide Mapping Advisory Committee has reactivated the two subcommittees responsible for transportation roads data standard and the parcel standard. The subcommittees are tasked to suggest changes next year to the version 1 guidelines that were adopted at the May 11, 2005 Council meeting. He mentioned that a GPS standard subcommittee has also been convened to review the standard. That committee will report at the November meeting. Mr. Benton said the GPS standard is seven years old and the technology and pricing have changed. Staff in his department, Environment and Natural Resources, have asked if they must purchase the expensive mapping-grade units based on the old standard. Mr. Holman said anyone is invited to participate in the *ad hoc* GPS subcommittee.

Priority #3—Access and Distribution
Susan Johnson reported there was no forward progress on the proposed federal "Guidelines for Providing Appropriate Access to Geospatial Data in Response to Security Concerns."

Priority #4—NC OneMap Outreach
Tim Johnson reported that staff and GICC members were invited to present about NC OneMap. Two of the presentations are at state-sponsored meetings: last April in Wisconsin and this October in Pennsylvania. Other outreach activities include the National Association of Counties (NACO) in Honolulu, the ESRI Users Conference in San Diego, Carolina Geospatial Information and Technology Association, and the NC Property Mappers Association. At the ESRI User Conference, the Council was recognized for its vision and work in implementing NC OneMap. Mr. Christian Carlson, ESRI Regional Manager, presented the award to Council Chair, Dempsey Benton. Mr. Carlson commented about NC OneMap's status in the nation and recognized North Carolina's leadership. Mr. Benton thanked the Council members and staff at the Center for Geographic Information and Analysis for their work. Dr. Mandell said outreach at the NC Local Government Information Systems Association recent meeting should encourage more local governments to participate. Chief Information Officers and Information Technology directors participate in that association and are concerned with infrastructure issues.

Presentation: Project Homeland: National Geospatial Intelligence Agency and National Geospatial Programs Office

Mr. Nagy mentioned that he recently gave a presentation on NC OneMap in Washington, D.C at the annual meeting of the American Association for the Advancement of Science. The co-presenters in that homeland security session represented the National Geospatial-Intelligence Agency and the National Geospatial Programs Office. The interests and similar requirements for geospatial technology and data could complement each other. Mr. Nagy introduced the first speaker, Dan Vernon, program manager for Homeland Security and Homeland Defense, at the National Geospatial-Intelligence Agency.

Mr. Vernon said "Project Homeland" is a cooperative effort that involves U.S. Geological Survey, Department of Defense, Department of Homeland Security, and National Geospatial-Intelligence Agency. He said the federal government uses USGS to reach out to state and local government agencies since those governments often provide local data for large special security events, such as sporting venues and national funerals. Mr. Vernon mentioned a regional pilot in the San Francisco Bay area that sought to aggregate data in the face of a natural or man-made emergency. The regional pilot created a 4-node structure with redundant hardware protocols and security to enable access of local information in case the region faces a catastrophic situation. The National Geospatial-Intelligence Agency has a statewide pilot with the state of Colorado that allows the use of both public domain information and restricted information (e.g. manhole covers) for 3D analysis and support. The federal agencies use the Internet to retrieve information from the local level for situational awareness.

The Homeland Security Information Program has base orthophotography data for the most populous 133 urban areas in the country (including Charlotte, Raleigh-Durham, Greensboro). USGS handled the funding for those acquisitions. All the data includes metadata, which is a key component for the local, regional and national levels. When information is aggregated, value is added to the data. He mentioned that the National Weather Service, too, supports a web service architecture that accommodates for secret, top-secret and unclassified users. Based on access through web-services, instead of re-hosting, information can be dispersed and available for use world-wide. USGS has been successful in working with many states that want to participate.

Mr. Nagy introduced Bob Pierce, who is a Senior Executive with USGS National Geospatial Programs Office. Mr. Pierce said "Project Bluebook" is a national effort to bring producers of data (local governments) and consumers of information together. In the middle are the pieces, such as data sets and products, brokers, and data hosts. He said "Project Bluebook" provides implementation templates offering guidance and common specifications built on four characteristics: It must first work for local governments; it supports the business needs of government; it organizes a data sharing information model; and it leverages Project Homeland security efforts. States play a key role. The application is driven by a design approach that focuses on the display and use of data.

Mr. Pierce said he recently visited North Carolina and spoke with David Wray in the Department of Agriculture and Consumer Services, Zsolt Nagy with CGIA, Sarah Wray in the Floodplain Mapping Program and others invited from local governments. The point was to look at the business needs of these representative groups. He mentioned that USGS can not maintain 3,300

partnerships with all US counties: They prefer to work with the 50 states. "Project Bluebook" is a system of systems, including NC OneMap, which will provide "GIS for the Nation." This refines *The National Map* concept and leverages data standards. Mike Fenton asked about the relationship between *The National Map* and "GIS for the Nation."

Mr. Pierce said that the USGS originally envisioned *The National Map* to be constructed from seven framework themes that could be shared (Note: the themes include digital imagery, transportation, geodetic control, surface waters, governmental boundaries, elevation and bathymetry, land ownership). This was the first idea for a national product that would focus on 1:24,000-scale data (e.g. USGS topographic quadrangle maps), which is not a data scale useful to city and county business needs. Now, there has been a change of focus at the federal level to look at local government business needs and the wealth of their data holdings.

Dr. Mandell asked about the implications of both presentations to NC OneMap. Mr. Nagy said all three initiatives are complementary and have common requirements. The idea is to leverage resources and develop OneMap to be useful to multiple levels of government and to further improve the efficient use of geospatial data for decision-making, especially for Homeland Security. He mentioned, for example, that the GICC just recently adopted a core content standard for parcel data, yet we are just beginning to work with counties on the use of a consistent parcel data model**.** As we go about developing these models for all themes, we should involve NGA and NGPO. Dr. Mandell suggested that a broader group of stakeholders from city, county, state, and the Department of Homeland Security need to determine what the standards should be and what actions NC OneMap needs to take. Mr. Benton suggested that staff bring recommendations back to the November Council meeting.

Action #1: CGIA will examine how NC OneMap could leverage resources and opportunities by working with the National Geospatial-Intelligence Agency (NGA) and the National Geospatial Programs Office (NGPO) on Project Homeland issues such as aligning data needs and standards.

Mr. Pierce said moving toward "GIS for the Nation" takes advantage of North Carolina's successful model. North Carolina is moving toward completion and has shown how to focus on the local business needs. Mr. Vernon said the National Geospatial-Intelligence Agency (NGA) can't approach state and local governments directly, but they can go through USGS to transfer Department of Defense funds and assist with project models.

Committee Reports

Statewide Mapping Advisory Committee (SMAC). Gary Thompson reported on acquisition of new digital orthoimagery by counties (see www.ncgs.state.nc.us/flood/county_gis_info.pdf for a spreadsheet and www.ncgs.state.nc.us/flood/imagery%202005-Model.jpg for a map detailing the counties flown in 2005). He mentioned that Macon County is purchasing satellite imagery through DigitalGlobe. Since this is a first use of a satellite acquired product that is orthorectified, NC Geodetic Survey will perform quality control on the imagery to see if it meets state standards.

Landslide Hazard Mapping Cost-Share. Mr. Nagy mentioned that SMAC had an action item to assist in the development of potential cost-sharing for digital aerial imagery in the western part of

state in support of landslide hazard mapping. NC Geological Survey (Dept. of Environment and Natural Resources) is the lead agency for landslide mapping. The plan is to leverage funds from the Hurricane Recovery Act to assist county aerial photography projects that meet both local government and landslide mapping needs. Counties involved include Buncombe, Henderson, Haywood, Macon, but it could involve others.

USDA Omnibus Bill, FY05. Mr. Nagy reported that a $2.5 million "soft earmark" awarded to North Carolina in the USDA FY05 Omnibus Bill to support the collection of aerial imagery for 10 counties has not yet been funded. The Governor's Washington D.C. staff is working with the Congressional staff to see if they can change the outcome this late in the fiscal year. The counties involved were to have been Clay, Graham, Burke, Richmond, Halifax, Hyde, Beaufort, Perquimans, Tyrrell, and Alleghany. Mr. Benton asked what the NC Congressional delegation can do. Mr. Nagy replied that a letter has been sent recently from them to the US Department of Agriculture.

Federal Aerial Imagery Cost-Share. Staff are making progress with the distribution of federal aerial imagery funds ($170,000) to 12 counties that were flown last winter. The funds were awarded by the USGS National Geospatial Programs Office to the Council for equitable distribution. Contracts, ranging in value from $8,000 to $25,000, have now been issued to county managers in Alexander, Burke, Cabarrus, Catawba, Durham, Gaston, Iredell, Johnston, Lincoln, Mecklenburg, Richmond and Wake counties. Mr. Nagy mentioned that the process worked out between federal and state contracting officers to receive and distribute funds will remain in place for future awards. Ms. Anne Payne, GICC member from Wake County, read a letter her County Manager, David Cooke, sent to the Council Chair regarding their enthusiastic participation in NC OneMap and appreciation for the assistance with the collection and maintenance of geospatial data, as well as the new model for distribution of federal funds through the state to the counties.

Certified Charters and Boundary Maps (House 1305). Rex Minneman reported on House Bill 1305: An Act Requiring Cities to File Certified Charters and Boundary Maps and Counties to File Certified Boundary Maps with the Secretary of State. The House removed townships from the bill, and the Secretary of State will set the rules for submission of appropriate maps. Five groups will work with the Secretary of State on the rules: the NC League of Municipalities, the NC Association of County Commissioners, the NC Property Mappers Association, the Carolina Chapter of the Urban and Regional Information Systems Association, and the Statewide Mapping Advisory Committee (SMAC). The bill had crossed over to the Senate, but was pulled by Senator Allen on August 10th.

State Government GIS Users Committee (SGUC). Dianne Enright reported that the SGUC met in July and discussed the stream mapping project and the new hydrologic units data set that is being mapped by the Natural Resources Conservation Service. Each of the Executive Members introduced themselves to the members and discussed the use of GIS within their departments. The ESRI state government enterprise license has been successfully negotiated and is in effect. All state agencies now have access to ESRI products for developing, managing, and viewing geographic information. State employees can benefit from ESRI's virtual university, as well as receive discounted prices for ESRI training. This is the first state government Enterprise License Agreement issued by ESRI.

Ms. Enright introduced David Rossi, the Chief Information Officer for the Office of Information Technology Services. Mr. Rossi said the FY05-06 license fee is paid by the state's enterprise fund established by the Legislature. He thanked Jonathan Womer of the Office of State Budget for his assistance. There is a negotiated rate of $404/day for any ESRI training in Charlotte, or at the Raleigh OITS facility for $260/day. Training at the OITS facility would be open to state and local government employees. Ms. Kelly Laughton asked what local government people need to do. Mr. Rossi said the training schedule will be established and publicized, with a limitation of 16 people per session. Mr. Terry Ellis asked if training classes will begin by the end of the calendar year. Ms. Enright said that the discussions about training classes and schedule will begin soon. Mr. Mike Dyer, of ESRI in Charlotte, said the Enterprise License Agreement does result in cost-savings, but the real savings are in the ability for enterprise deployment of this technology. It eliminates the barrier to strategic planning and fosters interagency collaboration. He mentioned ESRI was excited about training at the OITS facility in Raleigh. Dr. Mandell said that getting the word out to local governments about training sessions could be handled through the statewide list serves and professional associations. Mr. Benton congratulated the State Government Users Committee and the Office of Information Technology Services for their work.

Local Government Committee (LGC). Kelly Laughton said that the committee met August 5 and added a new member, Chris Koltyk from Moore County. She said the committee will submit comments on House Bill 1305, discussed above, to the SMAC. To improve outreach to local government, the LGC plans to begin an LGC mail alert and redesign the LGC website as well as post more information to professional association newsletters. The LGC will create a local government advisory team that will provide input on standards. Ms. Laughton said the session on NC OneMap at the National Association of County Commissioners meeting in Hawaii was presented by local-state-federal partners and showed how intergovernmental collaboration worked in this case. She said the presentation has inspired other states and North Carolina has already been invited to give a presentation in October at the Pennsylvania state conference.

***Federal Interagency Committee (FIC*).** Chris Kannan said the FIC plans to meet in the fall. He mentioned that the Department of Homeland Security website has information on opportunities for funding resources. However, the funding opportunities must match up to the state plan for Homeland Security. Secretary Beatty said the state update is due September 30. It will detail how North Carolina will meet new requirements, although it is not the final strategy. Mr. Holman offered to speak with Crime Control and Public Safety to make sure NC OneMap is in the mix.

Action #2: The Statewide Mapping Advisory Committee (SMAC) will consult with the Department of Crime Control and Public Safety concerning the inclusion of NC OneMap in the State Homeland Security Strategic Plan.

Mr. Kannan said he is aware of Homeland Security activities occurring in other federal agencies, such as the National Geospatial Intelligence Agency, and the Defense Installation Spatial Data Infrastructure (DISDI), which is attempting to coordinate geospatial activities across military installations. Mr. Benton suggested that Tim Johnson, staff to the Council, hold discussions with the military and DISDI staff to see how NC OneMap and state GIS efforts intersect.

Action #3: CGIA will discuss the Defense Installation Spatial Data Infrastructure (DISDI) with the appropriate federal representatives and determine how those efforts

intersect with the NC OneMap initiative and what steps the Council should be taking, if any, as a result.

Management and Operations Committee (M&O). Tim Johnson said the committee met to discuss several items. On the subject of multiple portals and how that fits the vision of NC OneMap as the state's "geospatial data backbone," the committee considered the numerous business needs of an agency that might require its own Internet Mapping Service. The committee indicated that if that agency's portal does not work off of that same backbone of NC OneMap connections to local governments and others, it is inconsistent with the vision this Council has adopted. Mr. Johnson said that the committee believes that the large issues that face us, aside from continued investments in data, include building system architecture to ensure constant availability, redundancy in the event that one or more county, city, or state servers are unavailable, security to protect certain critical data, and other related matters. He mentioned the committee recognizes that a base level of investment is needed in NC OneMap. Options include continuing to seek grants from federal and state sources such as Homeland Security and the Federal Geographic Data Committee; working with state sources such as the State CIO and individual departments represented on the Council to seek these investments; continuing to seek funds from the General Assembly; and identifying creative ways of financing NC OneMap. The M&O Committee felt that until base funding is resolved, NC OneMap will not achieve the vision outlined by this Council. Mr. Holman suggested that the Council seek support from the General Assembly during the 2006 short session. He suggested getting into the Governor's budget, and point out the efforts and wide constituency of NC OneMap. Mr. Terry Ellis asked if it was a question of personnel. Mr. Johnson said the funding issues relate to data, software, hardware and personnel. Mr. Ellis said local governments might consider paying a fee, such as $1,000, to support NC OneMap. Mr. Benton asked the M&O to make funding recommendations at the next Council meeting.

Action #4: The Management and Operations Committee will develop specific options to seek funding for NC OneMap and present recommendations to the Council at the November meeting.

Mr. Benton also suggested that in light of Senate Bill 991 (Session Law 2003) that changed the process of state information technology management by the Office of Information Technology Services, the Management and Operations Committee might review the Council's enabling statute to bring them both in line.

Action #5: The Management and Operations Committee will review enabling Council legislation, particularly in light of Senate Bill 991, and evaluate whether the Council legislation is synchronized with Senate Bill 991 legislation.

GIS Technical Advisory Committee (TAC). Susan Johnson said that the committee is working on feet versus meters as the measurement system. The National Geodetic Survey is accepting both measurement systems and US Department of Transportation is backing off meters. At the next meeting the GIS TAC will probably recommend the Council remove the metric standard and adopt the English measurement of feet as the state standard.

Presentation: Regional Partners Helping to Build NC OneMap—Land of Sky, Western Piedmont, and Northwest Piedmont Councils of Governments

Scott Miller, Data Center GIS Administrator for the Western Piedmont Council of Governments, summarized the work the three councils of government agreed to complete for NC OneMap as a result of a 2004 competitive grant award from the Federal Geographic Data Committee (FGDC). Interstate-40 is the major highway corridor in the area served by the three councils in Winston-Salem, Hickory, and Asheville. The grant was to assist the COGs to help those local governments without the resources to support on-line web mapping tools to participate in NC OneMap by providing data layers, creating metadata, and deciding what data to serve. Twenty-four local governments are being connected and they will serve 62 new data layers, as follows: Northwest Piedmont COG, 19 layers from 3 counties and 5 municipalities; Western Piedmont COG, 22 layers from 3 counties, 6 municipalities, and 1 Metropolitan Planning Organization; Land of Sky COG, 21 layers from 2 counties, 3 municipalities, and 1 Regional Planning Organization. The grant increased the ability of each COG to develop metadata in their communities. Jon Beck, Land of Sky COG, said one result was the ability for local governments to actually serve their data to NC OneMap. Marc Allred, Northwest Piedmont COG, said the project really worked for the smaller towns to bring data on board since there is often personnel turnover. Ms. Anne Payne said that engaging smaller governments is always problematic, and this is an impressive model for low population areas. Milo Robinson from the Federal Geographic Data Committee spoke to the Council and commended the work of the Council of Governments partnership on the grant. He said this type of work exemplifies what the FGDC wants to accomplish with the competitive awards. He said North Carolina shows national leadership.

Other Business

National Spatial Data Infrastructure Partnership. Mr. Chris Kannan called attention to the draft agreement in the member's packet and summarized the changes at the federal level that created the National Geospatial Programs Office (NGPO) and placed Geospatial One-Stop and *The National Map* under the NGPO. The new NSDI partnership is being sought with all 50 states and will serve as the umbrella agreement for transmitting funding from USGS to each state. Mr. Benton suggested the Management and Operations Committee review the draft and report at the November meeting.

Action 6: The Management and Operations Committee will review the draft National Spatial Data Infrastructure (NSDI) Partnership agreement and provide recommendations to the Council at the November meeting.

Stream Mapping (Hurricane Recovery Act). Mr. Tim Johnson said that the Center for Geographic Information and Analysis, acting as staff to the Council, is in final negotiations with Watershed Concepts for work in the 19 affected counties with a delivery date of April 2007. The map presented in member packets shows how the 19 counties are divided into 8 areas, which pertain to the production schedule. The northernmost counties representing the upper New River and lower Yadkin River will be the first area completed by May 2006, then each remaining area will follow a 2-3 months delivery schedule. The final area for delivery is the upper and lower Little Tennessee River. The project is starting with the areas that have LIDAR elevation data

complete. CGIA is holding outreach meetings with groups of counties to brief them on the content of the project, the final product and how they can be involved in its creation and maintenance.

Floodplain Mapping Program. Mr. John Dorman said 43 counties are now complete for Flood Insurance maps, and 16,500 stream miles have been studied in North Carolina. All of Phase 1, which encompasses 53% of the state is finished. Elevation data has been collected for Phase II and Phase II counties, and a map viewer is being created to look at the LIDAR data. There are still 17 western counties that need orthoimagery processed (Swain and Madison counties had weather related problems during 2005 flying season). In Phase III the engineering studies are underway and there is scoping for other data needs being conducted in the western counties.

GIS Technician Training. Mr. Eldon Meacham, from the Department of Community Colleges, mentioned that he and member Terry Ellis had worked on a team in 1998 to put together a GIS technician training program that was approved for Johnston Community College (Smithfield), and has since expanded to two other schools: Haywood Community College (Clyde) and South Piedmont Community College (Polkton). In July, Central Piedmont Community College (Charlotte) was approved to offer GIS training with assistance provided through a two-year start-up grant from ESRI as a partner education center. Forsyth Technical Community College (Winston-Salem) is working on its application to begin courses in 2006.

Summer 2006 Aerial Imagery. Mr. David Wray said the US Department of Agriculture Farm Service Agency wants to fly leaf-on (summer) aerial imagery in 2006 throughout the entire state that could be one-meter, true color if the state is willing to cost-share on the $842,000 statewide project. Mr. Wray said the state's cost-share would be a contribution of $235,000 for this product. He also mentioned that the state does not have before and after imagery of the 2004 hurricane season that was destructive to the western part of the state. Mr. Kannan suggested that Mr. Wray post a notice on the Geospatial One-Stop website marketplace to see if anyone wants to partner on the 2006 summer aerial imagery.

ADJOURNMENT

There being no other business, the meeting was adjourned. The next meeting will be held November 9, 2005, 1:00-3:00 pm at the Department of Public Instruction Board Room, Room 755, 301 N. Wilmington Street, Raleigh.

PowerPoint presentations and reports are on the Council Web site: www.cgia.state.nc.us/gicc, then click on "Meetings." The individual "Presentation" icons follow the Agenda and Minutes.

2005 Meeting Schedule

Wednesday, November 9 1:00-3:00 pm