



North Carolina
Geographic Information Coordinating Council
Local Government Committee

MINUTES
LOCAL GOVERNMENT COMMITTEE
May 15, 2018, 2:00 PM

PROCEEDINGS

The quarterly meeting of the Local Government Committee (LGC), a committee of the Geographic Information Coordinating Council (GICC), was held on May 15, 2018.

PRESENT

LGC members:

Kathryn Clifton, Chair, Davidson County
Alice Wilson, Vice-Chair, City of New Bern, APA-NC and SMAC Representative
Debbie Brannan, Cabarrus County, GICC
Ben Strauss, Wake County, NCACC
Jason Clodfelter, MapForsyth, NCLM
George Brown, Alexander County, NCLGISA
Robin Etheridge, Dare County, Property Mappers Association
Tom Bell, Western Piedmont Council of Governments, ARCED
Wayne Brewer, City of Raleigh, Carolina URISA

Others:

Stephen Dew, Guilford County, Metadata Committee and Working Group for Orthoimagery and Elevation
David Nash, City of Fayetteville, Working Group for Census Geospatial Data
Marlena Isley, Alamance County, guest
Tim Johnson, CGIA Director
Jeff Brown, CGIA, Staff to the LGC

Absent members:

None

WELCOME

Kathryn (Kat) Clifton called the meeting to order and welcomed members and representatives.

MINUTES

The Minutes from the February 28, 2018 were approved as submitted.

MEMBERS AND APPOINTMENTS

Kat Clifton welcomed new LGC members:

- Debbie Brannan, Chief Information Officer, Cabarrus County, appointed by the GICC Chair, Alex Rankin
- George Brown, GIS Administrator, Alexander County, representing NCLGISA
- Jason Clodfelter, GIS Analyst, City of Winston-Salem/Forsyth County (MapForsyth), representing NCLM
- Ben Strauss, Senior GIS Analyst, Wake County, representing NCACC

Also, Robin Etheridge's term is renewed as representative for NCPMA.

Kat Clifton's service as LGC Chair is ending as she has rotated off to be a GICC member appointed by the Governor. LGC members need to elect a member as Chair and a member as Vice Chair. These are one-year terms, renewable. The LGC Chair also serves on the GICC as a local government representative. GICC meets quarterly in person in Raleigh. Also, as chair of a standing committee, the LGC Chair is on the Management and Operations (M&O) Committee that meets at least quarterly to follow up on GICC items and plan GICC meetings. That committee can be attended remotely. Serving as LGC Chair is not a large commitment, but consistent attendance at GICC and M&O Committee meetings is valuable on behalf of local governments. The Vice Chair takes on meeting duties in the absence of the Chair.

Jeff Brown will facilitate the process by email for nominations and voting by the end of the fiscal year. He encouraged members to consider themselves or other members as nominees and to check with upper managers for support to attend meetings. Nominations via email to Mr. Brown are requested by June 15.

Ms. Clifton expressed her appreciation for the opportunity to serve as LGC Chair and to work with the other chairs. She and Mr. Brown invited calls for more information.

NEXT GENERATION 911 AND LGC

Tim Johnson, CGIA Director, asked for a spot on the agenda this afternoon to share information about Next Generation 911 and make a request. Last week, the North Carolina chapter of the National Emergency Number Association and Carolina URISA held a workshop to share status with 175 participants. He and Mr. Brewer were among the presenters, and Ms. Clifton attended. The State is in a detailed process of engaging a contractor to work with the State to implement the GIS portion of NextGen911. A request for proposals went out in the winter. Mr. Johnson is on a team evaluating proposals from vendors. An award is likely toward the end of June. This will lead to a significant statewide project.

A couple of months ago, Mr. Johnson met with Richard Taylor, the Executive Director of the NC 911 Board, who has now retired. Mr. Taylor envisioned an approach similar to the way the Statewide Orthoimagery Program has been conducted. CGIA managed the program as a series of projects and formed a project team to oversee the work of contractors. Mr. Taylor also specified that he wanted the Local Government Committee on the project team. He saw local government GIS participation as a key element of NextGen911. He understood how much local government GIS does and how well.

Following that lead, CGIA will manage the project and the contractor, through the NC 911 Board. Mr. Johnson described ways to participate. One way is to be a member of the project team that will include CGIA and its *AddressNC* project manager (hiring in progress), NCDOT GIS (responsible for road centerlines), the Department of the Secretary of State (land records), and the Network Monitoring and Assistance Center (networking). The project team will meet with the GIS vendor on a regular basis to guide the work, as often as weekly at times. An appreciation and understanding of how data management works locally will be essential to avoid breaking applications and processes locally. Avoiding duplication and achieving solutions specific to North Carolina will be vital. Guidance from local government is clearly needed on the project team.

A second way to participate is to serve in an advisory role. Members of an advisory team would review and respond on a monthly or quarterly basis. This feedback role will be less time consuming than a project team role, but it will be important to the success of the project.

Mr. Johnson asked LGC members to think about these two ways to participate in the NextGen911 project, and to consider themselves and/or colleagues.

GICC TOPICS

The Council met on May 9 and discussed four topics that relate to local government GIS.

GICC Direction 2018-2019

The Council discussed challenges, opportunities and elements of a strategic direction. Ms. Clifton asked Jeff Brown to send the document the Council used as reference for its discussion. Strategic elements were grouped in four categories:

- improve and/or expand statewide geospatial data (especially address points, roads, parcels, orthoimagery, county and municipal boundaries, elevation, surface waters, and geodetic control)
- support application of geospatial data to meet business needs and challenges
- collaborate for more integration of geospatial data in information technology
- collaborate with all parts of the GIS community in North Carolina

The Council spent additional time on issues related to municipal boundaries and annexations and public access to utility data.

Municipal Boundaries

Ms. Clifton explained that Haley Haynes representing the Secretary of State briefed the Council on the current process for reporting annexations to the Secretary as specified in a statute. The law requires submission of an annexation to the Register of Deeds, the local Board of Elections, and the Secretary of State. However, the law does not require submission to the Secretary for an annexation to be valid. In some cases, annexations are not reported to the Secretary. This means the annexation is not included in the annual Boundary and Annexation Survey (BAS) by the Census Bureau. The Census relies on data received by the Secretary as part of the BAS program. Consequently, Census geography may not accurately represent incorporated areas, which has implications for federal funds that are allocated based on jurisdiction. The law requires an “accurate map” of an annexation. Submissions currently range from paper maps to digital representations from GIS to surveyed boundaries. Descriptions may relate to specific properties.

Jeff Brown added the GICC Chair directed the Statewide Mapping Advisory Committee to form a group to define the problem and a solution that will meet the needs of stakeholders including the Secretary of State, the State Demographer, the NC League of Municipalities, NCDOT, NC Department of Revenue. Paul Badr, SMAC Chair, will organize the group with staff support from CGIA. Mr. Johnson advised Mr. Badr to include local government members of SMAC –Alice Wilson, Marcus Bryant, and Steve Averett. Others are welcome to assist in this short-term effort—recommendations are needed this calendar year if part of the solution includes changes in statute to be considered in the long legislative session in early 2019. Ms. Wilson added that a concept is to establish one State point of submission of municipal boundaries and annexations, and collaborate to meet the needs of multiple state and federal programs.

Ms. Clifton observed that municipal clerks are key people in the annexation process and NC League of Municipalities represents all incorporated places. Turnover, infrequency of annexations, and other factors can result in missed reports to the Secretary of State. Ms. Wilson pointed out the need to be clear about what is required currently to help identify what is needed to improve the process. David Nash recommended a chapter about legal descriptions for annexations from David Lawrence’s book, Annexation Law in North Carolina. Even though the NC annexation law has been revised drastically since this was written, annexation legal descriptions are still relevant. Ms. Wilson concurred that the UNC School of Government has excellent resources including that book. She offered to begin research on the details.

Debbie Brannan added another complication—annexations may be approved for a future year, and an actual annexation cannot be mapped until it occurs a year or two later, long after the initial paperwork. Ms. Wilson observed that recording at the county register of deeds is a separate process from submission to the Secretary of State. Mr. Nash added that the Secretary of State’s Land Records Management Program is reaching out to counties and municipalities seeking agreements that counties will submit GIS annexation data for municipalities within county boundaries to satisfy the BAS program. He noted that this may not be suitable for all municipalities depending on the relations with respective counties and municipalities spanning multiple counties.

Ben Strauss pointed out the success of a model for Wake County where municipalities send annexations to a county GIS person who is responsible for processing and mapping annexations. Reliability is essential. In response to a question from Ms. Wilson, Tom Bell explained that his council of governments has created GIS representations of annexations for small municipalities, but local planners take responsibility for recording and reporting. Ms. Brannan added that Cabarrus County plays a central role like Wake County, but its location based permitting system gives municipalities added incentive to make sure the annexation is correct and the right permits come up. The permitting system is also a master addressing system which helps maintain data for jurisdictions.

Mr. Johnson highlighted the importance of municipal boundaries. NextGen 911 work includes making sure municipal boundary data are up to date. When the system is fully implemented, update frequency is targeted for 72 hours.

LGC members who are interested in participating in the working group on municipalities are invited to contact Jeff Brown (jeff.brown@nc.gov).

Access to Utility Data

The Council had a lengthy discussion of public access to local government and private utility data. LGC members expressed concern about not having access to private utility data. This is consistent with explanations by GICC member Ron York of Duke Energy.

Regarding local utility data, Ms. Clifton noted that representations of water and sewer lines have value if available, but also, other data including boundaries of service areas and mapped power utility corridors would be valuable if readily available for project planning. Some jurisdictions have security concerns and release only small areas of data on request. Jeff Brown added that the Council would benefit by hearing from a local government person about the rationale for not releasing local utility data and from another local government person that makes the same type of data available online and the rationale.

Ms. Clifton pointed to Salisbury as one example of a jurisdiction not making infrastructure data readily available. She can inquire if Salisbury has a written policy. Mr. Bell explained that his organization hosts infrastructure data for small jurisdictions that have varying policies about data distribution, though none put the data online. Mr. Strauss added that municipalities in Wake County have different policies. The Town of Cary makes its data freely available online. The City of Raleigh serves sewer lines but not water lines. He offered to find out details from each. George Brown commented that Alexander County shares water lines data because locations of hydrants and water meters labeled on roads visible on imagery. The data are beneficial in real estate work, for example. Ms. Brannan pointed out that Cabarrus County worked out a confidentiality and security policy agreement with the City of Concord (2005); the city shares its utility data with the county, but the county cannot distribute it digitally. The formality of an agreement helped establish trust between the city and the county. She offered to share the agreement with the group.

Unmanned Aircraft Systems

The Council had two presentations on UAS. Jeff Jones, City of Salisbury, an engineer pursuing a geomatics degree, provided information on use of a UAS that has saved time and money for the city utility. Ms. Clifton commented that manipulation of data from digital sensors may qualify as photogrammetry and require a license. James Gray of Stewart, Inc. also presented information about uses of UAS from the perspective of a private company. The presentations are [online](#) with the GICC meeting.

In response to a question about LGC members and UAS, Mr. Bell reported that Western Piedmont COG now has a staff person with Part 107 FAA certification. UAS is being used for promotional videos for member towns, but he envisions the system being used to monitor electric power facilities using an infrared sensor and helping to map utility rights-of-way in locations that are hard to access on foot. Jason Clodfelter shared that the City of Winston-Salem has a UAS and a pilot, mostly applied to marketing and communications at this early stage. Emergency management, the fire department, and public schools are interested in using the technology for emergency events. One MapForsyth staff person is in the process of getting a license. Ms. Wilson pointed out that UAS were used quite a bit in response to Hurricane Matthew. Jeff Brown observed that user stories that LGC can share with cities and counties will be valuable in evaluating needs and benefits. He offered to receive documents or presentations from committee members. Mr. Clodfelter added that Charlotte-Mecklenburg has a model to consider that established a single point of contact for UAS needs among agencies, and assigns work to a qualified contractor with the necessary equipment, licensing, insurance, etc. He offered to share more information about that model and how it might apply in other jurisdictions. Marlena Isley added that the Alamance County is testing UAS for an annual flyover of the county landfill instead of using a helicopter, with potential cost savings. The Sheriff and emergency management are very interested in UAS as well and have received information from vendors.

BRIEF UPDATES FROM COMMITTEES AND WORKING GROUPS

Statewide Mapping Advisory Committee (SMAC)

Alice Wilson reported, in brief, that SMAC met April 18. Paul Badr is the new chair. Statewide Orthoimagery is on schedule for release of 2018 imagery in December. There was a discussion of cadastral data and consistency of values in some fields. Stream mapping will be a priority this spring. The 2022 Reference Frame Working Group plans to meet soon to review and consider implications for NC state plane coordinates. NCDOT continues quarterly releases of transportation data, expected yesterday. Also, the Working Group for Land Cover had a good response to its survey of business needs for land cover and will findings report to SMAC in July.

Working Group for Professional Land Surveying and GIS

Kat Clifton has been participating in small group meetings of Council members and a surveyors' committee to examine in detail the use cases developed by the working group. The last meeting, May 9, included discussions that produced a disclaimer for geospatial data not collected by a professional land surveyor. This disclaimer explained that the data

did not meet accuracy standards defined for surveying but had a stated accuracy to inform the consumer. One product will be a summary of use case discussions. In response to a question from Ms. Wilson, Ms. Clifton acknowledged that the draft of a decision tree deserves another look. Ms. Clifton offered to run the use cases through the draft decision tree, note the outcomes, compare to the outcomes from discussions of use cases, and see if the decision tree is valid or could be modified to be a useful tool. She explained that the purpose of data development is an important factor, and metadata can help avoid using data for an unintended purpose. Given the government exemption, the group has given extra attention to GIS practices in private companies. She also suggested that the NC Board of Examiners for Engineers and Surveyors is willing to review proposed projects that fall into a gray area between GIS practice and surveying. The group plans to produce a final document of the findings to share.

Working Group for Seamless Parcels (WGSP)

Jeff Brown reported the spring update is in progress. In the SMAC meeting, a member reported that during an environmental analysis, he found that some counties in the statewide collection had missing values in some data fields (e.g., land value) needed for the analysis. He also found that the values in the standard fields for parcel use descriptions contained a wide variety of descriptions that were hard to query and analyze.

There was also a discussion in the SMAC meeting about property descriptors used in the CommunityViz software applied in transportation planning regions. There will be collaboration with the Piedmont Authority for Regional Transportation to identify counties to prioritize for the spring update and to discuss how CommunityViz describes properties in comparison to parcel use descriptions coming out of county tax data systems. Ms. Clifton is assisting on some of the details. Ms. Isley identified fields that could be considered in the next review of standard schema for NC Parcels.

Census 2020

David Nash updated the committee about the Local Update of Census Addresses (LUCA). The group shared the status of their respective jurisdictions. The City of Fayetteville is will be getting started on its review soon. The City of New Bern is complete. Alexander County is ready to submit. Alamance County is knee-deep in review. MapForsyth is working with revised address points from the Census Bureau. Davidson County used the batch geocoder offered by the Census.

Working Group for Roads and Transportation (WGRT)

Jeff Brown reported that the working group, including Greta Bumgarner of Catawba County and Harry Lee of Currituck County, completed a revision to the state data content standard for street centerlines (2005). SMAC approved the revision and will recommend approval by the GICC as an update. He will distribute a copy to LGC.

Metadata Committee

Jeff Brown reported that in-person metadata training can be arranged for local governments. The Metadata Committee with assistance from North Carolina Central University has developed templates and instructional materials. Please contact committee

members Stephen Dew or Jeff Brown if you know of interest or would like more information.

Stream Mapping: Water Quality Rules

Jeff Brown explained that the Environmental Management Commission (EMC) has opened revised water quality rules for public review. There is one section that has applied to Jordan Lake stream buffer rules and will be expanded to other watersheds. In that section, stream buffers can be based on streams on USGS topographic maps, also called blue line streams, or streams represented on soil surveys, or streams approved by the GICC and the EMC. The rules were written in 2008 without participation by the GICC, and the GICC has had only two inquiries from local government, the latest from Alamance County. The GICC has no process or criteria for approving stream maps for buffer purposes. With the rules open for comment, the GICC now has an opportunity to advocate for separation of geospatial representation of streams and riparian buffer policy in water rules. The GICC should be limited to technical criteria, not regulation and policy that is the purview of the EMC. There is work to be done on the details by the Stream Mapping Advisory Committee headed by Cam McNutt of the Division of Water Resources.

PROFESSIONAL DEVELOPMENT

The committee identified some opportunities:

- The 2019 NC GIS Conference will take place in Winston-Salem, February 26-March 1, 2018.
- NC ArcGIS Users Group will have its conference in Asheville, August 29-31.
- Land Records workshops are taking place across the state.
- Mapping school is coming up August 6-10 in Winston-Salem. Robin Etheridge is a contact.
- NC Local Governments GIS Symposium hosted by NC Arc Users Group is scheduled for October 26 in Hickory.

Ms. Clifton expressed her appreciation for the opportunity to serve as LGC Chair. Members thanked her for serving well for five years.

ADJOURNMENT

There being no other business, the meeting was adjourned at 3:30.

LGC meeting dates for 2018: Wednesday, August 22; and Wednesday, November 28—starting at 2:00 PM.

LGC's web page on the GICC website:

<http://it.nc.gov/gicc-local-government-committee-lgc>