

Geographic Information Coordinating Council
MANAGEMENT AND OPERATIONS COMMITTEE

January 29, 2018

1:00 to 3:00 PM

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

MINUTES

1. Acting Chair Stan Duncan called the meeting to order and welcomed Bob Brinson, Bob Coats, John Farley, Dan Madding, Scott Lokken, Tim Johnson, Jeff Brown and on the phone, Kathryn Clifton.
2. Minutes of the December 4, 2017 meeting of the Management and Operations Committee were approved for adoption as submitted.

Mr. Duncan announced Governor Cooper's appointment of Alex Rankin to serve as Chair of the GICC beginning January 26. Mr. Rankin is President of Concord Engineering & Surveying, Inc. and has served on the Council as a voting member and as an advisory member. Mr. Duncan congratulated Mr. Rankin by phone this morning. Mr. Rankin was not available this afternoon and will be away on business on the date of the next Council meeting, February 14. He asked Mr. Duncan to serve as Acting Chair today and on the 14th in his stead. They discussed the agenda for this afternoon. Mr. Duncan will continue to serve as a Council member. Mr. Duncan thanked the committee members for their contributions to the Council and tolerance for his questions as the committee worked through issues.

3. Quick Updates

Statewide Orthoimagery

Tim Johnson reported readiness for orthoimagery flights starting as early as next week for the Northern Piedmont and Mountains 2018. The project team is approving flight plans. There is much interest among local governments in piggy-backing on the state project to buy-up higher resolution imagery (3-inch ground resolution) and planimetric data. Jurisdictions include the City of High Point, the Town of Boone, and municipalities in Davie County. Growth and infrastructure management may be reasons for the higher resolution products. The project team is preparing a proposal to the NC 911 Board to acquire imagery in the next phase, Southern Piedmont and Mountains 2019, to complete the second four-year cycle. The team is preparing to close out the Eastern Piedmont 2017 project after successful delivery to Public Safety Answering Points in December, six weeks earlier than in previous years.

NC Parcels

The fall update of statewide parcels was successful in 96 of 100 counties. The remaining counties have had issues with staffing or data. The team will reach out during the spring update, beginning in March. He noted that the field for present use value (yes or no) is now populated by

50 counties. The NC Parcels Program is becoming more routine for participants. At this time last year, 82 counties had completed a fall update.

The plan for 2018 is to update all counties in the spring, make more progress on populating parcel use descriptions and present use value, sustain the NC Parcels Transformer (annual approvals required by the Department of Information Technology), continue cost-share from NCDOT, NCDA&CS, and CGIA, and continue technical assistance from the Working Group for Seamless Parcels and CGIA.

Regarding the frequency of updates, a few counties have set up a quarterly update cycle voluntarily. Mr. Farley is preparing a list of counties where most of the NCDOT highway projects are located to guide the NC Parcels team in efforts to achieve quarterly updates where changes in property data are most frequent.

Census Geospatial Data

Bob Coats reported on Census programs. He shared a map of participation in the Local Update of Census Addresses (LUCA). Among counties, Cherokee and Mitchell declined to participate. Also, 11 counties did not respond by the December 15 deadline for sign-up (Clay, Madison, Yancey, Davie, Orange, Montgomery, Anson, Duplin, Hertford, Bertie and Dare). He reported that non-participating counties need attention to fill in gaps on address verification. He reviewed the 2014 *AddressNC* data and found that only 2 of the 11 non-responding counties distinguished between residential and nonresidential addresses. He sent *AddressNC* addresses to the Census for analysis and got a report back that 59,594 addresses in those 11 counties do not match what the Census has in its master address file. Those addresses need analysis (e.g., are there new residential addresses or were there commercial addresses not included in the Census database?). The Office of State Budget and Management asked Mr. Coats what cost may be incurred to verify the non-matching addresses. He needs to know if there is going to be a request this fiscal year. The likely LUCA timetable in NC is data distribution from the Census Bureau in March, with 120 days to submit verified addresses and corrections.

Mr. Coats added that counterparts in South Carolina requested updated state boundary data, and he received information from Gary Thompson on the updated boundary to share with the Census Bureau and South Carolina.

Also, the Census Bureau will hold three training sessions about the Boundary and Annexation Survey (BAS) in February (Wilmington 2/12, Durham 2/13, and Charlotte 2/14). Those are open to local governments to learn how to submit information. A new contact list from the Census Bureau will be reviewed by the Association of County Commissioners. The Department of the Secretary of State is the lead agency for BAS and will follow up with non-responding counties as needed. Mr. Coats will add Mr. Farley to the mailing list for BAS announcements for purposes of NCDOT collaborating with the Secretary of State on municipal boundaries for efficient data collection.

National Agriculture Imagery Program (NAIP)

Dan Madding described an issue concerning NAIP imagery and public access. Since 2003, US Department of Agriculture (USDA) Farm Service Agency (FSA) has provided statewide leaf-on

aerial imagery for NC and other states at 1-meter ground resolution. The imagery is a source for USDA to map farm fields across the nation. Since 2010, USDA has delivered 4-band imagery that enables color infrared and true color versions. North Carolina has statewide aerials for 2004, 2005, 2006, 2008, 2009, 2010, 2012, 2014 and 2016. NC is scheduled to be flown again in 2019 as part of USDA's new 3-year cycle (one-third of the nation annually). USDA alone supports 80 percent of the acquisition costs and all of the program's administrative costs amounting to around \$7.85 million dollars for national coverage. Several other Federal agencies contribute to the cost including \$1.55 million from the US Geological Survey (USGS), the US Forest Service, Natural Resources Conservation Services and others. Some Federal partners are not paying expected cost-share or not paying on time for flight schedules, presenting budget problems for USDA.

FSA expects costs of NAIP acquisition can be reduced by half if they allow a vendor to license the data to consumers outside of USDA for fees to recover some of the cost. FSA sees a vendor product with licensing fees as a low risk approach to the next cycle of NAIP imagery. Mr. Madding expects a decision on how to proceed by USDA in May.

Mr. Madding also described a related subscription product (Valtus) that offers a higher resolution version of the NAIP imagery (apparently acquired at 1-foot resolution and resampled to 1-meter for the NAIP product).

Mr. Madding is opposed to a move by USDA to subscription-based access to NAIP imagery. He would like the GICC consider writing a letter to USDA in opposition to the end of free public access to NAIP imagery. The letter recipient is to be determined. One recipient could be the USDA aerial photography field office. NC Department of Agriculture & Consumer Services has a federal liaison who is looking into this.

Also, Mr. Madding is consulting USGS considering NAIP has been used in The National Map. It is not known if USGS would consider state-generated imagery sources for The National Map.

As an example of one of a range of uses, Mr. Madding displayed a new statewide tree cover dataset created by classifying color infrared NAIP imagery to extract areas with trees as a subset of land cover. Products like that are at risk in the absence of publicly available NAIP color infrared imagery. Concurrently, the Working Group for Land Cover is researching business needs for land cover that will define needs related to resolution, frequency, and classes.

Mr. Johnson added that the National States Geographic Information Council (NSGIC) will meet in late February, and NAIP imagery is likely to be a topic of discussion. The required timing of an opinion from the Council is to be determined. Mr. Johnson and Mr. Madding will provide more information at next meeting of the Management and Operations Committee. Mr. Duncan thanked Mr. Madding for bringing up the issue. An item for NAIP will be added to the Council agenda for February 14.

Working Group for Professional Land Surveying and GIS

Bob Brinson, chair of the working group, and selected members of the group met with the Surveying Committee of the NC Board of Examiners for Engineers and Surveyors for the third time on January 23 to review use cases. There are two use cases remaining. Discussion of

“spatial analysis” was extensive. Could a GIS practitioner take an engagement that would produce an inventory of potential impacts of a proposed construction project? The inventory would be intended to identify items that would require a surveyor or engineer to specify impacts of construction. Does this require a surveyor or engineer from the initial analysis or is there a useful engagement to guide a client about what to expect? In another example, is an approximate representation of an envisioned development on a property generated by a GIS professional a beneficial starting point for an engineer’s site plan, compared to a “cocktail napkin” drawing by a property owner? Defining workspaces like those can be challenging but beneficial.

The next meeting is scheduled for March 20. The working group needs to finish up use cases and be prepared to present a draft work product to the collaborative meeting. What-if questions may be helpful, along the lines of a decision tree.

In discussion, points included the importance of understanding the GIS field in relation to the field of surveying and engineering in the collaborative meetings. More work on the gray areas is needed. Use cases need to be related to NCBEES rulings to be informative to the Council and the Board. The working group needs to set aside the government exemption in its thinking and focus on GIS practice, whether private or public. For example, a GIS professional should describe and document accuracy of data for a client/consumer in proper GIS practice. Accuracy is not a concept limited to surveying. The concept of a licensing board for GIS practice or state certification of GIS professionals continues to be a consideration. More information about the relationship of GIS practice and professional licensed surveying in other states would be useful.

Mr. Duncan suggested the working group think beyond documenting the use cases and develop recommendations to the Council that would clarify, support and sustain GIS practice in North Carolina in the context of what the working group has learned from this process.

Mr. Coats reminded the committee that the Office of State Budget and Management is available to analyze the fiscal impact of legislation if something related to this issue comes up in future sessions of the General Assembly.

4. New Council Member Orientations

Mr. Johnson and Mr. Brown have traveled to visit new Council members and provide orientations. Sessions were held with Paul Badr, Greg Cox, Scott Lokken, Jason Hedley, and Lee Worsley. An orientation with Debbie Joyner will take place early in February. These have been good opportunities to learn more about the new Council members and share information about how the Council operates and discuss expectations for members. All the meetings have been valuable and encouraging.

5. Council Meeting Agenda for February 14

The committee reviewed a draft agenda. A request by Mr. Madding on the subject of NAIP imagery will be added to the agenda. More time will be added to introduce new members who were not able to attend in November. Mr. Coats will not be available on February 14. CGIA will invite the vice chair of SMAC, Gary Thompson, to give a report from SMAC. The discussion of

Council priorities will continue with part 2. Mr. Duncan will confer with Mr. Rankin to finalize the agenda.

6. Geospatial Data Act of 2017

Mr. Johnson explained he took comments from Council members and drafted a letter in support of the Geospatial Data Act of 2017 intended to go from the Council to congressional committee chairs. He consulted with John Correllus, Deputy State CIO and Chief Data Officer, and Nate Denny, NCDIT's Senior Advisor for Legislative Affairs, about how to proceed with a liaison in Washington, DC. Direction is pending. The bill is in the Senate Committee on Commerce, Science and Transportation. No action is evident to date. The Geospatial Data Act will be a topic of discussion at the National States Geographic Information Council meeting in late February.

7. Next Generation 911

The request for proposals for the GIS portion of Next Generation 911 has been issued by NCDIT. Proposals are due by February 9, and the target date for completion of review is February 25. Mr. Johnson and Mr. Farley are on the review committee along with Erin Lesh of NCDOT. They will urge collaboration with state agencies, for example, in integrating local government street centerlines.

8. Committee Status Reports

Local Government Committee

Ms. Clifton reported the LGC will meet next on February 28. The committee needs to fill out membership. Despite her new seat on the Council, she will continue to chair the LGC until the committee elects a new one later this year. LGC had a good discussion about land cover data and the committee participated in a land cover survey. The committee discussed imagery including color infrared imagery. There continues to be interest in the Working Group for PLS and GIS. Ms. Clifton is interested in what others states are doing on that topic. Mr. Johnson and Mr. Farley will do research on other states.

Federal Interagency Committee

Scott Lokken of the National Geodetic Survey reported he met with Doug Newcomb and Silvia Terziotti to learn about past FIC activities and plans. He needs to schedule meetings of the Executive Committee and general members. There is interest in how federal agencies apply GIS to wildfires to share experiences and resources, especially in western North Carolina. Information on new datums for 2022 will be a topic as well.

State Government GIS Users Committee

Mr. Farley reported the SGUC Executive Committee will meet tomorrow to begin working on details for the next enterprise license agreement with Esri starting in Fiscal Year 2018-2019. The survey of state agencies will be revised to assist SGUC and Esri in understanding current software needs. SGUC has a subcommittee to follow up on details and prepare for negotiations with NCDIT and Esri. One difference for this round, NCDIT has a limited services contract for GIS in place, meaning Esri professional services need not be in the ELA. Also, SGUC had a

good general meeting in December featuring presentations on open source GIS and applications of ArcGIS Online.

Statewide Mapping Advisory Committee

In the absence of a SMAC chair, Mr. Brown reported progress by working groups. The land cover group issued a survey and will review results soon. The Working Group for 2022 Reference Frame will meet again soon. Also, the Working Group for Orthoimagery and Elevation is updating its 2011 paper on color infrared imagery after reviewing an analysis of processes and costs of producing color infrared imagery from the Statewide Orthoimagery Program. Mr. Farley added that NCDOT will research what can be derived from a combination of LiDAR data and color infrared imagery, for example, impervious surface. SMAC also discussed elevation data products derived from LiDAR including contours. The working group will do more research on contours with consumers in mind.

Technical Advisory Committee

Mr. Madding had to leave before the TAC report. In a discussion, the committee noted that with completion of the guide to open source GIS software, the TAC is available for a new task. Work may be related to land cover solutions (given business needs from that working group), issues related to open source GIS software, LiDAR and derivative products, and/or getting more out of the LiDAR investments, especially the 30-points per meter collected by Geiger sensors. NCDOT Photogrammetry Unit is a resource for this as well. Implementation of 2022 Reference Frame may be a future topic for TAC.

9. 2019 NC GIS Conference Update

Tim Johnson reported that agreements with the Benton Convention Center and the Marriott and Embassy Suites hotels in Winston-Salem are in place and registration and hotel rates will be announced this week. In addition to the change in location, the conference will cover an extra day, and there will be a daily rate available as an option. The conference committee will market the improved facility and features of the downtown area. The website will be released this spring and a management company will be engaged soon.

11. Future Meeting Dates

The next Management & Operations Committee meeting is to be determined.

The meeting adjourned at 2:55 PM.