Geographic Information Coordinating Council
MANAGEMENT AND OPERATIONS COMMITTEE
June 20, 2016
1:00 to 2:30 PM
Center for Geographic Information and Analysis
301 North Wilmington Street, 7th Floor
Room 770A

MINUTES

1. Chair Stan Duncan welcomed Bob Brinson, Dan Madding, John Farley, Tim Johnson, Joe Sewash, Bob Coats, Jeff Brown and Brett Spivey and on the phone Kathryn Clifton

2. Minutes of the April 18th meeting of the Management and Operations Committee were approved for adoption as submitted.

3. Quick Updates

a. 911/NG911 in the Media

For awareness of a GIS-related issue, Stan Duncan summarized a national news item involving 911. Mr. Duncan explained this is not a topic for Council action, but it is a prominent example where geographic information matters. A 911 call from Cary near its county boundary was picked up across the county line by the Chatham County emergency communications center where the caller's address could not be found from available data at the center and response was delayed. Joe Sewash observed that in the future, NextGen911 would be capable of identifying the location of the caller's handset for call routing. However, there are scenarios where NextGen911 would not necessarily produce the caller's location. For example, a call from a moving vehicle could not be located at the site of the reported incident.

NextGen911 provides an opportunity to apply consistent GIS datasets, aggregated from local authoritative sources and standardized, to support efficient call routing. The National Emergency Numbering Association (NENA) has worked on a standard schema for NextGen911 and may have a final version in the second quarter of 2017. In the meantime, North Carolina is evaluating the current form of the NENA standard for data exchange planning purposes. For future consideration: once the national standard is in place, what would be the utility of a North Carolina specific schema? Bob Coats added that the National Emergency Address Database (including technology to identify rooms within a building) may be another resource for emergency response and dispatch within a decade. This is separate from a National Address Database.

b. *AddressNC* and Census Geospatial Data

Mr. Sewash reported that a budget item for *AddressNC* was in the Governor's budget, but not in the budgets of the House or Senate to date. On the national level, the Federal Geographic Data Committee's Executive Committee acknowledged the "addressing" theme in the National Geospatial Asset Catalog after longtime debate. For the National Address Database, the US

Department of Transportation and the Department of Commerce (Census Bureau) have taken on joint leadership for the addressing theme.

Bob Coats, Governor's Census Liaison, reported that the Census Bureau is preparing to send out a Federal Register notice about the Local Update of Census Addresses Program (LUCA). In late 2018 there will be a 120-day period for address verification. *AddressNC* is a tool for lessening the burden on local governments. LUCA will be followed by the Participant Statistical Areas Program (PSAP), not done concurrently this time. Working back from late 2018, Census Bureau will need statewide data from North Carolina by a date to be determined. Mr. Coats is chair of a national steering committee that will meet in Raleigh July 18-20, and the agenda includes Greg Hanks, Deputy Chief of Geography for the Census Bureau, who may be available to discuss the timetable. Also, Mr. Coats offered to coordinate Census Bureau participation in the 2017 NC GIS Conference.

b. Orthoimagery

Tim Johnson reported that the project team is closing out the Southern Piedmont and Mountains phase (imagery acquired in 2015) including final delivery of imagery from re-flights in the Sandhills area. A final report will be completed this summer. For the Coastal Region (2016) training sessions for using the visual quality control tool will begin in July, and state and local quality review will begin in August. Last week, NC 911 Board and the Department of Information Technology (DIT) signed off on the agreement for the Eastern Piedmont and Mountains (2017) phase. CGIA will engage NCDOT Photogrammetry and NC Geodetic Survey to be on the project team again. A new agreement with Fort Bragg will be needed for 2017 acquisition. Again, CGIA will reach out to the neighboring states of South Carolina and Virginia to acquire copies of imagery along the state border to fill out the 7-mile requirement for imagery beyond NC county boundaries.

c. NC OneMap

Brett Spivey reported that CGIA has changed the format of the tiles of orthoimagery that are stored and downloadable. Instead of tiles in TIFF format with JPG compression, tiles were converted to MrSID compressed format. This was necessitated by disk storage space concerns as the phases of orthoimagery are completed and added to the NC OneMap imagery server. CGIA gained between 20 and 25 percent more space by changing file format. Although MrSID format is proprietary, GIS and mapping software packages have capability to use MrSID files or can add plug-ins to make the files readable for display. The benefit is the extension of the current system for an additional three to four years, accommodating the 2016-2019 cycle of statewide imagery as well as the older imagery served through NC OneMap. Also, CGIA anticipates being able to serve countywide mosaics (one file containing all the imagery for a county) to meet the needs of consumers that need imagery from areas larger than downloadable user-defined areas.

d. NC Parcels

Jeff Brown displayed the latest map showing the status of NC Parcels by county, with 82 counties updated in 2016. CGIA successfully renewed the contract with the Carbon Project, Inc. for another year of operation and maintenance of the cloud-based Parcel Transformer. Cost share from the Department of Transportation, Department of Agriculture and Consumer Services, and CGIA support the operation and maintenance.

Mr. Duncan added that in his conversation with staff from the NC Association of County Commissioners, it is apparent that county GIS operations are located in different departments from county to county (e.g., tax administration, land records, IT, planning, or a specific GIS department). A survey in 2010 found a variety of departmental locations for GIS (http://www.ncgicc.org/Portals/3/documents/Location_of_County_GIS_Operations.pdf).

4. Working Group for Professional Land Surveying and GIS
Mr. Duncan announced that he has appointed Bob Brinson to serve as chair of a new working group on professional land surveying and GIS. Mr. Brinson and Mr. Johnson confirmed that the working group will be large, representative and inclusive of stakeholders. A review of the current list of members led to a recommendation to add a photogrammetrist, an NCDOT engineer, and another private sector member.

Mr. Duncan noted that NC Association of County Commissioners did not have additional information about the legislative changes related to land surveying and GIS and potential impacts.

Mr. Farley explained his understanding that NCBELS interprets the statute in question to mean the government exemption is still in effect, despite the change in 89C-25(7), based on language in another section (89C-19). That may be the case, but it leaves open the question of authority over public and private GIS by the GICC and NCBELS. Mr. Farley recommended equal attention to public and private GIS questions and concerns. Mr. Duncan noted that current interpretations by NCBELS do not treat the same action the same way depending on whether the action is done by a public or private GIS practitioner.

While it may not be clear if the statute change affects government GIS, NCBELS has challenged private service providers. Mr. Farley emphasized that GICC statutory responsibility includes coordination, direction and oversight of public and private GIS efforts.

A committee discussion brought up questions related to instances where mapping is done to inform legal determinations and where maps are produced to represent an inventory of features. The list of “inclusions and exclusions” originated from the NC OneMap data priority list and was developed by the former GICC Surveyors’ Model Law Working Group in cooperation with NCBELS back in the 2009-10 timeframe. It was created to facilitate discussion at that time. Specific use cases would be more meaningful and adaptable to a wide range of situations. For example, delineating the extent of a property boundary or a tree stand using a surveyor-sealed product such as orthoimagery for reference is not surveying. In a particular project, GIS may be used in preliminary mapping and analysis, surveying may be essential to establish location of certain features, and GIS may be used again to communicate results in the context of a base map. Accuracy varies depending on the need, not on the type of dataset.

Clarifying the authority to create data results in better guidance than a list of “inclusive” datasets. Data creation and GICC-adopted standards need to be considered in defining use cases. NCBELS rules and guidance documents, created years ago, need careful review as well as the statutory language. Overlap between GICC and NCBELS responsibilities need to be identified and resolved to a practical extent. Mr. Farley suggested an evolution in respective

responsibilities whereby the Council is involved in issues about particular applications of GIS before NCBELS initiates enforcement actions. Updated documentation could follow. Periodic review of responsibilities and rules would be needed as technology changes.

Mr. Coats explained that rules to implement legislation come to the Office of State Budget and Management. If the preferred approach—an understanding between the Council and NCBELS—turns out to be a partial solution, a formal rulemaking process is an option after differences are distilled to the smallest possible set of issues.

Mr. Brinson will ask the working group to build understanding of the legislation and rules and the impact on GIS, both public and private; develop clear use cases; and clarify the facts before engaging NCBELS in discussions. As part of the information to be provided to the working group, Mr. Johnson will send documents from the previous working group on this topic as well as the list of volunteers for the new working group. He gave the committee a preview of the draft charter for the working group, based on the action item from the May 11th Council meeting. The charter includes background, topics, and tasks. The committee will review the draft charter and send comments to Mr. Johnson. The intention is for the group to meet before the August Council meeting.

5. GICC Website

Jeff Brown gave the committee a preview of the new GICC website. He explained that CGIA is working with DIT to take advantage of tools and templates consistent with the state's "Digital Commons" approach to website design across the state government enterprise. Content is based in part on priorities expressed by the Council and its coordination partners. The primary audience is the GIS community, but there is attention to citizens being able to navigate this and other state websites in consistent ways. Reports and minutes will be posted for three years, with earlier documents available from CGIA. Drupal is the content management software.

Suggestions from the committee:

- list the standing committees alphabetically
- add a link to CGIA's home page when that is upgraded to the new software
- take advantage of Iframes (an HTML document embedded inside another HTML document on a website) to add graphics and perhaps interactive maps and/or links to maps at other web locations
- avoid wrapping of Council member names and phone numbers in the member list.

Release of the website is planned for July. CGIA will receive training in July to be able to take on maintenance responsibility.

6. Committee Reports

Mr. Farley reported that the State Government GIS Users Committee's Executive Committee is working with DIT on a GIS services contract that will give state agencies another option for short-term GIS assistance. A request for proposals would be the next step, followed by selection of qualified service providers. Once in place, the contract would enable state agencies to engage one of the service providers on a task order basis. The intent is to meet needs for temporary technical services, not to replace RFPs for large projects. Mr. Farley added that Council-adopted

standards may be referenced in contracts for consistency. Local governments would be eligible to take advantage of this convenience contract unless there is a local rule against it.

Mr. Madding reported that Technical Advisory Committee completed the technical document on mobile devices and GIS. Looking to a work plan for 2016-2017, Mr. Madding explained that a technical architecture guide is on hold, awaiting more information on enterprise architecture from DIT. On another potential topic, he observed that the Council-adopted standard for classifying land use/land cover (1996) may need revision. Mr. Brown confirmed that the standard was developed by a task group in conjunction with one-time statewide land cover mapping by CGIA under an EPA grant. Alternatives include Anderson (1976) classification (a modified version is used for National Land Cover Data) and American Planning Association's Land Based Classification Standards (2000). Mr. Johnson suggested the Statewide Mapping Advisory Committee consider this among standards needing an update and, if a priority for the year, identify technical issues that could be addressed by the Technical Advisory Committee in cooperation with SMAC. Questions to consider include:

- Who is classifying land cover in North Carolina in what project areas and for what purposes?
- Is there an opportunity/funding to develop a new statewide land cover product?
- Who are potential consumers and what are the potential applications of updated land cover? Forest services? Land conservation? Economic development?
- How is land cover classification related to classification of LiDAR data?
- Source data questions:
    - Is current satellite imagery (applied in 1996) suitable as the source for classification?
    - Would color infrared imagery, if funded and processed from statewide imagery acquisition, be the best source for statewide land cover classification?
    - Would National Agriculture Imagery Program (NAIP) leaf-on imagery be adequate for statewide land cover classification?

7. Council Items

a. Meetings

Mr. Duncan confirmed that the Council meeting on August 10 will feature an update on *AddressNC* and Census 2020 by Joe Sewash and Bob Coats (30 minutes). Mr. Duncan saw Tim Trainor of the Census Bureau last week and received compliments about North Carolina's geospatial data and its cooperation with the Bureau.

The Council agenda will include the Local Government Committee bylaws to be submitted for approval and SMAC submission of an update to the content standard for core cadastral data. SMAC will vote on the revised standard by email in June, and submit the standard to the Council 30 days before the August 10 meeting.

b Appointments

Three appointments are still pending. Names have been submitted to the Governor and the House.

8. Other Items

Mr. Duncan and Mr. Brown reported on their participation in the National Parcel Data Summit in Reston, VA on June 17. John Bridgers, co-chair of the Working Group for Seamless Parcels, also attended. Mr. Brown and Mr. Duncan described the one-day session, organized by the Homeland Infrastructure Foundation-Level Data Committee for the purposes of revisiting the status and benefits of national parcel data, identifying possible approaches, exploring the roles of federal departments, and informing an action plan with recommendations and principles. Indiana, Utah, and Oregon were prominent states in attendance, and North Carolina got recognition from featured speaker Dave Cowen and others for its comprehensive statewide parcel data. Nancy von Meyer, longtime collaborator with NC, participated as well. The National Address Database may serve as a model for parcels, though lead federal agencies were not forthcoming at the summit. There was agreement that in general parcel data should be produced by local governments, aggregated by state governments, and compiled into a national resource by one or more federal agencies. More work is needed on specifying requirements of federal agencies as parcel data consumers, and identifying which federal agencies are purchasing commercial parcel datasets from vendors and how much are they spending. Mr. Duncan was one of the presenters as a representative for the International Association of Assessing Officers (IAAO). He used North Carolina as an example to describe how parcel data can be aggregated and provided to the public free of charge. In contrast, a presentation by a county data manager in Kentucky described charging consumers for offline copies of parcel data as a needed local revenue source. Cy Smith of Oregon offered to organize a working group to make progress on an action plan. Also of note, a group of federal data managers are collaborating on development of a federal lands geodatabase.

Mr. Coats added that the Office of State Budget and Management, in a recent planning session, explored interest in mapping, open data, and coding exercises to make state government data useful to communities. GIS is a likely component. A concept is to involve community colleges to offer related instruction to build local skills and support an open data effort. Serving areas outside of the metropolitan areas would be an emphasis. The Census Bureau is interested in participating with its open data as a resource.

9. Future Meeting Dates

The next meeting will be scheduled for July 18, 2016.

The meeting adjourned at 3:05 PM.