

Geographic Information Coordinating Council
MANAGEMENT AND OPERATIONS COMMITTEE

June 18, 2018

1:00 to 3:00 PM

Center for Geographic Information and Analysis
301 North Wilmington Street, 7th Floor
Room 770A

MINUTES

1. Chair Alex Rankin called the meeting to order and welcomed Bob Coats, John Farley, Dan Madding, Scott Lokken, Bob Brinson, Tim Johnson, Jeff Brown and on the phone, Kathryn Clifton and Paul Badr.
2. Minutes of the April 23, 2018 meeting of the Management and Operations Committee were approved for adoption as submitted.
3. Quick Updates

Census Geospatial Data

Bob Coats reported on Census programs.

- Boundary and Annexation Survey (BAS): The Census Bureau and the Department of the Secretary of State are identifying counties willing to submit consolidated BAS updates (all municipalities within a county, with Census communication going to the county).
- The effort to improve the process for maintaining statewide municipal boundaries with the latest annexations (an item below) has potential to lead to a single statewide BAS update.
- There will be opportunities to coordinate communication with local governments about municipal boundaries among the Secretary of State, the Census Bureau, the GICC, state agencies, the League of Municipalities, and the Association of County Commissioners.
- The Census Bureau plans to communicate with local governments by mail in August.
- The Local Update of Census Addresses (LUCA) is in progress.
- This fall, after LUCA, the State Data Center plans to offer trainings hosted by councils of government, related to local promotion of Census 2020 as well as the Participant Statistical Area Program. This also presents an opportunity to communicate about a vision and/or plans for statewide municipal boundaries.

Census-related information may be ready to share with the GICC on August 8 relating to municipal boundaries, and Mr. Rankin welcomes a request for Council endorsement of Census efforts.

Statewide Orthoimagery

Tim Johnson reported on recent developments:

- In the Northern Piedmont and Mountains, the project team approved imagery samples from the four contractors, and imagery is now in production.
- Training for the VOICE online visual quality control tool is scheduled for July 24. Communication went out today to Public Safety Answering Points and GIS coordinators in the region.
- Burke County had an urgent need for the latest imagery for a public safety investigation; the Statewide Orthoimagery project team got permission from the NC 911 Board to release images early to assist in this case. This may be an interesting example to report to the Council.
- The project team is preparing for the Qualifications-Based Selection process for 2019 imagery in the Southern Piedmont and Mountains.

NC Parcels

Jeff Brown reported that the spring update of statewide parcels has occurred for 79 counties to date. The program has given priority to updates in selected counties based on planning needs of NCDOT and a metropolitan planning organization (Piedmont Authority for Regional Transportation). For the latter organization, Kat Clifton and Steve Averett spoke up at a planning meeting to direct the group to NC Parcels for parcel data to avoid duplication of data collection and integration.

Ms. Clifton suggested requesting information from the organization after the planning process for a narrative about how the statewide parcel data were used and the value and time savings from having the resource readily available. She sees a need to keep telling the story for wider understanding. She offered help get a story from the group and would look for content suitable for the NC GIS Conference. She observed that more communication to planners in general would be valuable.

More reminders are going out to the remaining counties. Some of the counties have had staff turnover, delays in getting the tax system updated, or security issues that have impeded the spring update.

Next Generation 911

Mr. Johnson reported that a selection process is still in progress for a contractor that will build a database for statewide geospatial data (street centerlines, address points, boundaries, etc.). An award to a contractor is expected this summer. State oversight will be important to assure that a contractor coordinates data acquisition with current collaborative data sharing between state and local governments. Discussion emphasized that data acquisition and integration methods need to fit unique conditions in North Carolina.

Working Group on PLS and GIS

Bob Brinson announced that he will retire from the Department of Public Safety at the end of June. After congratulations from the committee, Mr. Brinson commented on the group meeting with the surveyors committee of the NC Board of Examiners for Engineers and Surveyors (NCBEES) on May 9. He advised that the critical pieces needing attention include metadata that can clarify what was collected, how it was processed, purpose of the data, and use constraints. Disclaimers are now recognized as beneficial for clarifying suitable uses for data. Agreement on

specific disclaimer language will be important for both GIS practice and surveying, stating appropriate uses of data to inform clients and data consumers. He encouraged continuation of the work of the small groups and thanked Alex, John, and Kat for their participation in the series of meetings on the details. He advised a meeting of the larger GIS working group to inform all the members on accomplishments and remaining work. He acknowledged staff assistance and recognized that the concept of a decision tree based on data purpose has been useful in thinking through the issues. He advised a more regular schedule for the working group. Mr. Johnson added that he, Kent Rothrock, and John Logsdon will meet to work on disclaimer language. Mr. Rankin observed that surveyors are looking forward to participating in the 2019 NC GIS Conference. He encouraged regular interaction.

Ms. Clifton pointed out a new law in Georgia concerning the educational path for professional land surveyors that splits the hydrology component from land surveying. She observed that a GIS practitioner may be interested in becoming a professional land surveyor, but components like hydrology can be a barrier. Mr. Badr commented that Georgia has not offered PLS licensing for photogrammetry or mapping science like North Carolina. South Carolina has a different model with separate licensing for land surveying, photogrammetry, and mapping science. Mr. Rankin described concern about unmanned aircraft systems enabling image acquisition by people who may not have a PLS license and requisite competency in photogrammetry.

Mr. Rankin thanked Mr. Brinson for his leadership of the working group.

4. GICC Strategic Elements and Direction for 2018-2019

Mr. Brown referred to a summary of elements discussed at three Council meetings. The summary has four categories with numbered elements and suggested committee tasking. A revised version based on the following discussion is attached to these minutes.

Discussion about element 1.2 included recognition that there may be ways to represent local infrastructure with less specificity than fully delineated assets such as pipes. There is inconsistency in what is available to the public, e.g., bridge locations are released as part of road data, but water lines are withheld. Above ground facilities related to water lines, e.g., hydrants or dams, are visible in person or in imagery. Someone intent on doing harm need not rely on geospatial data to find a target. Mr. Rankin would like to see local governments consider why data are withheld, what are the benefits of securing, and what are foregone benefits to GIS users. There may be options for subscriptions. Department of Homeland Security guidelines may not be as well understood as they need to be. He advised starting a conversation to identify what needs to be protected and what could be shared safely. Water and sewer infrastructure would be the primary datasets for consideration related to land development. Ms. Clifton added a local government concern that water and sewer information may be misinterpreted or misapplied at some cost. A subscription where a user could see information but not get a copy may be an option for some datasets. Another concern is where geospatial data are created—within a jurisdiction or in a distant location, even another country.

Mr. Johnson added that this is not a mapping or data issue, but a policy issue. Management & Operations Committee has a role in researching public policies before starting a conversation

with local data managers. Mr. Farley observed that NCDOT is working out a data sharing agreement with the Department of Natural and Cultural Resources concerning sensitive data. There may be model agreements that could be relevant to this policy issue.

Regarding other comments, a process for maintenance of statewide address points will be essential under item 1.3. NC Emergency Management and State Board of Elections are the state agencies that are not sharing datasets with NC OneMap for discovery and access (element 1.5). Steps to resolve this include defining the opportunity specifically and communicating to agency leadership.

A routing service based on NCDOT statewide roads, intended for planning purposes, is an example of an application under 2.2. Smart cities initiatives will need definition as well as consideration of expectations and capacity. An assist from the Local Government Committee is appropriate. Element 4.2 can include an assist from SMAC in outreach and identification of business needs for jurisdictions with little or no GIS capacity.

5. GICC in Rules for Stream Maps – Public Comment

Mr. Johnson reported that draft comments about the GICC role in rules for stream maps were distributed to Council members. He received a few minor comments on the document that were reviewed by Cam McNutt, chair of the Hydrography Working Group. Mr. Johnson proposed crafting a letter to the Environmental Management Commission (EMC) as the GICC's comments, under Mr. Rankin's signature on GICC letterhead, before July 2 when the comment period closes. In discussion, the committee advised adding a phrase to reference a list maintained by the GICC of the best available hydrography data; this will accommodate new stream data developed under the oversight of the GICC. Mr. Farley made a motion for the GICC to submit the letter to the EMC. Seconded by Mr. Madding.

Voted: The GICC will submit a letter to the Environmental Management Commission with comments on the GICC role in rules for stream maps by July 2.

6. Municipal Boundaries

In addition to the discussion under the Census update above, Mr. Badr reported that SMAC has formed a working group that will have a kick-off meeting on June 26. He and Mr. Brown identified 20 stakeholders to invite.

Mr. Coats explained that he communicated with the Census Bureau recently about the Boundary and Annexation Survey (BAS). The NC Department of the Secretary of State is the certifying agency for BAS. The Secretary has encouraged consolidated BAS submissions where a county submits for all the municipalities in its boundaries. The Census Bureau is promoting consolidation before the 2020 Census. An authoritative municipal boundary dataset has potential for someday serving as a consolidated statewide BAS submission. Meanwhile, the State Demographer is planning to send out letters to municipalities in August requesting information for municipal population estimates, including annexed areas and households. The Census Bureau is interested in collaborating on communications to local governments, potentially involving the

GICC, the NC League of Municipalities, NC Association of County Commissioners, and the Secretary of State. The goal is to avoid multiple, potentially confusing requests. There may be an opportunity for the GICC to add a statement to a Census Bureau mailing to local governments in August or September. Mr. Coats envisions some regional workshops related to preparation for Census 2020 that could include content about municipal boundaries, in October or November.

7. National Updates

Geospatial Data Act of 2017

Mr. Johnson reported that the letter in support of the Geospatial Data Act is in the Governor's Office, waiting for approval and submission. He will follow up. At the national level, the act has not come before a committee yet.

National Agriculture Imagery Program

Mr. Madding reported that he learned from the Field Office of the Farm Service Agency of the US Department of Agriculture that the Department will continue with the status quo—free public access to NAIP imagery—and attempt to get partners to contribute their shares of the cost. Mr. Johnson confirmed the same understanding in the National States Geographic Information Council. The M&O concluded that the letter to USDA should be held until the issue comes up again and advocacy by the GICC would be timely.

Also, Mr. Madding reported his understanding that NAIP imagery is now planned for acquisition over North Carolina this summer, not in 2019 as planned previously.

8. Committee Status Reports

Local Government Committee

Ms. Clifton reported the LGC met May 15. The committee is in the process of electing a chair, ending Ms. Clifton's service as LGC chair. Topics for the committee include Next Generation 911 and opportunities to serve on the project team or an advisory group. LGC reviewed the draft GICC strategic elements and discussed municipal boundaries. One comment of note—Debbie Brannan explained that an annexation may be approved by a jurisdiction one month, but implemented months later, complicating the process of reporting to the Secretary of State. Also, LGC member Wayne Brewer explained that Wake County takes responsibility for processing and mapping annexations for all municipalities within the county for a reliable approach. LGC discussed utility data and reviewed an agreement that Cabarrus County has with the City of Concord Electric Department for data sharing. Ms. Clifton also found that the City of Salisbury did not have a written policy about utility data. It appears that some jurisdictions make utility data available online, but many do not. More research is needed. On the topic of Unmanned Aircraft System (UAS), at least one regional council of government is planning on getting licensed for UAS. Other LGC members have someone on staff or anticipate gaining the capability. Tourism and emergency services were two purposes mentioned. August 22 is the next LGC meeting.

State Government GIS Users Committee

Mr. Farley reported the SGUC Executive Committee continues to focus on preparation for negotiations for the Enterprise License Agreement (ELA) with Esri for GIS software. The committee completed a survey of state agencies for software details and is sharing information with Esri. Terms and conditions are under review. A two-month extension has been requested, through August.

Federal Interagency Committee

Scott Lokken of the National Geodetic Survey reported FIC is seeking new members and officers for the FIC Executive Committee after its recent meeting. A general meeting is scheduled for August 2 in Raleigh. Topics include the 2022 Reference Frame and implications for state plane coordinates in NC. He noted that comments in response to the Federal Register announcement about 2022 are due August 31.

Mr. Rankin added that the 2022 Reference Frame Working Group met last week. One of the questions: will the origin for state plane coordinates move and by how much? After technical review and discussion, with concern for the PIN system in North Carolina and its users, the group concluded that a change of in parameters of 10,000 meters for the state plane coordinate system would be preferred. That change in parameters would be large enough to distinguish 2022 from NAD 1983, for example. At extremes of the state, the difference could be 200 feet on the ground. NC will continue to be one zone. Grid values and ground values will be close to the same in a low distortion approach. Ms. Clifton recommended getting information from the NC Property Mappers Association (NCPMA) about changes and impacts on GIS users. The NCPMA listserv may be a tool for collecting information, and opportunities are coming up for presentations to the NCPMA Mapping School and fall conference. Mr. Rankin anticipates a report from the 2022 Working Group at the next GICC meeting.

Statewide Mapping Advisory Committee

Mr. Badr reported that SMAC has several efforts in progress in addition to the Municipal Boundaries Working Group, NC Parcels, Orthoimagery, the 2022 Reference Frame Working Group and the water quality rules discussed above, including:

- The Working Group for Roads and Transportation submitted a revised state data content standard for road centerlines, and SMAC approved. The revised standard will be distributed to the Council in early July for a 30-day review period, and SMAC will recommend Council approval on August 8.
- Elevation derived from LiDAR is progressing toward completion of its 4th and 5th phases. Roads are being classified from the data.
- The Working Group for Land Cover is on track to submit a report to SMAC in July on business needs for land cover data.
- Transportation datasets are maintained and published on a quarterly basis.
- AddressNC project is still on hold while a CGIA hiring process for a project manager is in progress.
- The Hydrography Working Group is being reactivated by Cam McNutt and has a series of meetings scheduled.
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The next SMAC meeting is July 18.

Technical Advisory Committee

Mr. Madding presented a paper from Gary Thompson, NC Geodetic Survey, on “Understanding the 2022 Reference Frame and Changes Coming to the State Plane Coordinate System and Geospatial Data.” In discussion, the committee advised that that report would be more appropriate coming from the 2022 Reference Frame Working Group. In addition, there is a role for TAC to prepare information customized for various parts of the GIS community. Mr. Madding will communicate with Mr. Thompson about content. Data managers need to understand the changes and impacts.

9. Council Meeting Agenda for August 8

The committee clarified items for the agenda including a short segment for Form I-9 as a lead-off item, a presentation from the 2022 Reference Frame Working Group, adoption of Version 2 of the state content standard for road centerlines, and committee reports. Using GIS in response to a tornado in the City of Greensboro will be the featured technical topic. Related to Form I-9, discussion pointed out value in information about state employment and rules that may apply to Council members.

10. Other Items

Mr. Johnson is consulting with Senator Berger’s staff on reappointments of Matt Helms and John Gillis and appointment of Pokie Harris, the new Executive Director of the NC 911 Board. Mr. Rankin is continuing to contact the Department of Public Instruction for a designee to serve on the Council for Superintendent Johnson.

11. Future Meeting Dates

The next Management & Operations Committee meetings are scheduled for Mondays, September 17, and December 17.

The meeting adjourned at 3:15 PM.

Elements of GICC Direction, 2018 and Beyond

Members of the NC Geographic Information Coordinating Council offered observations and insights about challenges and opportunities in 2018 and beyond. The primary challenges are collaborating to add value to Next Generation 911 and Census 2020. Discussions during three quarterly GICC meetings form the basis for a set of elements to guide the Council's direction. Elements, organized in four categories, are each stated with a proposed lead committee and tasks to include in committee work plans for 2018-2019.

Category 1. Improve and/or expand statewide geospatial data

1.1. Promote free and open discovery of and access to geospatial data created and maintained by local governments.

Lead: Local Government Committee

Tasks: Summarize business needs and value; promote through professional organizations

1.2. Find solutions for consumers to discover and gain access to public geospatial datasets that local governments currently withhold from public access for concern about homeland security.

Lead: Statewide Mapping Advisory Committee

Tasks: Research and clarify federal, local, and public utility policies; summarize business needs and value versus risk; define alternative geospatial datasets (e.g., corridors, easements, service areas) and their appropriate uses and disclaimers; start a conversation with local data managers

1.3. Continue to support initiatives that compile and maintain statewide geospatial datasets that are priority data themes of the Council, including AddressNC, NC Roads, NC Parcels, Statewide Orthoimagery, county and municipal boundaries, LiDAR elevation, surface waters, and geodetic control.

Lead: Statewide Mapping Advisory Committee

Tasks: Prioritize efforts to improve municipal boundaries and surface waters; sustain working groups to advise data programs and projects; support the AddressNC project and the local government role

1.4. Find solutions to make data sharing local-to-state more efficient to meet the needs of multiple statewide datasets and not place undue burden on local geospatial data managers.

Lead: Statewide Mapping Advisory Committee

Task: Maintain data content standards

Assist: State Government GIS Users Committee

Task: Define common data requirements from multiple state agencies

Assist: CGIA and Next Generation 911 Project Team

Task: Define data requirements and a workflow in collaboration with contractor and the Local Government Committee

1.5. Request all state agencies to make the Council's priority geospatial datasets discoverable and accessible through the NC OneMap Geospatial Portal.

Lead: State Government GIS Users Committee

Tasks: Identify priority datasets currently not discoverable and accessible through NC OneMap and find solutions with host agencies

1.6. Promote geospatial metadata for standard documentation.

Lead: Statewide Mapping Advisory Committee

Task: Metadata Committee—reach out to local governments, promote online videos, and provide onsite training

Category 2. Support applications of geospatial data

2.1. Support creation of services that publish results through online applications that include vehicle routing and address validation, from single requests to batch processing.

Lead: Statewide Mapping Advisory Committee

Task: Assist in analysis of business requirements and benefits for application development and geospatial services related to NC Roads and AddressNC

Assist: Local Government Committee

Task: Help promote local government data sharing for statewide datasets for roads and address points

2.2 Support other applications that derive business value from geospatial data assets and analytics.

Lead: State Government GIS Users Committee

Task: Identify common opportunities and requirements

Assist: Local Government Committee

Task: Identify common opportunities and requirements

Category 3. Collaborate for more integration of geospatial data in information technology for expanded benefits

3.1. Identify opportunities to collaborate on GIS solutions in state departments and divisions not directly represented on the Council to add value to state business processes.

Lead: State Government GIS Users Committee

Tasks: Survey state agencies to learn more about GIS needs and opportunities; collaborate with the Department of Information Technology on optimization of IT resources.

3.2. Identify opportunities to collaborate and inform municipalities engaged in “Smart Cities” initiatives about potential for GIS in information technology solutions.

Lead: Technical Advisory Committee

Tasks: Engage local government and university resources to research and identify potential applications of GIS in support of “Smart Cities” initiatives

Assist: Local Government Committee

Category 4. Collaborate with all parts of the GIS community in North Carolina

4.1. Identify opportunities to collaborate on geospatial data and technical solutions on a regional basis, engaging councils of government.

Lead: Local Government Committee

Task: Representatives participate on SMAC and working groups to identify opportunities for regional solutions

4.2. Reach out to jurisdictions with the least resources to find ways to add value with geospatial data and applications.

Lead: Local Government Committee

Tasks: Identify jurisdictions in need, priority business needs and data needs, and practical ways to assist; engage professional organizations in outreach and solutions

Assist: Statewide Mapping Advisory Committee

North Carolina Geographic Information Coordinating Council <https://it.nc.gov/gicc>

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