

Geographic Information Coordinating Council
MANAGEMENT AND OPERATIONS COMMITTEE

December 17, 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 declared a quorum, welcoming Jason Clodfelter, Hope Morgan, John Farley, Dan Madding, Tim Johnson, Jeff Brown and on the phone, Paul Badr.
2. Minutes of the October 22, 2018 meeting of the Management and Operations Committee were approved for adoption as submitted.

Mr. Rankin announced that, with John Dorman's retirement, Secretary of Public Safety Erik Hooks has designated Hope Morgan to represent the Department of Public Safety as a Council member. Mr. Rankin has appointed Hope Morgan to serve as GICC Vice Chair. Also, the State Budget Director Charles Perusse designated Bob Coats to represent the Office of State Budget and Management, replacing Nels Roseland as a Council member. Mr. Johnson observed that OSBM has been an important part of the Management and Operations Committee concerning budgetary aspects of the Council, and it is valuable to have Bob Coats in that role.

3. Quick Updates

Statewide Orthoimagery

Tim Johnson reported that imagery for the 2018 Northern Piedmont and Mountains project was delivered to Public Safety Answering Points (PSAP) in 26 counties during the week ending December 7. Counties on the border of Tennessee or Virginia received imagery shared by the neighboring states. Counties received imagery extending 7 miles around their boundaries to approximate the distance of cell phone coverage from which a 911 call could be received.

The kick-off meeting for the Southern Piedmont and Mountains 2019 project took place on December 13. The four contractors are the same as last year. The purchase orders have been completed early this time, and the contractors are doing flight planning. Acquisition will begin by February. The project team is promoting the opportunity for local governments to piggy-back on a state contract and engage a flight vendor to acquire additional products such as higher-resolution imagery, color infrared imagery, or planimetric data. Buy-ups in the last phase included High Point, Boone, Greensboro, and areas around Mocksville. Counties or municipalities may take advantage of the opportunity. Mr. Madding urged the project team to reach out to local governments to raise awareness of potential cost savings in acquiring color infrared imagery, in addition to notifying county contacts about who is the contractor in their county and pointing to the information on the NC Orthoimagery website. Hope Morgan

suggested a one-page pamphlet to describe the potential benefits of cooperative products. Mr. Johnson confirmed that details are available on the project [website](#) (cooperative products tab), and more messaging to local governments can be done by the project team.

NC Parcels

Jeff Brown reported that the fall update of statewide parcels is still in progress. He displayed a map showing 78 counties updated since September, another 11 counties updated in the summer, 8 counties last updated in the spring, and 3 counties last updated in 2017. A few of the counties have delays in updating property tax data this fall, delaying the update of parcels for sharing. John Bridgers in the Department of the Secretary of State has been contacting county GIS coordinators and county managers in some cases to promote completion of the fall update. In a discussion of incentives for counties to participate, benefits were noted:

- a county data manager may point consumers to NC OneMap for access to standardized parcel data, saving data distribution time locally (e.g., Watauga and Pender)
- a county has access to comparable data to neighboring counties (consistent fields)
- copies of parcel data are available online outside of a county in case local operations are interrupted by a storm event, ransomware, or some other problem

Mr. Brown acknowledged that NC Parcels lacks a mandate, local staff turnover can interrupt regular updates, and changes in computer assisted mass appraisal systems can occur from time to time. Nonetheless, 97 counties have participated in 2018. Hope Morgan suggested looking at new incentives to sustain participation. What would make it more beneficial or easier to participate? This can be discussed by the Working Group for Seamless Parcels. Jason Clodfelter added that years ago counties tended to charge for copies of parcel files with consideration of large initial investments in the data. Over time, data distribution policies have changed for many local governments. He emphasized the importance of communicating benefits to the data providers. The Local Government Committee can continue its communication role. Mr. Johnson advised communicating the value of datasets state agencies develop and share with local governments, particularly orthoimagery and LiDAR elevation products. The state investment has been significant. Mr. Rankin suggested framing the issue as state/local “teamwork” that produces benefits.

Census Geospatial Data

Jeff Brown reported briefly on behalf of Bob Coats.

- The Local Update of Census Addresses (LUCA) submissions are under review by the Census Bureau. There will be an opportunity to identify new construction of residential structures in 2019 as well.
- The Participant Statistical Area Program is beginning. Mr. Coats emphasizes the importance of local governments defining geographic areas for which statistics will be published. For example, the Census will not publish data for what were delineated as “traffic analysis zones” in prior decennial census geography. Comparable statistical areas could be proposed by local governments if needed for transportation planning. Also, an unincorporated settlement may be delineated as a Census Designated Place if needed.
- The annual Boundary and Annexation Survey (BAS) is getting underway. The Department of the Secretary of State is the coordinating agency for North Carolina.

- Bob Coats and the State Demographer, Michael Cline, are considering more regional presentations to promote Census 2020, starting in January.
- The North Carolina Complete Count Commission was established on October 22 when Governor Cooper signed Executive Order 79.
- More information is available on the NC Census 2020 [website](#).

4. Municipal Boundaries

Mr. Brown reported on behalf of Bob Coats, co-chair of the Municipal Boundaries Working Group. The group last met on October 29. In brief, the group is testing a new data flow for annexation data (actual documents) with a pilot group of six counties, including Forsyth, with appreciation to Jason Clodfelter. The goal is to answer questions about the timeliness and practicality of data submissions to a state entity, as well as the quality of data coming from county data managers. The ability of metadata to capture and describe accuracy and currency is also being assessed. Incentives for currency and accuracy are being considered. In addition, the group is considering ways to make the source annexation documents, including plats, consistently digital and geo-referenced.

Mr. Badr added that Gary Thompson sent him a proposal for improving annexation plats and collaborating with state agencies to produce better quality municipal boundaries. This would be similar to the approach taken by NC Geodetic Survey for establishing state and county boundaries. The proposal is intended to be discussed at the next meeting of the working group. Mr. Badr will send a copy to Mr. Brown to share with the M&O Committee.

Mr. Clodfelter commented that MapForsyth did a comparison of what the Secretary of State had received, what the Census Bureau had on file for boundary and annexation data, and what MapForsyth (city/county) had on file. The differences were eye-opening. For example, one municipality had numerous small annexations in one year that had not been reported to the Secretary of State. He noted that MapForsyth uses annexation data in 911 computer aided dispatch data layers and other layers where the corporate limits are needed. His office is requesting to be on distribution lists of municipal clerks to establish a consistent flow of annexation documents. Otherwise, his office relies on informal notification by elections or tax officers. He submitted actual documents to the Secretary of State as part of the pilot data flow from selected GIS coordinators. The working group favors a data flow that is comprehensive at the local level and consistent in what is shared with state agencies for compilation of statewide municipal boundaries. Mr. Clodfelter explained that municipal and county managers regularly meet and communicate within the county, and a topic could be the fiscal impact of incomplete municipal boundary data.

Mr. Brown added that the NCDOT annual updates for the Powell Bill Program are involved in the process, and the working group reached out to other state agencies to identify other requests for municipal data, with the intention of making data sharing more efficient. Another factor is upcoming geospatial data management for Next Generation 911, including municipal boundaries as a required dataset.

Ms. Morgan added that floodplain map maintenance requires extraterritorial jurisdictions (ETJ)

as well as municipal boundaries. The datasets are related, and the working group will look into opportunities.

5. Working Group for PLS/GIS

Mr. Johnson reported that he has been editing a document describing the use cases and findings. He needs more time to complete the task. Once complete, he will send it to members of the small group and the NC Board of Examiners for Engineers and Surveyors (NCBEES) for review. The plan is to finalize the document and send it to the larger working group. Also, Mr. Johnson, Kent Rothrock, and John Logsdon have agreed on language for a disclaimer intended for data managers to apply; that can be shared with the larger group, too. Mr. Johnson intends to set a meeting before the next GICC meeting to clarify a message to send to the GIS and PLS communities. In addition, the NC GIS Conference will include a panel session on GIS and PLS. Mr. Rankin urged timely completion and dissemination, and he noted interest in our findings nationally as well.

6. GICC Annual Report

The GICC Annual Report, including the new 1-page executive summary, was distributed to the M&O Committee for review early this month. No changes were identified. The Committee agreed that the Annual Report is ready for submission to the Secretary of Information Technology. Once approved by the Secretary, the report will be submitted to the Governor, the General Assembly leadership, and the General Assembly's Fiscal Research Division.

7. Council Meeting Follow-up from November 8

Minutes from the November 8 meeting are in draft form, to be finalized soon. The Minutes have details on the presentations and discussions related to Hurricane Florence, which made up the bulk of the meeting. Mr. Johnson explained that staff tries to strike a balance—not to create a transcript, but to include enough detail to capture the significant points. The November 8 meeting was packed with information.

Mr. Rankin advised that a separate document could highlight the value of geospatial data and technology covered that day. For example, participating in NC Parcels provides a second source of parcel data if something should disable a county server or if staff are not able to share parcel data with a neighboring county during an emergency response. Also, approaches to providing GIS support to counties in need has great value. A one-pager to post on the GICC website and to hand out will be valuable. Mr. Farley added that new technology was applied, particularly unmanned aircraft systems.

Ms. Morgan expressed interest in next steps—how do we learn from experience and work together? She learned that state agencies are doing much more than she realized from her position in the state Emergency Operations Center (EOC). It would be a good idea to identify efficiencies and resources in state agencies that can be included in emergency response. She explained that a lot of questions come to NC Emergency Management that could be shared with

other agencies to take advantage of more GIS staff in a coordinated way. Mr. Farley and Mr. Madding concurred.

Considering GIS staff assisting on location, Ms. Morgan explained that NC Emergency Management engages the NC Local Government Information Systems Association and its “IT Strike Team” (IT and GIS) to provide volunteers to assist emergency operations. In discussion, the Committee highlighted the value of communicating expectations about paying staff, or not, to join a strike team, and identified multiple dimensions—including data creation and management, data access, publishing web services and related server performance, personnel, and financial issues such as seeking FEMA reimbursement for staff working on location in an affected county.

Mr. Clodfelter added that the Local Government Committee discussed local government GIS resources that are not fully utilized in response to events—most are not aware of the NCLGISA IT Strike Team or not trained to participate on the team. Local governments need to know more about how to offer help and how to request help when needed. His office has participated in the county EOC and has taken FEMA Incident Command System (ICS) training courses. However, GIS staff may not know what to do and operations people may not know what to ask GIS people to do. He noted that some counties do not include GIS staff in a county EOC. Ms. Morgan and Mr. Farley echoed the challenge of getting into an EOC (state or local) and understanding what maps and analysis are most valuable. Operations folks are field oriented and structured in certain ways that make it hard to integrate new procedures and information. Communication and learning are essential for better use of geospatial data and technology.

Mr. Farley suggested a daily state/local conference call during response to identify needs and resources, analogous to the FEMA daily geospatial call. Ms. Morgan added that NCEM has streamlined processes for how to distribute resources such as generators, pumps, etc., as well as people. This runs through area and branch coordinators and county emergency management contacts, all through the operations side. She sees an opportunity to broaden that to involve more state and local government staff who are trying to help.

Mr. Farley added that unmanned aircraft systems were newly deployed in a significant way. Ms. Morgan observed that the NCLGISA IT Strike Team was effective but has a limited pool of volunteers. Engaging more GIS resources will be valuable. Integrating GIS in field operations has a lot of unrealized potential. Also, the Working Group for Orthoimagery and Elevation is planning to look at the wealth of aerial imagery and large number of aircraft involved.

Mr. Rankin requested a working group for enhanced emergency response to identify lessons learned, strengthen response, and leverage what we have. Identifying what can be improved will be timely and valuable for future events. He asked Ms. Morgan to chair the new working group and to draft volunteers, including people not on the Council. The working group will report to Management & Operations Committee.

8. Council Meeting Agenda for February 13

Mr. Johnson explained that the meeting will be at the Triangle J Council of Governments in the Research Triangle Park.

Technical presentation possibilities include Next Generation 911, the NC DOT's Advanced Transportation through Linkages, Automation and Screening (ATLAS) Project, more follow-up to Hurricane Florence, the 2022 Reference Frame, and public access to infrastructure data.

After discussion, the Committee arrived at the following:

- Hold the topic on public access to infrastructure data until the May GICC meeting, engage DIT counsel Jessica Middlebrooks in research on the legal framework, and invite her to the next M&O Committee meeting (April 1).
- Check on the status of the Next Generation 911 geospatial contractor (to be selected) in January to see if a presentation could be ready for the February GICC meeting.
- If Next Generation 911 is not ready, invite Ryan Arthur of NC DOT to do a presentation on the ATLAS project with a focus on geospatial data and technology and collaboration.
- Ask Scott Lokken to deliver a 10-minute message about 2022 Reference Frame in May and another message later in 2019.
- Smart Cities should be considered for the list as a visionary topic. Mr. Badr will send an abstract for a presentation by a recommended outside presenter.

9. Committee Status Reports

Local Government Committee

Jason Clodfelter reported that the LGC met on November 28, 2018. He briefed the LGC on the November Council meeting, which led to discussion of how to organize resources for emergency response. On the topic of the NCLGISA IT Strike Team, most LGC members were not familiar with the entity. NCLGISA representative George Brown followed up with the past NCLGISA president Chris Koltyk for more information. He found, and Mr. Clodfelter confirmed, that NCLGISA intends to continue to organize a GIS oriented IT Strike Team, and the team is open to people who are not members of the association. There is a vetting process for volunteers. Participation is a significant commitment. The NCLGISA website has information about volunteering for the [IT Strike Team](#). Mr. Clodfelter offered to assist NCLGISA with communication via the Local Government Committee. He plans to use a newsletter format as one tool. He added that Wayne Brewer, Carolina URISA representative on the LGC, is exploring a GISCorps in NC analogous to the national URISA [GISCorps](#). Mr. Clodfelter emphasized the potential value from better organized public and nonprofit resources, and that a communication plan is essential to realize potential value.

Ms. Morgan added that the NCLGISA IT Strike Team has been engaged by the state EOC internally in past events; assignment on location in a county (Pender) was a first-time occurrence. There is a formal process through NCEM for engaging NCLGISA or any other set of organized volunteers in emergency operations. She offered to share a description of NCEM's expected volunteer capabilities. The NCEM approach is to organize "packages" of people in preparation for events.

Mr. Farley observed that once business needs are clarified and resources organized, criteria for prioritizing where to respond will be needed.

Mr. Clodfelter continued, describing an LGC discussion about public access to local government utility data. The committee's survey of local governments, issued through various listservs and open through December, has generated about 60 responses to date. He plans to compile findings in January.

In a parallel effort led by Ms. Morgan, the Statewide Mapping Advisory Committee is gathering information from private utilities, using similar questions to those posed by LGC. There may be some overlap regarding municipal members of Electricities, as the latter participates in the state EOC.

State Government GIS Users Committee

Snow led to cancellation of the SGUC general meeting in December. Concern of the SGUC Executive Committee continue to include the Enterprise License Agreement for Esri software (extended through June). Upcoming talks will include getting a better handle on agency software needs and figuring out the latest Esri pricing and licensing. Another concern is potential for using cloud resources, particularly in the context of Hurricane Florence and potential impacts to state servers. NCDOT is pursuing cloud resources. Mr. Johnson added that this may be of interest to other state agencies. For example, CGIA is examining cloud services for NC OneMap.

Federal Interagency Committee

No report.

Statewide Mapping Advisory Committee

Mr. Badr reported on progress since the GICC meeting.

- Regarding public access to geospatial data for water, sewer, and other infrastructure, Hope Morgan is gathering information about data distribution policies of private utilities that are involved in emergency response. She is asking for differences in emergency and non-emergency policies. This will complement the research by the Local Government Committee about policies and practices in local governments.
- Updates for Statewide Orthoimagery, NC Parcels, and municipal boundaries have been presented already today.
- The Working Group for Orthoimagery and Elevation will meet in January and discuss the many sources that produced imagery in response to Hurricane Florence.
- Other priorities for SMAC in January include:
 - the 2022 Reference Frame and implications for the state plane coordinate system
 - more analysis of land cover business needs
 - evaluation of hydrography data produced by NCDOT's ATLAS project

Technical Advisory Committee

Dan Madding reported that he is organizing an ad hoc group to define what should be included in a paper on GIS in Smart Cities. A meeting on December 13 included Alice Wilson (New Bern), Jim Alberque (Raleigh), Steve Averett (Greensboro), David Giordano and Jeff Brown. The next

step is to condense meeting notes and concepts into an outline of a paper intended to guide municipalities in understanding Smart Cities initiatives and the role of geospatial data and technology. An outline will lead to a rough draft as a starting point for other volunteers to add detail. Mr. Madding and Mr. Badr will confer about Mr. Badr's Smart Cities contact in Virginia state government. Mr. Madding expects an outline by the end of January.

Mr. Farley added a related topic: he sees a need to clarify the concepts of "Civil Integrated Management" and "Building Information Management" as they relate to collecting, organizing, and managing information about transportation construction projects.

10. Other Items

None.

11. Future Meeting Dates

The Management & Operations Committee set meeting dates for 2019, all Mondays at 1:00 PM at CGIA:

April 1
June 24
October 14
December 16

The meeting adjourned at 2:50 PM.