



North Carolina
Geographic Information Coordinating Council

Minutes
November 10, 2009

PRESENT

Chair, Dr. Lee Mandell. Members: George Bakolia, Michael Brown (for Kenneth Lay), Rodney Bunch, John Correllus, John Cox, John Dorman (for Reuben Young), Ryan Draughn, John Farley, John Gillis, Derek Graham, Bliss Kite, Kelly Laughton, John Leskovec (for Sarah Porper), Dan Madding, Joe McKinney, Tom Morgan (for Elaine Marshall), Steve Morris (for Dr. Hugh Devine), Doug Newcomb (for Federal Interagency Committee), Anne Payne, Jeremy Poss, Stephen Puckett, Julie Stamper, Melodee Stokes, Richard Taylor, Rebecca Troutman, Sandra Williams, and 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 Dr. Lee Mandell called the meeting to order. He mentioned that Jerry Fralick has been named as the State Chief Information Officer and that George Bakolia, now the Senior Deputy State CIO, will serve on the GICC. Dr. Mandell mentioned that the Office of State Budget and Management member, Sarah Porper, just had a baby and he welcomed John Leskovec to the meeting, and also Sandra Williams, Senior Vice President for Technology and Workforce Development from the Department of Community Colleges.

The Minutes of the August 12, 2009 meeting were approved.

Status and Discussion of Priorities Before Council

Priority #1: NC OneMap Implementation

Tim Johnson reported that several data layers have been updated and are available for free download. They include 2009 local imagery from Vance and Washington counties, local government street centerlines from Iredell and Cherokee counties (both from NC StreetMap), and a stormwater reference that represents permitting authority (local, state, multiple, or none) based on Phase II stormwater legislation and other state or local programs that impose stormwater requirements. The US Library of Congress GeoMAPP project, headed by CGIA in collaboration with the NC Division of Archives and NC State University, has begun an interstate transfer of geospatial data with our Kentucky and Utah state partners and the NC Division of Archives has ingested more than 14 gigabytes of data. More partners are being added to share information, including Georgia, Maryland, Maine, Minnesota, Montana, New York, Texas, Wisconsin,

Wyoming, and Washington, D.C. The Division of Archives has exposed this transferred data and is asking data users to test whether they can find and request the data through the Division's online archival discovery and retrieval system. The GeoMAPP project will add more states next year.

Mr. Johnson said the September transition of the Center for Geographic Information and Analysis (CGIA) from the Department of Environment and Natural Resources to the Office of the State Chief Information Officer is complete. The physical move to new offices required a huge cleanout of records and archival of documents pertaining to CGIA and the GICC.

Priority #2: Surveyors Model Law Working Group

Mr. Johnson reported on behalf of Herb McKim. He said a letter to the Attorney General related to questions raised by the Local Government Committee has been composed and is being reviewed by attorney Richard Bradford in the OITS office, which will then be forwarded. There is still an outstanding item before the working group on the use of the word "authoritative." He said that as far as he knew, the Attorney General's Office has not responded to the NC Board of Engineers and Land Surveyors letter regarding the question on whether Councils of Governments could be treated like local governments in the law pertaining to data collection. Dr. Mandell remarked it was good to have Richard Bradford available for these inquiries.

Priority #3: ESRI Enterprise License Agreement (ELA)

Mr. George Bakolia said that new multi-year agreement negotiations have begun with ESRI, with significant state partners in the process. The current ELA expires in 2010. He said one commitment he made with the transition of CGIA to OITS is to promote collaboration with local governments on this license. There are 200 separate ESRI agreements with North Carolina local governments. To save taxpayer dollars the state is looking for a mechanism to get contracts in place so local governments are enabled to purchase the same product line at a significant multi-volume discount, when their current contracts expire. He said they hope to announce the new agreement after the holidays.

2010 Statewide Orthophotography Project, NC 911 Board

Richard Taylor said that Tonya Pearce from the City of Durham could not attend. The history of this project began in 2004 when Zsolt Nagy from CGIA asked the NC 911 Board to fund a statewide orthophotography project, but there was no provision in the statute for that type of expenditure. Last year the statute was changed so local government could move forward with the next generation of 911. Ms. Pearce, on behalf of the Durham PSAP, proposed a statewide flyover and she collaborated with CGIA and the Council's Working Group for Orthophotography on a grant application to the NC 911 Board. Mr. Taylor said the grant application was excellent, but with 34 competing applications for the \$25 million allocated, he did not have confidence that the proposed \$12.3 million project would be successful. However, the NC 911 Board liked the idea and awarded the City of Durham the \$12.3 million project, which will be managed by CGIA.

Mr. Tim Johnson directed member's attention to the handout providing a brief project overview and map showing how the state will be flown, starting in January. He said it was fortunate to have excellent people to carry out the plan. Collaboration is not a new concept for the GICC and previous collaborations have involved the Secretary of State's Land Records Program, the Floodplain Mapping Program, NC Geodetic Survey and local governments. Contractors already registered in the Floodplain Mapping Program's Qualifications -Based Selection (QBS) process

will be used for the data collection. The expectation is that statewide orthophotography will be delivered by December 2010, and data should be released by spring of 2011. NC OneMap will be used for data distribution. CGIA is working on contracts with City of Durham and the Floodplain Mapping Program.

Ms. Kelly Laughton said she was asked at a recent NCLGISA professional meeting how this statewide project will affect individual counties applying for 911 funds for photography for their regular tax revaluation cycle. Can they still apply to the NC 911 Board for funds to acquire orthophotography for a later time period? Mr. Taylor responded that yes, they can. Ms. Laughton said that question and answer should be posted on the project's website.

ACTION 1: Include question and answer about affect on future county orthophotography funding in FAQ on Statewide Orthophotography 2010 website.

Mr. Taylor said a comprehensive 911 study is being conducted and the 2010 statewide flyover is not a single event. The study is considering how orthophotography could be part of a scheduled rotation. Mr. Doug Newcomb said that federal agencies are trying to form a consortium to fund the processing of the fourth photographic band, the color infrared imagery. Mr. Johnson said the flying automatically captures this band, but there is no money to process it. Dr. Mandell said this is exciting and is great for showing how we can collaborate to fund and manage a large project. He expressed delight that the NC 911 Board is interested in a sustaining program.

Presentation: New Perspectives on Standard Data: Suitability Mapping in the Sandhills Region

Mr. Jon Parsons, Executive Director of Sustainable Sandhills, said sustainability involves three components: economic, social equity, environment. His non-profit organization attempts to inform regional planning by using standard GIS data (cadastral, roads, land cover, water-sewer and built infrastructure) as a foundation for considering suitable uses of the landscape. He noted that the project would not have been possible without the accomplishments of the GICC and the GIS community. He said they use NC OneMap data and regional data collected by the 11 counties and 70 municipalities in the region around Fort Bragg. The area includes both the Cape Fear River and Lumber River drainage basins and is known for the longleaf pine. His 501(c)3 organization advocates for sustainable development, which led to the creation of models and maps to inform the process. The maps are composed of 30-meter x 30 meter cells (the size of a baseball diamond) and each cell is weighted from 1 (very unsuitable) to 9 (highly suitable) for a "potential" land use. He said the maps may inform plans from multiple perspectives (commercial, industrial, residential, farmland, forestland, and natural areas).

For example a commercial development suitability map can evaluate and assign a weight to each cell based on the assets (population, water, transportation, distance to markets, and infrastructure) and the constraints (slope, flood zones, wetlands). Conserved lands, the military installation (Fort Bragg) and water bodies are not rated on these maps. Suitability is rated per each cell. Land with potential for commercial use might already be developed. In other examples, Mr. Parsons said the map on residential development shows 31-percent of the subject area is highly suitable; the map on working farms shows 45-percent of the land area is highly suitable; and 21-percent of the land area is highly suitable for use as natural areas. The challenge is to use all these perspectives and combine the different maps to highlight the unique and competing values of these land use potentials to inform planning decisions in the area. Ms. Anne Payne said Wake County is surveying open space and using parcels. Mr. Parsons said they discourage the use of data at the

parcel level for planning. Ms. Julie Stamper asked if there were surprises from this project. Mr. Parsons said the conservation and working lands groups were more enthusiastic than expected. He is working to get developers and planners to realize the potential. There are good relationships with local governments and many planners, and the maps can be used by anybody.

Mr. Parsons mentioned that GICC member John Gillis served on the residential and commercial development group to evaluate the maps. Mr. Gillis said he personally experienced a planner using the maps to argue against rezoning, but that was an inappropriate scale for the analysis. He said Jon has been an advocate for use of data for land use planning in the public planning process, not as a hammer for developers. Dr. Mandell said the tool takes data from many places and can be used at the local level to assist decision makers. He asked about zoning boundaries, because of local zoning issues. Mr. John Dorman agreed it is a powerful tool, but asked about education and labor force. Ms. Julie Stamper asked if Sustainable Sandhills had considered analyzing “potential” commercial areas against existing “built” commercial areas. She thought there might be the need for user education of the tool. Ms. Rebecca Troutman asked if the commercial suitability infrastructure included telecom. Mr. Jeff Brown responded that the e-NC authority was working on the statewide infrastructure and it is not complete; therefore, that information was not included. Ms. Troutman acknowledged that some of the telecommunications data is proprietary. Mr. Brown noted that the project considered education and labor force and concluded that they are difficult to represent for specific locations and that transportation makes labor force widely available in the region.

Committee Reports

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

Statewide Mapping Advisory Committee (SMAC). Ms. Anne Payne reported that the Committee met on October 14 and welcomed James Armstrong from Richmond County, the new Local Government Committee representative. They heard updates from all the working groups and a Council report from Tim Johnson. She reported that the Stream Mapping Advisory Committee met and they are reviewing the recent federal wetland mapping standard as well as working on the stream naming recommendation to clarify the relationship between the federal Geographic Names Information System names and feature names managed by other stakeholders.

She also reported on behalf of Dr. Tyrel Moore and the NC Board on Geographic Names that they now have an approved charter and new members from the Division of Water Quality and Department of Cultural Resources. Several feature naming issues have come up and Dr. Moore said he will schedule a face-to-face meeting in the near future.

Working Group for Orthophotography Planning. Gary Thompson said the group is focused on the statewide project and has delayed work until next year on two tasks: the white paper on oblique imagery and the issue paper on Color Infrared photography. However, the work on the digital camera range is moving forward to find a suitable location. Ms. Payne thanked Gary Thompson and the Working Group, CGIA, Floodplain Mapping and John Dorman for all the work they will put into the 2010 project.

Working Group for Seamless Parcels. Tom Morgan said the committee, co-chaired by Pam Carver of Henderson County, is trying to integrate local government parcels into a statewide fabric. The \$500,000 grant from US EPA is designated to build a tool to make translations from local government parcel data and go through the state’s EPA node in the Department of

Environment and Natural Resources. The work plan is being defined now for EPA so the money can be obligated.

Working Group for Roads and Transportation. Ms. Janet Lowe from NC Department of Transportation reported on the NC StreetMap project. The year-old project has revealed obstacles for use of the current data standard, especially as it relates to translating between local and state government street centerline data. The standard needed more meat, she said, and that is what the redesign team focused on. The Eastern Band of Cherokee, federal agencies, local governments, councils of government and others participated on the team. A pilot was created to test the present concept of the standard. However, a tool is essential to translate local government data into the new standard. Therefore, the committee will apply for a \$75,000 Federal Geographic Data Committee (FGDC) 2010 CAP grant in the “Demonstration of Geospatial Data Partnerships” category. The Eastern Carolina Council of Government will be the principal and apply for the grant, which proposes to develop a client-based translator tool that will convert street centerline data to XML data structures. The translator tool will read in local data, read in the data structure and then create an output file that can possibly be automatically uploaded to NC StreetMap. Ms. Lowe said the CAP grant application is due January 6 and she requested a letter of support from the Council. She said work on the standard will be completed. Ms. Payne said the SMAC Committee would like to see an abstract and requested it be provided in time for the SMAC and the GICC to review it. The Local Government Committee and Federal Interagency Committee offered to provide letters of support. Dr. Mandell asked about automatic error correction in the translator tool. Ms. Payne said the working group is looking at error correction as part of the proposal for the tool.

ACTION #2: Council to write an endorsement for inclusion in the CAP grant application.

State Government GIS Users Committee (SGUC). Mr. John Correllus said that the SGUC established a process for collecting information about all the ESRI licenses deployed (desktops, production and development servers) throughout state government under the ELA. Working through the SGUC Executives they received 100% participation and have provided this useful information to George Bakolia. At the last SGUC Executive meeting, October 8, in addition to reports from committees and discussions on the ELA status, Bentley Systems presented information on content management systems. There was a SGUC general member meeting on October 15 that was well attended. The time of the general meetings was changed to accommodate non-Raleigh state employees, but then the travel restrictions were implemented. The January 2010 general meeting will move to a Department of Health and Human Services facility on Chapanoke Road, which has a large meeting room with web-conferencing capability. At the October general meeting Tim Johnson discussed CGIA’s move to OITS and Joe Sewash presented on the Master Address Dataset, which sparked interest and conversation. Mr. Correllus said Mr. Johnson should give a regular report on Council activities at each general SGUC meeting. He said the Management and Operations Committee needs to address the continuation of the Master Address Dataset project. NC DOT presented on their current projects, and there was another presentation on 3-D feature extraction from imagery. Mr. Correllus pointed out that future SGUC general meetings will cycle through state agencies to highlight their applications. Dr. Mandell commended the information sharing at SGUC and showing the value to a larger audience.

Mr. Bakolia said there is a new process with Enterprise Project Management Office (EPMO) with respect to GIS projects. Any information technology project that goes through the EPMO that has a GIS component in the proposal will be reviewed by CGIA. Mr. Correllus said GIS oversight from OITS in state government agencies is good. He asked if state agencies will be widely contacted when OITS comes to terms with ESRI. Mr. Bakolia said the CIO must get concurrence from agencies and OSBM has identified and reserved the funds. A few years ago OITS was financially short-changed when a department head backed out of an agreement. OITS is receipts-based, and agencies must buy in. He reminded the Council that the appropriation in the Information Technology Fund is for early initiatives, not recurring charges. Mr. Correllus asked if the Council could play a role in developing the ELA. Mr. Bakolia said that an endorsement of the GICC on the value of GIS software would be useful to get support. Mr. Dorman asked if each state agency will have to sign off on the new ESRI ELA. Mr. Bakolia said each agency will have to allocate funds and will not be able to use another GIS vendor. The law requires that if the State has an ELA, all RFPs for that type of technology must use the ELA.

Mr. Newcomb asked about using different GIS software. Mr. Bakolia said the buyer must justify it.

ACTION #3: Management and Operations Committee requested to consider continuity of the Master Address Dataset.

Local Government Committee (LGC). Julie Stamper said the LGC has been working through the various working groups and committees. LGC has representatives on numerous committees, including 20 on the Working Group for Roads and Transportation; seven on the Working Group for Seamless Parcels; seven members serving on the Statewide Mapping Advisory Committee, the GIS Technical Advisory Committee, the Stream Mapping Advisory Committee, the Working Group for Orthophotography Planning and NC Board on Geographic Names. In addition 13 local government members participate on the LGC GIS Advisory Team.

Ms. Stamper mentioned HB 1779 which authorizes the NC Division of Motor Vehicles (DMV) to collect vehicle taxes for county tax assessors. Because she is the GIS coordinator for Pasquotank County, Ms. Stamper said the DMV contacted her and wanted all county GIS data, including building footprints. Her concern was that this massive statewide data aggregation project was not coordinated with the GICC. Ms. Rebecca Troutman said the NC Association of County Commissioners supported this legislation because many counties are in arrears in collecting vehicle taxes. The DMV will now collect those fees and return them to the county.

Mr. John Farley said that the NC DOT GIS Unit was contacted after the legislation passed. The DMV met with CGIA to discuss the Master Address Dataset, and chose another direction. Mr. Johnson said that CGIA learned about this through Office of State Budget and Management. CGIA met with the project team and showed them the Master Address Dataset. He noted that the project acquired the best available data and the goal was to meet the Census Bureau deadline, but there is no ongoing funding to continue the project beyond the 2010 Census. Mr. Farley said the project will use addresses from county tax assessors because the local government is the taxing authority. Ms. Stamper noted that the tax assessors would simply go to the county GIS unit for address points. Mr. Farley said there is a benefit because all 100 counties will be enabled to send information to the state in a single format (a first), since it is in their interest to communicate. He

indicated that it was unfortunate that there was not more coordination between the two projects but that DMV chose the best approach available and decided to forego the use of geospatial data.

Ms. Troutman said the counties were pushing for the collection of \$55 million in delinquent motor vehicle taxes, and this will save their staff time. The DMV program is supposed to be ready in 2011. Dr. Mandell said an RFP was sent out for services, and before it was awarded Mr. Johnson and he had suggested the DMV project use the Master Address Dataset. Dr. Mandell remarked there could be a backdoor benefit in that this dataset needs to be maintained over the long term. He challenged the members to consider how to get the broadest possible benefit to the state from this data collection. Ms. Stamper mentioned that the DMV said it would give this new data to the US Census for the next Local Update of Census Addresses (LUCA) update. Mr. Farley said the DMV address list will also include business addresses. Mr. Joe Sewash, speaking as project manager for the Master Address Dataset, said that project only included business addresses if the county provided it. Dr. Mandell asked about error detection in this new dataset. Mr. Farley said that errors found in street centerlines can be fixed, but address errors, based on parcels, is another problem.

Management and Operations Committee (M&O). Dr. Mandell said the M&O has not met. The recent retirement of Zsolt Nagy, the Coordination Program Manager at CGIA, and the CGIA transition issues contributed to the delay. Tim Johnson has new responsibilities in OITS and there is a new State CIO, Jerry Fralick. George Bakolia said that when CGIA transitioned to OITS there was little familiarity with CGIA, and its value, in the Executive Branch. Mr. Bakolia said CGIA recently presented to the CIO Council and it was positive.

GIS Technical Advisory Committee (GIS TAC). Kelly Laughton said the GIS TAC had its first meeting November 9 and members represent different technical backgrounds. They discussed the purpose, bylaws and their understanding of what the GIS TAC is to achieve. She said one member still needs to be appointed by OITS, as required by the bylaws. The question of the technical refresh of NC OneMap was the item before the GIS TAC. Discussion centered on what NC OneMap currently is, and what it should become. Although this is an item for the Management and Operations Committee, Ms. Laughton said the GIS TAC members suggested three questions that need to be asked of GICC members and committees. The answers can be compiled in a “gap” analysis to point the future technical direction of NC OneMap. The three questions were:

1. Who are we trying to serve with NC OneMap?
2. What is NC OneMap today? For example, do you consider it a Viewer? a Data Warehouse? a Clearinghouse? or what?
3. What should NC OneMap become in the future? How should it be changed/updated to better serve your needs?

Ms. Laughton suggested responses from individual GICC members, or aggregated by each committee chair, should be sent to her by January 5, 2010 for analysis.

ACTION #4: Staff to circulate questions posed by the GIS TAC to GICC members and committees relating to perception of NC OneMap.

Mr. Correllus said that what we want NC OneMap to look like in the future provides a great opportunity to engage people across the state, perhaps in a few focus groups in the east and

western part of the state, as well as Raleigh. Dr. Mandell said a survey of GICC members and committees is a good first step since focus groups may not be practicable, but perhaps as a follow-up strategy. Mr. John Dorman said these are good questions, but the NC OneMap vision has already been endorsed by the GICC. Dr. Mandell said perhaps this is a good time to revisit the vision because of changes and much broader usage of NC OneMap data, even though the principles are still valid. Mr. Correllus said the meetings he recommended are just to bring stakeholders together. Ms. Laughton said that when NC OneMap first appeared, map viewer functionality was new; now there is Google Earth and needs are shifting. A question raised relates to the essential idea of what NC OneMap represents: a viewer, a data clearinghouse, a warehouse of NC data, perhaps a rethinking of NC OneMap as a geospatial basemap.

Federal Interagency Committee (FIC). Doug Newcomb reported that their committee met in the morning and had great attendance. There was a presentation on landscape collaboration in the estuarine areas from North Carolina's Albemarle-Pamlico Estuarine Study area to Florida which is working on habitat issues and strategic habitat preservation. A presentation by the USDA-Natural Resources Conservation Service explained new seamless on-line tools to view county soils maps, although soil data continue to be delineated by counties and you cannot analyze data across county boundaries. He mentioned the new Department of Homeland Security member spoke about data exchange and data correction. The US Census is looking for the best representation of municipal boundaries. Mr. Tom Morgan said that the boundary and annexation survey is filed with the Secretary of State by each county using a paper map with their county ordinance. Mr. Newcomb said that biologist Holly S. Weyers has been appointed Director of the USGS NC Water Science Center.

GIS Day 2009

Anne Payne reminded GICC members that International GIS Day is celebrated on Wednesday, November 18. The purpose is to education adults and students about GIS. There are a wide range of events planned by local governments, universities, community colleges, and other groups across the state. The Raleigh event, co-sponsored by City of Raleigh, Wake County, and the State Government GIS Users Committee will be in downtown Raleigh from 9 am to 3 pm at 205 Fayetteville Street. It will feature demonstrations and a map gallery showcasing GIS use in government. Mr. Bakolia suggested adding the announcement to the NCgov.com website.

Other News

Mr. Tim Johnson mentioned that CGIA staff, Zsolt Nagy, the former Coordination Program Manager, had retired in August. He said that Diana Hales, another CGIA staff member, will retire in January 2010. Mr. Johnson acknowledged and thanked Mr. Nagy and Ms. Hales for their invaluable contributions over the years to the accomplishments of the GICC.

ADJOURNMENT

There being no other business, the meeting was adjourned. The next meeting will be February 10, 2009 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.ncgicc.org Click on “Meetings.” Presentations and documents presented during the meeting are available in a Zip file for easy download.