

Geographic Information Coordinating Council
MANAGEMENT AND OPERATIONS COMMITTEE

September 19, 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, Doug Newcomb, John Farley, Bob Coats, Anca Grozav (Office of State Budget and Management), Tim Johnson, Joe Sewash, and Jeff Brown and on the phone Kathryn Clifton
2. Minutes of the August 22 meeting of the Management and Operations Committee were approved for adoption as submitted.
3. Quick Updates

a. AddressNC

Joe Sewash reported that the core project team has been meeting and the steering committee had its first meeting last week and meets next on September 28. DIT fiscal office is assisting with budget information to enter into the project initiation phase in DIT's "Touchdown" project management system. CGIA has a vacancy that will be filled and purposed for AddressNC activities. On September 12 the Federal Geographic Data Committee (FGDC) announced that the National Geospatial Asset Catalog will include an Address theme, co-led by the Census Bureau and US Department of Transportation. National States Geographic Information Council (NSGIC) has issued a [press release](#) about the announcement. The creation of the Address theme establishes a framework for geospatial data layers within the theme, including address points. In general, Census applies address points to the decennial census, and Transportation uses address points to validate address ranges association with street centerlines. In North Carolina, address point data will be valuable in quality control for address ranges to be associated with NCDOT street centerlines.

b. Census Geospatial Data and Population Estimates

Mr. Coats and Ms. Grozav have discussed demographic population estimates and available geospatial data. It appears that the next set of population estimates will apply data in the same way as last year, but 2017 estimates will take advantage of AddressNC data and other statewide resources. Office of State Budget and Management (OSBM) is available to contribute to requirements and user stories to the AddressNC project and apply statewide geospatial resources. OSBM would like to offer its population estimates project (ANCA) as a proof of concept for new AddressNC data. Mr. Sewash explained that requirements for AddressNC should be available in December or January that may inform design of the ANCA project. For example, a quality control workflow will be built into AddressNC that may satisfy the ANCA project's need to include local government verification of addresses. Mr. Sewash agreed that a list of requirements

from ANCA would be timely for AddressNC planning. For example, distinguishing residential and commercial addresses and group quarters are needed. Meanwhile, DIT planners are working with state agencies to document business processes for address points as another source of information for design work. Ms. Grozav emphasized the importance of identifying changes in addresses (structures) from one year to the next for reliable population estimates. Mr. Sewash explained that one cycle of AddressNC data, applying the new requirements, will be delivered by June 30, 2017. Requirements will include an update cycle, starting with quarterly or monthly. Every record will have a date stamp. An analysis could produce the first July 1 to June 30 change by jurisdiction in June 2018. He added that county boundaries (updated by NC Geodetic Survey) and municipal boundaries (NCDOT and the Department of the Secretary of State) are important data layers for reporting annual changes in address points.

Parcel boundaries may be used as a reference for municipal boundary lines, but parcels are not the document of record for municipal boundaries. Changes in municipal boundaries occur with annexations (or de-annexations). Parcel data by itself may not indicate that a property is within a municipality. Municipal boundaries do not always coincide with parcel boundaries. Mr. Brown explained that NCDOT is likely to continue to serve municipal boundary data, in collaboration with the Department of the Secretary of State, to take advantage of recorded annexations and the Boundary and Annexation Survey and information submitted by municipalities under the Powell Bill (reimbursement for road maintenance). Mr. Duncan added that NC Department of Revenue may issue a recommendation for a best practice that local governments map county and municipal boundaries to property boundaries.

Ms. Grozav pointed out that the State Demographer has collected information from local governments about municipal boundary changes since 2010, contained in a spreadsheet, including annexation information and population within. How does that information compare to NCDOT municipal boundaries? Annexations, effective dates, and acres? Mr. Sewash observed that research into who locally is providing municipal boundary information to multiple state processes may find common local sources, meaning reconciliation may be practical. Mr. Johnson added that evolving to one master dataset would be mutually beneficial. Mr. Madding added that municipalities have an incentive to report current boundaries to NCDOT to receive their fair share of revenue.

The conclusion is that authoritative municipal boundaries in geospatial format are needed for population estimates and other purposes. If boundaries are not correct, they need to be reported to the Secretary of State and updated in collaboration with NCDOT and OSBM. Mr. Coats observed that the Census Bureau relies on the Boundary and Annexation Survey (BAS). Rich Elkins of the Department of the Secretary of State is responsible for BAS in NC. Mr. Coats sees the need for a state review team to verify local government submissions through a secure application. Mr. Sewash sees value in a governance framework to manage geospatial datasets across multiple business processes and for completeness and consistency. This is an opportunity for which the NC League of Municipalities and Association of County Commissioners are partners.

Mr. Duncan observed that being able to select parcels within all municipalities or a specific municipality from the statewide parcel dataset would be efficient and valuable. Are there reliable

municipal locational codes in tax databases that could be included in statewide parcels? This problem needs definition and solutions need to be researched.

c. Statewide Orthoimagery

Tim Johnson reported that 13 counties have been reviewed completely in the 2016 imagery. Local review on the remainder continues through the first week in October. The project team and the US Marine Corps are cooperating on review of imagery over USMC properties. The next phase is the Eastern Piedmont 2017. The Qualifications-Based Selection (QBS) process is underway. The team will review submissions. Selections will occur by November and contracts in place in December. Military bases will be included in the phase and approvals will be requested. At this time Mr. Johnson seeks information on local government plans to request additional products or higher resolution imagery from the flight contractors. Outreach from the Local Government Committee to counties and large municipalities would be helpful and the sooner the better. Mr. Johnson confirmed that 2016 imagery will be delivered in an area extending 7 miles beyond each county's boundaries and imagery will be requested from South Carolina and Virginia where needed for border counties.

d. NC Parcels

Mr. Brown reported that the fall updates will be requested this week. The parcels team will represent the Council at the URISA conference in Toronto to accept the Exemplary Systems in Government award for a Distinguished Enterprise System. A short presentation and a video are planned.

4. Working Group for Professional Land Surveying and GIS

Bob Brinson reported that the working group is making progress on a set of use cases, led by John Farley. Group members are using a template to fill in information and are using a collaborative space to share examples. There is a lot of interest in the group's work. There is concern at NCDOT that the government exemption was not retained in the revised statute. Mr. Duncan concluded that conflicting information and lack of clarity support the pragmatic approach of the working group. Mr. Farley has been invited to observe a meeting of the North Carolina Board of Examiners for Engineers and Surveyors (NCBEES) survey committee on October 4. Ms. Clifton added that the Local Government Committee found that national model rules (National Council of Examiners for Engineering and Surveying (NCEES), 2015) still include a government exemption.

5. GIS and Next Generation 911

In the absence of Mr. Farley and Mr. Sewash, Mr. Johnson reported briefly. In early September, those three were in a meeting with John Correllus, Erin Lesh (NCDOT), and Richard Taylor and David Corn of the NC 911 Board. They clarified an opportunity to come together and collaborate on projects including AddressNC. The next step is for the group to contribute to the RFP that NC 911 Board plans to issue in January.

6. NSGIC Annual Request

This annual effort by the National States Geographic Information Council (NSGIC), composed of state GIS leads across the country, is an opportunity to briefly share information with counterparts. States each have two minutes to share accomplishments, goals, and challenges over the year (October through September). Last year, Mr. Johnson reported accomplishments as completion of NC Parcels, updating AddressNC, and holding the 2015 GIS Conference. The goals were sustained funding for NC Parcels and AddressNC, engagement with enterprise IT planning for business data applications and infrastructure, and completing the statewide refresh of orthoimagery. Challenges were funding for maintenance of statewide parcels and address points integrated from local sources, coordinating public access to framework data through a combination of centralized and distributed hosting, and education of legislative leaders on the value, benefit, and impact of GIS.

In a discussion, IT transition plans and consolidation came up as a challenge. The integration of municipal boundaries, addresses, and parcels may be a goal and is an example of larger opportunities to apply geospatial data to business processes in state government. A standard based approach to storing and accessing geospatial data may be a goal, enabling consumers to plug in easily. Aggregating data statewide has identified variation across local governments in how authoritative source datasets are formatted, stored and accessed. Translation models can work but require time to develop and maintain, and they may prepare a path for more adoption of standards. Another goal may be to coordinate/consolidate data requests by state agencies to local governments. While sustainable funding has been achieved for AddressNC, OSBM is willing to look at requirements for maintenance as they become clearer. A challenge may be to get more information from new IT initiatives to find ways to include geospatial elements to generate more benefits. Another goal may be to be involved in GDAC projects to integrate geospatial data and analysis.

Mr. Coats described another opportunity may be to get state geospatial representation on a planned statewide partnership commission to help get a complete count. Who should be involved? How do we target populations that are the most difficult to fully count and does GIS have a role? The Census Bureau has a planning database that includes at risk block groups where enumeration is most challenging.

On a related outreach issue, Mr. Duncan intends to have a geospatial presence at conferences of NC League of Municipalities and Association of County Commissioners and to highlight the Census.

Mr. Duncan urged committee members to email more ideas about challenges and goals to Mr. Johnson by Thursday of this week.

7. Committee Reports

Ms. Clifton reported that the Local Government Committee (LGC) met on August 24. Discussion about PLS/GIS included a desire to know more about how other states are dealing with this issue and attention to the model rules from NCEES. The committee concluded that

communications to the GIS community should include both the GIS listserv and the NC Property Mappers Association listserv despite some overlap. Another topic was the NC GIS Conference in February and the importance of applying for the Herb Stout awards for local government GIS projects. The LGC suggested that the story map for the value of GIS might be coordinated with the NC GIS Conference to get more entries from local governments across the state. Regarding data, LGC noted that geospatial datasets for precinct boundaries and other voting related boundaries are accessible from an FTP site hosted by the State Board of Elections, but not discoverable through NC OneMap. Marc Burris is the contact. Mr. Brinson and Mr. Brown offered to assist Ms. Clifton in communicating a request for required information to make it discoverable. Also, LGC is looking forward to metadata training at upcoming conferences (NC Arc User Group and NC Property Mappers Association). LGC also discussed Next Generation 911 and observed that address points associated with structures are valuable locally.

Doug Newcomb reported that the Federal Interagency Committee (FIC) held a general meeting on August 25 and featured land cover analysis in three presentations: using LiDAR for vegetation analysis (Mr. Newcomb), land cover mapping using 1-meter color infrared National Agriculture Imagery Program (NAIP) imagery (Drew Pilant, EPA), and land cover mapping in coastal areas (Nate Herold, NOAA) using the NAIP imagery as well. Land cover is being mapped at higher resolution. Mr. Newcomb also presented information to FIC about Sentinel 2 satellite imagery and related image analysis. He expects more applications of Sentinel 2, 3-meter imagery for detecting changes in vegetation. Also, USGS is working on a tool for stream connectivity relating to culverts.

Dan Madding reported that the Technical Advisory Committee (TAC) is considering the request to research configuration of Geoserver software as an alternative for serving geospatial data. Mr. Madding pointed out that his agency does not have an installation of Geoserver software or the infrastructure to support installation and testing. Mr. Newcomb expects that there may be people who could contribute to a draft to get started. Mr. Madding will contact the LGC TAC representative, Tobin Bradley for more information.

Mr. Duncan announced that Ryan Draughn is taking a new position: Director of Information Technology for the National League of Cities Mutual Insurance Company in Washington, D.C. Mr. Duncan expressed appreciation for Mr. Draughn's successful leadership as chair of the Statewide Mapping Advisory Committee. Mr. Johnson added his appreciation for the way Mr. Draughn worked with Council staff to tackle issues and guide the many working groups and subcommittees.

Mr. Madding reported briefly that the State GIS User Committee held a general meeting on August 25 and had good presentations by Allan Sandoval on an application of QGIS software on commuting patterns, Ed Shipman and Open License Manager being used in NCDOT, John Cox presented on Senate Bill 747 and state property mapping, and Kat Clifton demonstrated the story map for the value of GIS.

8. Council Items

a. November Meeting Agenda

Ron York is scheduled to present on the value of GIS. The main technical presentation is to be determined.

b. Appointments

Three appointments are still pending, plus a fourth appointment is needed from the NC League of Municipalities to replace Ryan Draughn. Regarding Council members by statute, Mr. Duncan continues to communicate with the Community College System to determine the President's designee.

c. Annual Report

Mr. Duncan will review a draft with Mr. Brown after this meeting. They will then follow up on new formats for the information.

9. Other Items

Mr. Madding explained that NC Department of Agriculture & Consumer Services will contract with NCDOT to capture imagery over the State Fair as enabled by a memorandum of agreement.

Mr. Newcomb raised a future topic for technical consideration: how do data managers archive datasets that are shared via ArcGIS Online (data stored in the cloud)? Ms. Clifton added that ArcGIS Online can export documentation of what is used in a story map, not a back-up per se.

Mr. Johnson reported that the NC GIS Conference is making good progress on details of the sessions in the program, exhibitors, and other details of planning and preparation with the event coordinator.

10. Future Meeting Dates

The next M&O meetings are scheduled for October 17 and December 12.

The meeting adjourned at 2:58 PM.