North Carolina
Geographic Information Coordinating Council

Minutes

August 11, 2021

PRESENT

Alex Rankin (Chair), Steve Averett, Paul Badr, David Baker, Amy Barron, Kathryn Clifton, Bob Coats, John Correllus, Greg Cox, John Cox, Seth Dearmin, Jason Dowdy, Stan Duncan, Dianne Enright, Kristian Forslin, Dean Grantham, Joanne Halls, Pokey Harris, Matt Helms, Scott Lokken, Elaine Marshall, Hope Morgan, Chris Nida, Allan Sandoval, Bill Shankle, Brooks Tate, Gary Thompson, Christian Vose, Melanie Williams, Alice Wilson, and Eric Wilson.

Staff: Tim Johnson, Colleen Kiley, CGIA

ABSENT

Jason Hedley, Sarah Koonts, and Tony Simpson

PROCEEDINGS

The council held its meeting via Webex.

Welcome and Chair Announcements

Alex Rankin, Council Chair, called the meeting to order and welcomed council members and visitors on the Webex call. Council staff conducted a roll call to ensure that a quorum was present; a quorum was confirmed with a simple majority of voting members of the council in attendance. Mr. Rankin, Colleen Kiley, and Tim Johnson of council staff outlined some instructions for participating in this Webex meeting.

New Appointments to the Council

Mr. Rankin made several announcements about changes in committee leadership and council membership since the last meeting.

Melanie Williams has been named Chair of the State Government GIS Users Committee. Ms. Williams is the North Carolina Division of Water Resources (DWR) GIS Coordinator and has over a decade of experience coordinating statewide data and GIS projects for the Department of Environmental Quality (DEQ).

Alice Wilson is stepping down from her role as the Chair of the Local Government Committee. Alice's leadership and insight have energized the LGC, and her commitment to the GICC and the GIS community in North Carolina is evident in the number of working groups and projects in which she participates. Chairman Rankin thanked her for leading the LGC and for her continued dedication to GIS in North Carolina.

The following members were reappointed or newly appointed to the council:
NC Senate

- New member: Bill Shankle of Tri-South Commercial Realty
- Reappointed member: Pokey Harris, NC 911 Board
- Reappointed member: Matthew Helms, Charlotte Water

NC House

- New member: Jason Dowdy, CACI, Inc.
- New member (but current advisory member): Amy Barron, Duke Energy
- Reappointed member: Stan Duncan

From the NC Department of Transportation, Eric Wilson is the new GIS Unit Manager and has been appointed to represent the department.

Chairman Rankin called on each of the new members to introduce themselves.

Approval of Minutes

The minutes of the May 19, 2021 meeting were approved for adoption with no changes.

Presentations

GICC Goals for the 2021-23 Biennium (Tim Johnson and Colleen Kiley, CGIA)

Tim Johnson and Colleen Kiley moderated a discussion of the 2021-2023 goals and strategic direction. Tim Johnson began by reminding the council that one of the important roles of the council is to not only establish goals and objectives to carry the councils work, but ultimately to advise the governor and the general assembly about needed directions for the state of North Carolina including all stakeholders on the council. The goals are reviewed every two years, so these goals will occupy the council until 2023 and will drive the work of the committees. CGIA staff to the council read each goal and asked questions to prompt discussion. The goals and questions are presented below with a summary of the discussion following.

The goals as outlined below were adopted by a majority vote.

2021-2023 Geographic Information Coordination Council Goals and Strategic Direction

Goal 1. Improve, expand, and support statewide geospatial data and applications.

1.1. Promote free and open discovery of and access to geospatial data created and maintained by local governments.	
Access to local government datasets	LGC – promote value of data
What local government data sets need to be more readily available?	
How can we support local governments with limited resources?	
Eric Wilson spoke on behalf of DOT that utility information is important. Alice Wilson agreed and added that stormwater information is needed as well as building footprint information with elevation. She said that finding a way to assist communities lacking resources and developing their GIS datasets would help in developing statewide datasets. During emergencies, having state datasets is essential and can assist areas with no GIS data. Stan Duncan suggested that tying jurisdictional boundary data to the seamless parcels would be beneficial for both tax information and emergency response. He also suggested fire service areas and fire districts as an area for improvement. Catherin Clifton asked whether NextGen 911 data could provide fire response areas. Point addresses are a key dataset that individuals request regularly and is another example of the benefits of using NextGen 911 data. Paul Badr suggested looking to utility co-ops as a source of infrastructure data. Allen Serkin stated that local parks, cultural resources including museums and town hall buildings, and extraterritorial jurisdictions are data layers that would be beneficial at the statewide level. He also stated that there is a process in place for updates to jurisdictional boundaries, but that data may or may not be surveyed.	
1.2. Research solutions that maintain data sharing security to aid discovery and ease of access to geospatial data.	
Local data access constrained by security policy	TAC - clarify policies, needs, risks, alternatives.
Should this goal be a priority for committees other than the TAC?	
Other than infrastructure data, are there other priority datasets requiring security?	
Paul Badr suggested that an LGC liaison on the TAC would be beneficial, and Colleen Kiley clarified that there is an LGC member on the TAC as well as additional LGC members on the infrastructure working group. Chairman Rankin asked Dean Grantham whether the LGC should be tasked with assisting more with the infrastructure project? Dean said that the working group would benefit from more involvement. Paul Badr asked whether DOT maintains transportation infrastructure including rail and air. He also asked whether broadband was being mapped in DOT right of ways. Eric Wilson said that they would begin mapping in 2022, and the project would take 5 years. Paul asked whether we were prepared for autonomous vehicles, charging stations, and new technologies.	

1.3. Continue to support initiatives that compile and maintain statewide geospatial datasets that benefit the businesses and citizens of North Carolina.	
Data standardization and dissemination	SMAC- Prioritize streams, and municipal boundaries, AddressNC, buildings footprints

Given your agency or industry needs, what layers are missing from this priority list?

What other committees should have this as a work plan item?

Paul Badr stated that the Hydro Working Group should be considering USGS Elevation Derived Hydrography coordination, and Tim Johnson added that the state has been falling short of other states on this subject. Tim offered that the state needs a plan of action including stakeholder requirements that go beyond the Atlas program to take advantage of federal programs.
Lidar and Topobathy are two datasets that are available to assist with the development of a Hydrography dataset. Paul suggested that topobathy should not be confined to the coastal areas, but should be statewide.
Hope Morgan stated that the LGC should be involved because they are collecting local data, and that standardization across local governments would be beneficial, but should be determined among local governments.

1.4. Find solutions to make data sharing local-to-state more efficient to meet the needs of multiple statewide datasets and not place undue burden on local geospatial data managers.	
Reduce redundant data requests and streamline processes	SGUC – define technical and policy solutions

What are some examples of this issue?

Should this be a workplan item for the LGC as well?

Alice Wilson gave an example of the WGEER as a way to share and access data, and this could serve as a model for other topics.
Hope Morgan stated that the LGC should review what they have, what they are sharing now, and what they are willing to share. Alice Wilson added that the infrastructure working group is a good pilot.

1.5. Request all state agencies to make the council's priority geospatial datasets discoverable and accessible through the NC OneMap Geospatial Portal.	
Priority data accessible via NC OneMap	SGUC – define technical and policy solutions

Are there policy obstacles to data sharing?

Are there current technical obstacles to data sharing from state agencies?

Eric Wilson doesn't have policy obstacles, but when data is created for applications, there may be security around the application that prevent sharing data widely. Knowing what data needs to be shared would assist planning where to store data so it can be made available.
John Cox agreed that there aren't policies limiting sharing, but that resources could slow sharing.
Allan Sandoval agreed that policies aren't an issue, and that they don't really produce priority datasets.
Dean Grantham from DEQ agreed and added that datasets are being shared to NC OneMap, except for PII data. Even for PII, layers, efforts are made to share a version of the dataset without the sensitive information.

1.6. Promote geospatial metadata for standard documentation.	
Geospatial data documentation and protection	SMAC – metadata training and implementation

Metadata adoption has been a challenge and we need the council's help in encouraging adoption

How do we incentivize wider adoption of the metadata standards?

Gary Thompson stated that due to the upcoming data change, it is very important for metadata to reflect the correct datum. Paul Badr agreed and stated that this change should be the number one incentive. Scott Lokken said time tags will be important, but it may not be collected currently. Eric

Wilson suggested a pledge to show support for metadata, so that people can see that there is wide support and adoption.

1.7. Support applications that derive business value from geospatial data assets and analytics.	
Geospatial Services – business-oriented services beyond geocoding, routing, modeling	SMAC – Requirements and benefits SGUC - prioritize geoprocessing services LGC – Promote sharing of source data for roads and address points

What are some services that would benefit your industry or agency that could be built on existing data?

Paul Badr stressed that everything is based on geospatial data including banking and targeting of services.
Alice Wilson stated that demonstrating how existing projects benefit their communities and save money can spark new projects.
Hope Morgan suggested that each working group review existing datasets and brainstorm ideas for how the datasets could be used.

Other applications – from data assets and analytics	SGUC – identify common opportunities and requirements. LGC – identify common opportunities and requirements.

Goal 2. Collaborate and conduct outreach for more integration of geospatial data in information technology for expanded benefits in the geospatial community in North Carolina.

2.1. Identify opportunities to collaborate on GIS solutions in state departments and divisions not directly represented on the council to add value to state business processes.	
Collaborate with non-GICC State agencies to add value.	SGUC – Identify needs and opportunities; optimize GIS and IT resources.

For those departments and divisions, how do we "sell" GIS and provide resources for emerging projects?

Kathryn Clifton suggested that we may need to find out more about agency business practices and projects to better suggest ways to incorporate geospatial applications.
Alice Wilson suggested presenting at as many conferences as possible to widen the understanding of the power of GIS.

2.2. Identify opportunities to collaborate on geospatial data and technical solutions on a regional basis, engaging councils of government, educational institutions, metropolitan planning organizations, and rural planning organizations.	
Collaborate on a regional basis, engaging councils of government.	LGC – identify opportunities in working groups

Are there regional projects that should be a current priority?

How can we better engage the COGs in regional projects?

How can council members assist in identifying stakeholders and those who can assist?

Paul Badr said that the GICC is looked to as a leader for geospatial data. Allen Serkin, who will become the COG representative, said that COGs vary in their GIS capabilities. There are regional projects that COGs lead, and there are regional projects that they participate in, and other projects that they could be involved in.

2.3. Reach out to jurisdictions with the least resources to find ways to add value with geospatial data and applications.	
Reach out to local governments with the least resources	LGC – identify needs and practical ways to assist SMAC – assist in technical support
How can we reach those who might need help, and how can we assist them?	
Allen Serkin added that even though COGs vary in their abilities, they may still have more capabilities than the small jurisdictions in need. Solving this issue regionally rather than locally will be more efficient.	

2.4. Increase awareness and adoption of council initiatives and priorities through outreach and education	
Engage the GIS community at the local, state, and federal level to promote initiatives	LGC, SGUC, FIC – Share opportunities for collaboration, promote initiatives, promote the value of GIS
How do we ensure that council meeting updates reach others in member's organizations?	
Allen Serkin considered having regional GIS meetings through his COG to share ideas and get them working together. Rolling this out statewide would be an idea. John Correllus offered the support of the DIT communications team. How do we focus the communication on the GIS community through social media?	

NC Office of Recovery and Resiliency: GIS Data Needs and Uses (Amanda Martin and Maggie Battaglin, NCORR)

Chairman Rankin introduced Amanda Martin and Maggie Battaglin of the N.C. Office of Resiliency and Recovery (NCORR). Ms. Martin gave a history of NCORR. She outlined the homeowner recovery, affordable housing, mitigation and strategic buyout programs. Ms. Martin is the state's Chief Resilience Officer. Her group is very small and state that their compact organization necessitates coordination and collaboration with other agencies. She asked those interested in collaboration to reach out. There is an interagency resiliency team that includes staff from about 12 state agencies to coordinate resilience work across the state. She also introduced the state disaster recovery task force which operates by committee and subcommittees to tackle recovery support functions ranging from housing to environment. These groups bring together government, private sector, and nonprofit stakeholders. To date, the state has invested more than 3.6 billion in state and federal funding to support recovery from storms. To learn more about their programs visit rebuild.nc.gov.

Ms. Battaglin focused her presentation on the buyout program, which works to empower N.C. property owners by buying them out of storm damaged homes and incentivizing them to move to areas of lower risk. The homes are then demolished and converted to open space in perpetuity. The program is entirely voluntary, and to participate, applicants must seek out the program and can pull out at any time prior to acquisition. The program is collaborative with the state, local governments,

and homeowners. The buyout program can be a powerful tool to permanently reduce risk and increase resiliency in buyout areas.

The buyout program is a multi-step buyout process. After an in-depth review of eligibility and property appraisals and inspections, the home may be bought out, which is followed by demolition, restoration, and transfer of the property to the local government for open space. Buyouts are targeted in Disaster Risk Reduction Areas (DRRAs). DRRA establishment involves intense collaboration with local governments and has a goal of leaving communities more cohesive while allowing for more effective, long term mitigation planning. Each DRRA is supported by a local ReBuild NC Center to provide in-person, direct support to homeowners throughout the process.

Data allows NCORR to target areas with the greatest need, highest probability of success, and with local government priorities. Four major data categories contribute to the initial siting of DRRAs: Severe Repetitive/Repetitive Loss, Hazard Mitigation Grant Program Registrants, FEMA Individual Assistance Recipients, and Floodplain data. Initial DRRA areas are revised using local input to better align with local priorities and to concentrate buyouts. NCORR is also interested in working with long term recovery groups and volunteer organizations active in disasters to understand unmet needs and where they are investing.

NCORR is still developing its GIS capacity and is working on more efficient and effective ways to do business. Some data gaps that it would like to work with local governments to fill are actual damage indicators, such as addresses with substantial damage or records of emergency calls placed during storm events. NCORR would like to find more information on long term recovery group information including where unmet needs are located and where investments have been made. Other resiliency efforts are a third topic of interest including where other resilience investments are located or where stormwater management efforts are planned. Better coordination with other state agencies to understand where investments are being made and where they plan to invest is needed.

Lack of capacity is a constraint, but NCORR is reviewing ways to alleviate that issue. Additional areas for focus and data include unmapped flooding sources, heat and drought data, and a better understanding of the data in context to assist decision makers. The environmental preservation subcommittee of the state disaster recovery task force has recommended at statewide database of mitigation properties. Multiple programs have funded mitigation projects including FEMA funded Emergency Management projects and state funded buyouts through the Office of Budget and Management. Another recommendation that has come from the 2020 State Climate Risk Assessment and Resiliency Plan is a clearinghouse of resilience resources and data, but funding does not exist for the project, and NCORR is exploring partnerships and opportunities to implement the project.

Chairman Rankin opened the questions by asking what the most important thing would be to support the good work that NCORR is doing. Ms. Martin answered that examples of multi-agency datasets or multi-agency data collection methodologies to assist them in compiling datasets would be helpful.

Introduction of Jim Weaver, NCDIT Secretary

Chairman Rankin introduced Jim Weaver, newly appointed Secretary of the Department of Information Technology (NCDIT). Mr. Weaver has worked for Pennsylvania and Washington as well as serving in the National Guard. Mr. Weaver outlined his priorities which include expanding access to broadband and addressing equity issues, including making sure internet is available to households with children for educational purposes. A second priority is a digital transformation in

the state, changing the way the state interacts with North Carolinians, and making their experience with State Government more efficient and effective. Cyber security and privacy are especially important to consider and improve to protect the state's digital assets and infrastructure. Resiliency in IT systems is equally important, and more must be done to educate business leaders in the importance of planning and action. Lastly, Mr. Weaver outline his plan to move to cloud computing to refocus staff time on value added analytics and portfolio management.

Standards for Adoption (Paul Badr, SMAC Chair)

Chairman Rankin welcomed Paul Badr, Statewide Mapping and Advisory Committee (SMAC) Chair to introduce the two framework data layer schemas. Mr. Badr announced that the AddressNC and Municipal Boundary schemas were reviewed by the SMAC in detail and were unanimously approved at the July meeting. They are presented here for the council's adoption.

AddressNC Schema Standard (Matthew McLamb, CGIA)

Matthew McLamb provided a brief background on AddressNC. There were two previous efforts in 2009 and 2014. The first effort was driven by the 2010 Census. The 2014 refresh was funded by through the National Telecommunications and Information Administration (NTIA) State Broadband Initiative Grant. Within these two previous mapping efforts data schemas were produced and data was harvested from the local government entities that maintain the data.

Recurring funding was procured in 2016 to maintain the data set, however work was put on hold due to the NextGen 911 (NG911) project, which was also going to acquire address data. The NG911 project provides a platform where addresses are compiled into a statewide data set by an authoritative source. There was no need to perform duplicative work. Mr. McLamb predicted that the NG911 address data will be complete by the end of this year or in early 2022. The AddressNC data will be updated through the NG911 project. Frequency of updates will depend on the county and Public Safety Answering Point (PSAP). However, timely updates are ensured, as this is a NG911 requirement.

The 17-member AddressNC steering committee was formed in June 2020. The committee discussed a new standard during the last quarter of 2020. Content standards and data schemas from NENA i3 version 1, National Address Dataset, Federal Geographic Data Committee, 2009 AddressNC, and 2014 AddressNC were compared. Users outside of 911 were considered, including the Census Bureau, State Board of Elections, Department of Revenue, Department of Transportation, and local governments. Council members were provided with the schema prior to the meeting for review. In addition to leveraging NG911 data for addresses, the working group discussed value added products such as a state geocoding service. Several state agencies will participate in a testing process once the data is in production. Darrin Smith will be leading the project for CGIA.

Gerry Means (911 Board) said that it is important from the board's perspective that the counties have a formal agreement that the data can be used for this purpose by AddressNC. The NextGen 911 Data Governance Policy that is in draft form will contain an agreement for data sharing.

The council, by majority vote, adopted the AddressNC standards.

Municipal Boundary Schema Standard (Bob Coats, Municipal Boundary Working Group)

Chairman Rankin introduced Bob Coats to present an update on the Municipal Boundary Schema. The Municipal Boundary Working Group (MBWG) was tasked with reviewing the various boundary reporting processes to state and federal government agencies including defining a streamlined process that would limit duplication of effort and reduce the reporting burden on local governments. The working group developed content standards, core attributes, and a process flow to meet that goal.

A document containing the content standards was shared with the council prior to the meeting, and Mr. Coats summarized the content. The MBWG was composed of state agencies including the Departments of Public Safety, Revenue, Transportation, and the Secretary of State's Office. Local and federal government members of the working group also contributed. These stakeholders collaborated to define the largest common denominator of needs for attributes in layers that everyone could use.

Two layers were defined in the specifications: a layer containing annexation areas, and a layer containing the official municipal boundary. Each layer's attributes are described in the specifications. Mr. Coats reviewed the update process. Feedback from the working group and the initial pilot showed that the most likely path to success would be for counties to pass annexation data to the state. Cities are already sharing annexation data with the county for taxation purposes, and counties typically have greater resources than individual cities. Annexation areas would be submitted by counties to the Office of the Secretary of State where they would be reviewed for completeness and format. Once reviewed, they would be passed to the Department of Public Safety to be added to the annexation layer. The municipal boundary layer would be updated to reflect the new boundary changes. An internal state quality review would be triggered, followed by local review. Once final approval is received by the local government, the two public facing layers would be updated. The public facing layer would serve the needs of the multiple state agencies that use municipal boundaries as well as for the Census Boundary and Annexation Survey. Thus, cities would need to submit annexations to a single entity rather than to county, state, and federal government.

The MBWG plans to begin an expanded pilot of 25 counties within the next six months, incorporating training and education, before rolling out the new process statewide. The specifications and process were approved by the SMAC at their July meeting. Mr. Coats opened the floor for questions. A question was posed as to whether there were new requirements in this process. Mr. Coats answered that the process is based on requirements from existing legislation with nothing new, but that the process has been changed based on stakeholder feedback to shift to a county-based reporting where additional capacity should help increase the percentage of annexations reported properly.

The council, by majority vote, adopted the Municipal Boundary Standards.

Census Bureau: Public Use Microdata Areas (Bob Coats, OSBM)

Bob Coats announced that due to the minimal time left in the meeting, he would make his presentation available on the GICC website, and that there would be a press conference the next day at 1pm by the Census Bureau about the redistricting data release. All county municipal block level data will be released at that time (voting age populations). Public Use Microdata Areas (PUMAs) will be drawn and are due by January 2022. PUMAs are areas that maintain a population of 100,000

throughout the decade and are drawn only once. The Census Bureau is looking for as much input as possible on the boundaries, and Mr. Coats will be seeking input from stakeholders. Existing PUMAs can be retained, but if changes need to be made, now is the time to reach out to revise them.

ADJOURNMENT

There being no other business, the Chair requested and received a motion and a second to adjourn the meeting. The meeting adjourned at 3:15 PM.

The council has one remaining quarterly meeting for 2021 on November 3.

Presentations given at this meeting are on the council website.