North Carolina
Geographic Information Coordinating Council
Local Government Committee

MINUTES
LOCAL GOVERNMENT COMMITTEE
November 17, 2021- 2:00PM

PROCEEDINGS
The quarterly meeting of the Local Government Committee (LGC), a committee of the Geographic Information Coordinating Council (GICC), was held on November 17, 2021.

LGC EXECUTIVE COMMITTEE MEMBERS PRESENT
Josh Norwood, Pender County, NCLGISA
Ben Strauss, Wake County, NCACC
Natalie Walton-Corbett, City of Greenville, NCLM (LGC Chair)
Alice Wilson, City of New Bern, NC-APA
Jeff Hyder, Madison County, NCPMA
Melinda Ford, Piedmont Triad Regional Council, NCARCED
Absent members:
Pam Carver, Henderson County, CURISA representative
Todd Shanley, Cabarrus County, GICC Appointee

CGIA Staff Support:
Colleen Kiley

WELCOME
Natalie Walton-Corbett called the meeting to order and welcomed members and representatives.

MINUTES
Motions and voting for approval of the August 25, 2021 Meeting Minutes occurred.

MEMBER AND REPRESENTATIVE UPDATES
Alice Wilson nominated Natalie Walton-Corbett as LGC Chair, and she was elected with a unanimous vote. Natalie thanked Alice for her service and dedication to the committee and the GIS community. Nominations for vice chair should be sent to the LGC Chair or Colleen Kiley with CGIA. Jeff Hyder from Madison County has been named the representative for the NCPMA.

PRIORITY FRAMEWORK DATASETS UPDATE
Colleen Kiley presented an update on three priority framework datasets: Hydrography, Municipal Boundaries, and Building Footprints. She summarized for the committee project histories, stakeholders involved, the importance of the dataset to major stakeholders, current status, and path forward.

Hydrography

Our beaches, rivers and streams are something we all enjoy, and having high quality resources attracts millions to vacation in our state each year. One way to protect these important resources is to know where they are, and how they are connected. NC lags behind other states in developing an updated hydrography layer and is one of only 9 states that does not have a stewardship agreement with the USGS. Hydrography is used widely and is a dataset that is critical to regulation, habitat and resource conservation, and flood risk management.

North Carolina has had multiple projects working on hydro. Duplication of effort and business unit driven datasets developed in a silo are something the GICC targets to avoid. The goal of the Hydrography Working Group (HWG) is a single statewide layer with geometry that matches the federal layer that can be used by the division of water resources for assessment and regulation, by the DOT for transportation planning and impact minimization, by the NC FMP for flood risk warning, and by local governments for planning, floodplain management, resource protection, recreation and other uses. A stewardship agreement with the USGS would better coordinate our data with the federal data.

Hydrography is a very big project, and the state has been trying to update the dataset for decades. The Studies Act of 2004 (Senate Bill 1152) directed that the GICC and the Department of Environmental Quality (DEQ) develop a plan to improve the mapping and digital representation of surface waters for the state. The project used the National Hydrography Dataset (NHD) model which is the federal standard adopted by most states. Only part of the state was funded for updates. DEQ began a Headwater Stream Spatial Dataset (HSSD) project, which became the hydrography layer for the Department of Transportation's (DOT) ATLAS project. The HSSD is an elevation derived project. It uses the lidar data to create a surface model from which a hydrography network is derived. There are two great things about this project: it provides new features such as networking, the ability to trace up and down stream, and it uses methods that the HWG believes will allow it to move more quickly toward meeting new USGS specifications. ATLAS and the headwater stream project created a proof-of-concept layer that attributed DEQ assessment data on modeled streams.

The HWG began looking integrating NC data with the NHD. During that time period, the USGS came out with what they initially called (Elevation Derived Hydrography) EDH, which morphed into the 3D Hydrography Program (3DHP). This new federal model is elevation derived and the Headwater stream mapping project is very similar, so the HWG is confident that NC is moving in the right direction.

Currently, the HWG has at least four projects ongoing:

1. Network Development by HSSD program, this includes modeling and scripting metholodogies.
2. Conflation of current DEQ tables by the Atlas Program; testing the success of moving current attributes to the new geometry.
3. Schema and requirement refinement from stakeholders.
4. Coordination with USGS to respond to their latest 3DHP call to action in coordination with other states.

During the next year, the HWG plans to finalize draft Hydrography Schema for wider community review and adoption, investigate the path forward to a stewardship agreement with the USGS, create a plan for state to federal data sharing, and stay involved in the national discussion around the 3DHP program. Identification of funding mechanisms will be critical to implementation of final plans.

Building Footprints

During a needs assessment earlier this year CGIA realized that building footprints were a widely used database and were an at risk database, that is, there isn't a maintenance plan, funding source, or official steward However, NC Emergency Management (NCEM) has been the de-facto steward thus far. The need for building footprints reaches far outside of NCEM, and one of the state offices that stands to gain the most from an update is the broadband office.

Because broadband expansion and digital equity is one of the governor's priorities, building updates are an important part of realizing that success. We need to know customer addresses and buildings, knowing where the residences, schools, and businesses that would need high speed internet are located.

Enhancing the building footprint layer has the opportunity to have an incredible impact on all of these stakeholders, and the combination of building footprints with addresses is one of the overarching needs. More accurately determining building type or use is another major need for this layer. The existing building footprint layer is so important to emergency management that it is used to estimate storm damage and provide advanced warning of flooding events. The layer was first used to justify a federal disaster declaration in hurricane Matthew, the fastest in history.

Building footprints provide a solid source of information on housing units, can provide a basis for change analysis on properties for tax purposes, and provide valuable information for community planning or economic development.

The history starts with NCEM, and it was developed for risk modelling, especially in relation to flood risk. The layer was started in the 2009-2012 time period and spent multiple years going through conflation, adding first floor elevations, being moved to the Flood Risk Information System website and then being released on the Spatial Data Download site. So now that 5-10 years have passed since portions of the dataset were completed, geometry updates are needed, and NCEM has started that process. This year, a needs assessment by CGIA revealed a need for updated geometry and better attribution, and the stakeholders expressing that need to the Council were what resulted in a call for a working group.

Like I said, this is in the early stages. We will be identifying stakeholders within the next month or two, and we've drafted a charter.

Going forward, the working group will evaluate what attributes are needed, what standards already exist for this kind of layer, what kind of effort it will take for update, what business unit impacts there would be to schema changes, create a schema, and maintenance plan. CGIA hopes to make this a fast moving group similar in timeline to the AddressNC steering committee. There are very immediate needs from groups like broadband, and CGIA staff is ready to provide leadership of the working group to meet the urgent need for the data to support the governor's priorities. Stakeholders for the working group are needed, and should contact Colleen Kiley or David Giordano for more information.

Municipal Boundaries

The path forward for the municipal boundary layer will include a review of each mapped municipal boundary by each municipality in the state. The review process will allow each municipality to either approve the boundary by digitally signing a form, or to upload a boundary correction.

Additionally, a pilot of 59 counties will take place to submit annexations. Annexations can be submitted through a form online which will collect all required information as determined by the MBWG and

approved by the SMAC and GICC. Digital annexation boundaries and copies of the appropriate documents will be submitted with the form. This process will streamline submission of annexations and will be shared with the North Carolina Office of the Secretary of State Land Records Office, the State Demographer, the Floodplain Management Program, and the Department of Transportation as well as the U.S. Census. Bob Coat and John Bridgers will be leading the pilot and review efforts.

NEXTGEN 911 UPDATE

Matt McLamb discussed the status of the project. Out of 115 PSAPs in NC, 105 have had their data pass all the necessary checks. Their data is considered i3-ready. This data can now be used for call routing across the state. This data is important as it will feed AddressNC and DOT with road centerlines. Broadband, DPS, and DHHS, among others, have expressed a need for the NextGen 911 data.

It is extremely important to keep data up to date in the data hub. The 911 Board requests quarterly data updates, but encourages more frequent updates. CGIA is available to provide assistance and training as needed. A new dashboard is being made available that will show the time since the last data update for each county and will allow everyone to monitor maintenance frequency. Plans for four regional workshops for the first quarter of 2022 are in progress.

GICC UPDATES

Natalie Walton-Corbett gave an update on the recent GICC quarterly meeting.

- Two statewide projects have won national awards; NC Atlas and NextGen 911
- The 911 Board expressed the need to keep data current and maintained frequently
- The Census update highlighted new data to be released in the summer of 2022 that will include demographics and housing characteristics. January 3rd begins the Count Question Resolution process. Public Use Microdata Areas are being drawn, and local suggestions are encouraged.
- There is a national effort to leverage GIS data to ensure more effective and accurate elections. The GICC will revisit this topic at a later date.

BRIEF UPDATES FROM COMMITTEES AND WORKING GROUPS

Natalie moved into the next topic, the updates from committees and working groups.

<u>Working Group for Seamless Parcels</u>

There were 89 updates this quarter in quarter three. Thus far in quarter four, there have been 32 updates.

<u>Working Group for Orthoimagery and Elevation</u>

Orthoimagery

The project currently ongoing is the 2021 Eastern Piedmont. The Eastern Piedmont project involves 26 counties covered by 4 contract vendors. Acquisition was completed in March 2021. Unlike acquisition flights in previous years, imagery over Fort Bragg and Camp McCall will not be redacted and will be fully available on NC OneMap after delivery to the PSAPs and the counties. There will be an image resampling to 1-foot pixels for 7 tiles in those military installations. Data was delivered to the PSAPs mid-November. The 2022 project was approved earlier this year by the NC 911 Board. Localities can purchase a buy up to obtain higher resolution data.

Elevation

- NOAA completed a pilot of 6 land cover classes in Brunswick and New Hanover counties. The data has been delivered and is being post processed.
- The N.C. Geodetic Survey is working with NASA to access pre and post storm satellite products.
- The grant application to update Phase 3 lidar has been submitted.
- The USGS has released recently collected Lidar data for 3 of 8 areas on their website. The others will follow as they are completed.
- The 2022 Reference frame update has been delayed to 2024.

Systematic issues with the recent Lidar collection will result in a delay in delivery. Originally planned for May 2021, the data will be delivered in the fall. There were some challenges combining the Lidar and coastal topobathy data. NCEM is still working on the QC for contours created from the Lidar data.

Statewide Mapping Advisory Committee

Other than the items already covered by other working group updates, N.C. Geodetic Survey has 84 CORS stations working right now. Several county boundary surveys are ongoing. Powell Bill boundary updates will be released in February. Transportation data for the 4th quarter was released November 8th. CGIA will be testing a geocoding service using new addressing data that will be released early 2022.

Hydrography Working Group

The Hydro working group is concentrating on a schema for the data and evaluating whether the data produced by the Atlas project could be brought into the Elevation Derived Hydrology dataset or the National Hydrography Dataset. The schema will include local needs and have time for local review.

Technical Advisory Committee Infrastructure Working Group

The working group sent out a survey to all state and local contacts as well as multiple listservs to collect data to better quantify the infrastructure data available and produced across the state. The working group is compiling its draft preliminary findings.

ADJOURN

There being no other business, the meeting was adjourned.

LGC's web page on the GICC website: http://it.nc.gov/gicc-local-government-committee-lgc.