MINUTES GEOGRAPHIC INFORMATION COORDINATING COUNCIL November 8, 2006

PRESENT

Chair, Dempsey Benton. Members: Bob Brinson, Rodney Bunch, John Correllus, Dr. Hugh Devine, John Dorman (for Bryan Beatty), Dianne Enright, Tom Gray, Reggie Hinton, Bill Holman, Susan Johnson, Gayle Holder (for Elaine Marshall), Bliss Kite, Dan Madding (for Britt Cobb), Dr. Lee Mandell, Ben Matthews (for Derek Graham), Herb McKim, Joe McKinney, Anne Payne, Mark Prakke (for Carmen Hooker-Odom), Stephen Puckett, Gerald Ryan, Allan Sandoval (for Steve Troxler), Colleen Sharpe (LGC representative), L.C. Smith (for Lyndo Tippett), Richard Taylor, Jonathan Womer, Ron York

PROCEEDINGS

A meeting of the Geographic Information Coordinating Council was held in the Board Room of the Department of Public Instruction in Raleigh, North Carolina. Chair Dempsey Benton called the meeting to order. The Minutes of the August 16, 2006 meeting were approved. Mr. Benton mentioned that Kelly Laughton, the former Local Government Committee chair, has left government service and will no longer be representing that subcommittee. A certificate acknowledging her service to this group was sent on behalf of the Council. Colleen Sharpe, with the City of Raleigh, will represent the Local Government Committee until it elects a new chair.

Status and Discussion of Priorities Before Council

Priority #1—NC OneMap Implementation

Tim Johnson said that the NC OneMap statewide GIS data inventory (www.nc.gisinventory.net) is progressing and 55 counties, 30 cities, 6 lead regional organizations and 10 state government departments are now participating. That means that we have added 15 new reporting agencies since the last Council meeting. Efforts continue to get all counties to participate. Mr. Johnson expressed his appreciation to all of those organizations that made an extra effort recently to populate the inventory.

The NC OneMap viewer application has transitioned from the USGS EROS data center to CGIA in Raleigh. Since it is now in place CGIA will begin making enhancements to the map viewer. Mr. Johnson thanked Jerry Ryan from USGS for their essential support in hosting the NC OneMap viewer. With the transition complete, CGIA will renew its efforts to connect more communities to NC OneMap. The need for accelerating connections was underscored by a request from Johnston County that depends on data from surrounding counties. Mr. Benton said that a recent blog (http://geotips.blogspot.com/2006/10/must-sdis-fail.html) from Paul Ramsey, President, Refractions Research, said that NC OneMap was a good example of organizations getting online to share data in a spatial data infrastructure. The article said a favorite site was NC OneMap which is based on local governments sharing data, and it works.

Priority #2—Streambed Mapping Project Status Report

Joe Sewash said the first production unit (Pigeon River Sub-basin) has passed quality assurance/quality control (QA/QC) and the second production unit (Upper New and Upper Yadkin Sub-basins) QA/QC review is close to complete. The Upper Little Tennessee is the next group that should have imagery available by the end of November. These sections represent half of the production unit areas for the project and will be received from the contractor by the end of the 2006 calendar year. The project is on schedule for completion and final delivery in 2007. Mr. Benton asked if there were plans for distribution of this dataset to local governments. Mr. Sewash said local governments will receive the final stream data for their areas.

Priority 3—Public/Private Partnership Working Group

Ms. Susan Johnson said Herb McKim, GICC member and President of McKim and Creed, has agreed to join her as co-chair of this working group. The group's goal is to identify the mutual benefits and possible structures for creating public and private partnerships to progress the vision of NC OneMap. The first meeting will focus on team formation and identify private sector needs. The second meeting will focus on what challenges and barriers are encountered by the public sector in providing data to the private sector. The third meeting will consider the architecture for partnership opportunities to increase the value of government generated GIS data.

The working group members will be weighted in terms of the private sector, and so far include George Glenn, Executive Director of NC One Call, Ron York of Duke Energy and representatives from large developers, realtors, utilities, surveyors, and mapping service providers, and the transportation logistics sector (e.g., Fed Ex). From the public sector, members will include the City of Charlotte, Dr. Lee Mandell from the NC League of Municipalities, Rebecca Troutman from the NC Association of County Commissioners, CGIA, Department of Commerce and others from local government.

Action #1: The Public/Private Partnership Working Group will structure the committee, schedule the meetings and submit a report for consideration at the May 9, 2007 GICC meeting.

Presentation: Perspectives of State GIS Initiatives from MPOs and RPOs

Ed Johnson, the Executive Director of the Capital Area Metropolitan Planning Organization, has more than 30 years experience as a transportation professional, and has been with the Capital Area MPO since 2003. Mr. Johnson introduced Jake Petrosky who is the GIS analyst for the MPO. Rural Planning Organizations (RPO) and Metropolitan Planning Organizations (MPO) were established in the 1960s to assist in transportation planning. There are 37 MPO and RPO groups across the state.

In the Capital Area MPO, for example, membership includes municipal and county elected officials as well as the NC Department of Transportation. The agencies represented include county and municipal representation from Wake County and portions of Franklin, Granville, Harnett, and Johnston counties.

MPO organizations consider 7-year, 20-year, and 25-50 year planning cycles. The 7-year planning window is the Metropolitan Transportation Improvement Plan (TIP), which prioritizes projects and

must match with the NC DOT state plan. The 20-year planning window is the long range transportation plan that is fiscally constrained by the ability to pay for the plan. The 25-50 year forecast is called the Comprehensive Transportation Plan (CTP) and is a state requirement, but it is an unfunded vision that now must include multi-modal transportation (2001 legislation). The MPO and NC DOT are the decision-makers.

Mr. Jake Petrosky described how the RPO/MPO uses GIS to show the human environment, physical environment and transportation data. The data must be updated regularly. The human environment includes local, state, and federal data such as parcels, building footprints, aerial photography, land use/land cover, transportation data, census information, and historical areas. Transportation data includes DOT state-maintained roads, local road data, TIP projects, as well as traffic engineering accident analysis. The physical environment is data such as wetlands, endangered species, conserved lands, parks, etc.

Data problems encountered include the out-of-date DOT Universe file that has good attributes, but could be improved with a linear referencing system; the crash data Traffic Engineering Accident Analysis System (TEAAS) that does not output spatial coordinates; and the county local roads data that lacks an efficient system for data sharing. Mr. Petrosky said the Council's Working Group for Roads and Transportation is trying to find a solution to the local government data problem.

The Comprehensive Transportation Plan (CTP) placed the MPO as the lead organization. To streamline the objectives and make timely decisions, it is necessary to integrate review and the permitting process on the state level. This will help build better projects, faster, with optimal balance between transportation and land use. Integration with the National Environmental Policy Act (NEPA) requirements has to overcome current problems, which include no documentation of protocols, no standardized environmental analysis techniques, and limited staff.

Mr. Johnson proposed a solution that could use a web-based GIS application. He said Florida is a good example because they complete the NEPA process in 9 years, versus 12 years in North Carolina. This translates into considerable construction cost savings and benefits the public by opening the new roads sooner. If North Carolina wants to streamline transportation planning and the environmental review process, permit issues must be identified early. Florida has 11 Environmental Technology Advisory Teams throughout the state. Florida implements three screening processes so resource agencies can make early adjustments during the planning phase. Their system, Efficient Transportation Decision Making (ETDM), keeps everything web-based. All agencies use the same Florida Geographic Data Library of 350 data layers in an interactive database. Projects are rated by all relevant agencies, a summary report is generated, and then "concerns" are explained. The reports for each project are standardized so that the process looks the same across the state. He noted that the public can review the plans and reports. Mr. Johnson said there is no need to reinvent in North Carolina, just adapt this system. He said the Council might promote this kind of system.

Mr. L.C. Smith said the NC DOT has established a project manager to work on a similar system and submitted the request to the DOT Information Technology Project Management Office. Future support from the Council would be beneficial.

Mr. Benton said the National Environmental Policy Act requires road building permits to avoid impacts on streams, wetlands, endangered species, and archeological sites, or to conduct

mitigation. The CTP really wants to identify these issues during the planning stage to accelerate the permitting process. Good planning can occur when officials have good GIS, which includes access to the relevant data sets. Earlier this year a plan was developed by the Interagency Leadership Team. The GICC can add value to this proposal in terms of shortening the time frame.

Mr. Bill Holman asked whether Florida's GIS data is up-to-date. Mr. Johnson said the 350 core data layers have maintenance time frames. He reminded the Council members that transportation projects in North Carolina cost billions of dollars, and the cost of updating needed statewide GIS data is \$5 million; a very small cost that pays a huge benefit. Mr. Johnson said that from the MPO/RPO perspective, the GIS data update and maintenance is the single most important part of transportation planning.

Dan Madding asked if the Capital Area Metropolitan Planning Organization contacts local governments for their roads data and whether non-standardization is a problem. Mr. Petrosky said he spends considerable time adjusting data. Mr. Madding asked if they had seen the road standard developed by the SMAC. He suggested that a tool could be developed for local governments so that roads data can be standardized for other users; for example, he noted Buncombe County had developed its own tool. Mr. Petrosky said the recent grant of \$92,000 to NC DOT for a central repository for local roads data would gather the data, and then tools can be created.

Committee Reports

All Council committee representatives reported on their group's activities.

Statewide Mapping Advisory Committee (SMAC). Bill Holman reported that the Committee met on October 18 with 23 people attending. Mr. Holman said items discussed included digital scanning of old aerial imagery, circa the 1940s, the National Grid, reports from Streambed Mapping, Floodplain Mapping, and Landslide Mapping projects; and NC OneMap updates. He mentioned that 95 state data sets are available as a free download from the NC OneMap FTP site.

Gary Thompson spoke for the Orthoimagery Planning group and said that the NC OneMap FY05 federal assistance projects are complete. All counties met their obligations and have received final cost-share payments. This imagery is being distributed on a portable hard-drive around state agencies. For NC OneMap FY06, 21 contracts are being prepared with local governments for federal cost-shares. The FY07 and FY 08 cost-share is in the early planning stages. There are many counties with orthoimagery that will be 10 years old at that time. Mr. Thompson said the USDA NAIP imagery (leaf-on photography) from summer 2006 flights is being delivered: Eight counties are in, and more are on the way. He said the next meeting of the Orthoimagery Planning Group will review implementation of the orthoimagery standard through the use of digital cameras.

Working Group for Roads and Transportation. Mr. L.C. Smith said the grant application to the National Highway Traffic Safety Administration for funds through the Traffic Records Coordinating Committee was successful and \$92,760 was awarded. The funds will be administered through the Governor's Highway Safety Program. NC DOT will work with a WGRT subcommittee that will include CGIA, and others. The subcommittee will define the requirements and CGIA will do the work. The goal is to have a signed agreement with a schedule and deliverables by early January; and the project will be completed in six months.

Library of Congress Grant: Frequency of Data Capture Survey. Mr. Jeff Brown of CGIA reported on the results of the survey. The Frequency of Data Capture survey was completed as part of the NC Geospatial Data Archiving Project partnership. The work is being managed by NC State University and CGIA. The survey was to provide a snapshot of how regularly North Carolina county governments are archiving their GIS data. Sixty-one counties responded, and the good news is that two-thirds are saving data for long-term retention. The results show that most counties save a snapshot of their parcel geometry at least annually; followed by street centerline geometry and zoning. Digital orthophotos are being stored for the future by almost all governments, which has implications for tracking changes through a time series and NC OneMap. The survey sought to find the reasons that drive retention of data from a local government standpoint, and it served to educate the recipients about the issue of retention and taking a snapshot of their data on some regular interval.

State Government GIS Users Committee (SGUC). Dianne Enright reported that the SGUC met October 19 and heard Dan Madding and John Cox from the State Property Office present about the Facilities Information System that provides in-depth information about state properties. Joe Sewash from CGIA presented on the Streambed Mapping Project progress in the western part of the state. Ms. Enright encouraged all State Government User Committee members to attend the 2007 NC GIS Conference.

Local Government Committee (LGC). Colleen Sharpe, representing the LGC, said the LGC will postpone electing a new chair until a member is appointed by the NC Association of County Commissioners to replace Kelly Laughton who is no longer with local government. The LGC bylaws require it to select a chair from among its members. Ms. Sharpe invited Council members to the GIS Day activities planned for downtown Raleigh on Wednesday, November 15.

She requested that the special subcommittee on data sharing, which is being formed by the Council as a result of the August meeting, include representatives from the Local Government Committee. Bill Holman asked Ms. Sharpe to inform him when the new LGC chair is elected and the subcommittee will be convened.

Ms. Sharpe advised the Council about an October letter sent from the NC League of Municipalities to NC Board of Engineers and Land Surveyors (NCBELS) requesting a change in the General Statutes (G.S. 150B-21.1) to conform to the National Council of Examiners for Engineering and Surveying (NCEES) Model Law. The Council had forwarded recommendations concerning adoption of the NCEES Model Law to NCBELS in February 2005. She encouraged the Council to track this situation.

Federal Interagency Committee (FIC). Jerry Ryan said the FIC met in Raleigh November 6 and heard presentations on the NAIP orthophotography program conducted by the US Department of Agriculture. The next meeting will be held at the March 1-2, NC GIS Conference in Winston-Salem. Mr. Ryan said he will be retiring January 3, 2007. He said it has been an honor to serve on the Council and its commitment to fostering the collaborative process with federal, state, and local governments.

Mr. Benton presented Mr. Ryan with a certificate of appreciation and thanked him for his service and for the high level of support from US Geological Survey in many Council endeavors, including the local government orthophotography cost-share program.

GIS Technical Advisory Committee (GIS TAC). Susan Johnson said there were no major projects underway.

Management and Operations Committee (M&O). Tim Johnson said the committee met recently to consider the issue of staff support that CGIA provides to the Council. Historically, all staff support and collaboration costs have been paid out of CGIA project receipts. Mr. Johnson said the 3.5 FTE funded positions, if funded through the state's General Fund, will benefit North Carolina as a whole and benefit the Council. Funded positions will result in a 20% reduction in CGIA service rates. The Management and Operations Committee discussed the issue and recommended that the GICC support this proposal. Dr. Lee Mandell said that CGIA should move forward on this proposal and a motion was passed to support the budget request.

Action #2: The Council directed CGIA to submit necessary paperwork for the Governor's 2008 budget requesting 3.5 FTE positions as staff support to this Council.

Council Member Announcements

U.S. National Grid. Susan Johnson discussed the U.S. National Grid effort that is being championed by Homeland Security. This is not about data storage, she said, but provides a way to coordinate emergency responders during and after a crisis. The National Grid is a way to present existing GIS data and should not require a massive change on the part of local and state government data developers. It allows diverse emergency responders with GPS equipment to coordinate recovery efforts, especially when street signage and other landmarks are missing. She recommended the Council consider adding National Grid elements to NC OneMap. The Army is currently using the National Grid and it could integrate with our state. Ms. Colleen Sharpe asked if federal agencies will begin requesting local data in the National Grid format in emergency situations and would local governments have to supply it that way.

Ms. Johnson said the National Grid is only for presentation of data, not how it is created. She suggested that consideration of the National Grid be referred to the Council's SMAC or Technical Advisory Committee (TAC). Mr. Benton suggested the TAC might be the most appropriate committee. John Dorman said that Floodplain Mapping Program would like to serve on this group.

Action #3: The Technical Advisory Committee will consider the U.S. National Grid effort for North Carolina and advise the Council.

Sex Offender Monitoring. Mr. Bob Brinson said effective January 1, 2007, certain sex offenders will come under GPS monitoring provisions established by House Bill 1896 (Session Law 2006-247). Mr. Brinson said either active or passive GPS ankle bracelets will be used on convicted sexual predators, recidivists, and those with aggravated offenses, for the remainder of their lives. Estimates are that this population will initially number about 100 offenders. The NC Department of Correction has contracted with ProTech, a Florida vendor that can provide active GPS

monitoring for \$9/per day per individual and can include/exclude zones for the GPS. There are several problems to be addressed with this program, including homeless predators who cannot recharge batteries. The new program will eventually link to crime databases to determine if any predators were in a particular area at the time of the crime.

Renaissance Computing Institute (RENCI). Dr. Hugh Devine said the triangle universities are investigating projects that would explore petascale computerized data sharing and distribution issues using RENCI computing facilities. RENCI provides a caching environment and is soliciting participation for research applications that can use this powerful computing capability. Dr. Devine said the computer sciences could consider a geospatial component for housing data.

Floodplain Mapping Program. Mr. John Dorman said that in August, 67 counties had new floodplain maps in hand for insurance purposes, and now 69 counties had delivery of full or partial maps. An engineering contract has now been issued for the Upper Yadkin river basin. He said that 24,000 stream miles have been studied as part of the Floodplain Mapping Program. Mr. Benton asked if the Floodplain Mapping Program is tracking compliance with and adoption of the new digital flood insurance rate maps. Mr. Dorman said that if a municipality or county does not choose to adopt the maps, they will be dropped from the flood insurance program.

NC Wireless E-911 Board. Mr. Richard Taylor said between 88 and 90 percent of counties with E-911 centers have deployed wireless 911 in their areas. Of the \$20 million available in the wireless fund for local E-911 operations, only about 60 percent has been spent on mapping programs. The Request for Proposal to construct a statewide 911 plan to share GIS and other data across the state will be released mid-December.

2007 North Carolina GIS Conference. Mr. Tim Johnson reminded the Council that the Conference will be held on March 1-2, 2007 at the Benton Convention Center in Winton-Salem. He said that the first registration has been received for the conference. The Herb Stout Award for visionary use of GIS by local government will be awarded to both a city/town and a county in 2007. Most of the past recipients have been large counties and cities. The Conference Executive Committee will reach out to small counties and towns to encourage them to apply for this award. He said the award's committee is expecting many applications by the January 31, 2007 deadline.

ADJOURNMENT

There being no other business, the meeting was adjourned. The next meeting will be February 7, 2007 from 1:00-3:00 pm at the Department of Public Instruction Board Room, Room 755, 301 N. Wilmington Street, Raleigh.

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