

MINUTES

Statewide Mapping Advisory Committee Meeting

Wednesday, April 19, 2023, 1:30 – 3:30 PM
NCDIT iCenter Unite Conference Room - Hybrid Meeting

Welcome/Introductions

In attendance: Paul Badr, Gary Thompson, Alice Wilson, Nathan Bland, Darrin Smith, Dr. Kenneth Taylor, Tim Johnson, Bob Coats, Kitty Kolb, Cam McNutt, Joe Battinelli, Ben Shelton, Sean McGuire, John Derry, John Lay, Katie Doherty, Christian Vose, Jeff Essic, Elizabeth Daniel, Richard Greene, David Giordano

Paul introduced Joe Battinelli and Ashley Yandle as the newest members of the committee. Joe is the Cabarrus County GIS Administrator and represents the Local Government Committee on the SMAC. Ashley is from the NC Division of Archives and History and represents the NC Department of Natural and Cultural Resources.

The minutes from the January 11, 2023 minutes were approved.

Working Groups and Related Geospatial Data

Working Group for Orthoimagery and Elevation

Gary informed the SMAC the WGOE will now meet twice per year, rather than quarterly. In place of the other two meetings Gary and Ben will distribute updates through email.

Orthoimagery

The orthoimagery program is currently in the final year of the 4-year cycle. The 2023 area is the Southern Piedmont and Mountains (21 counties in purple, see Figure 1).

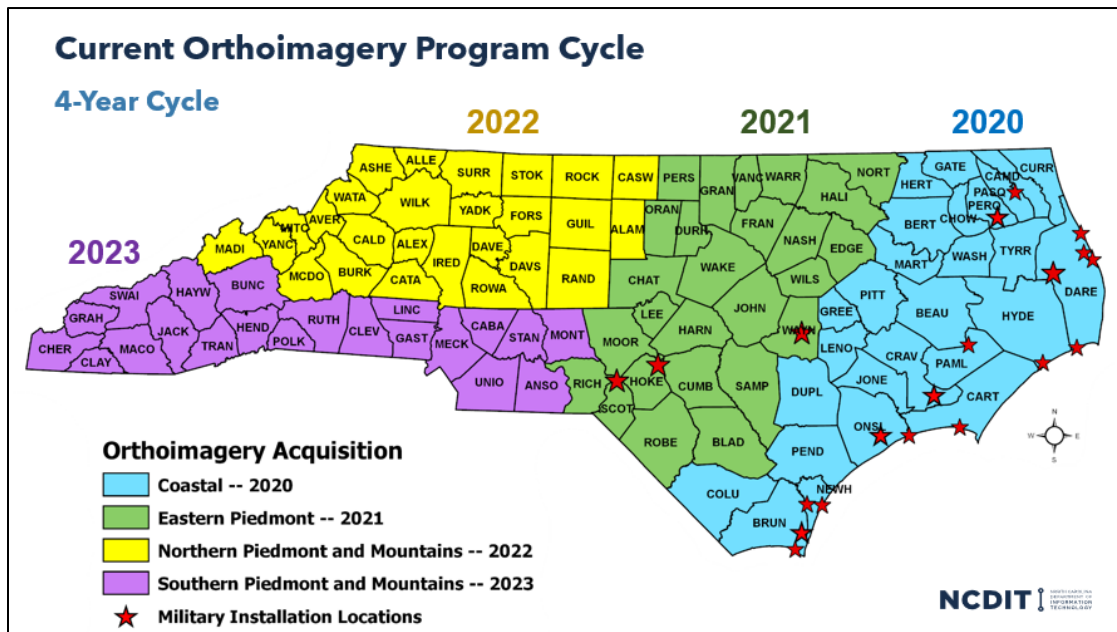


Figure 1: Current 4-year cycle map for NC Orthoimagery

Quality control starts July 24. Every two weeks 3 sets of counties will be reviewed through VOICE. The anticipated delivery to the PSAPs is still mid-November.

The next 4-year cycle (see Figure 2) was proposed to the 911 Board in March. The first phase of the cycle was approved – 27 counties along the coast. Qualifications based selection for the 2024 area will begin in July 2023.

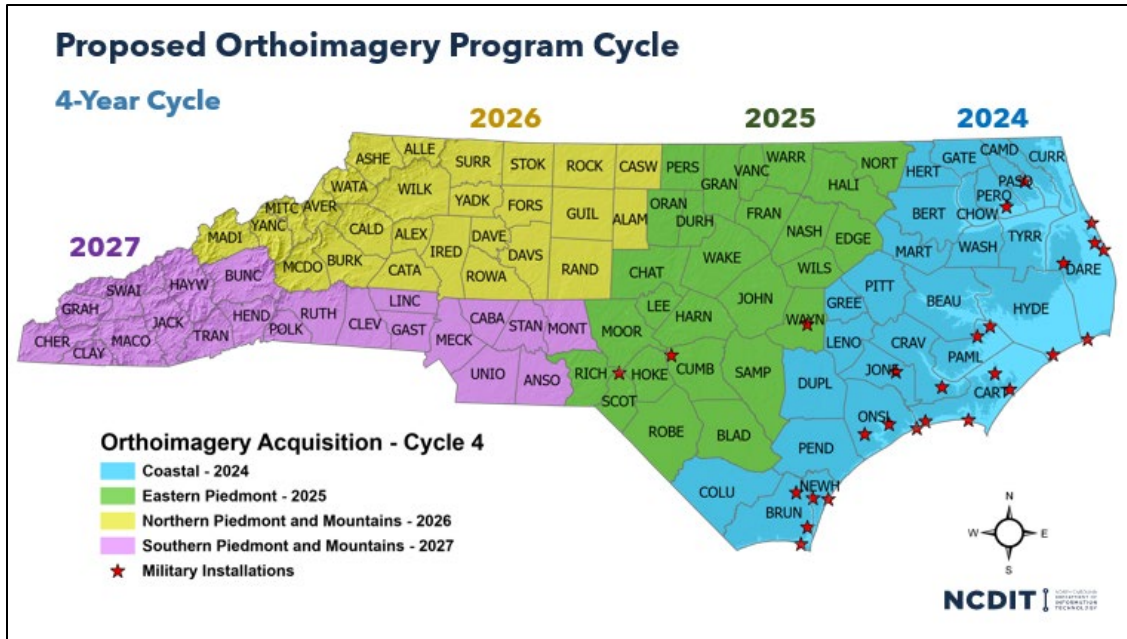


Figure 2: 2024-2027 4-year cycle map for NC Orthoimagery program.

Geodetic Control

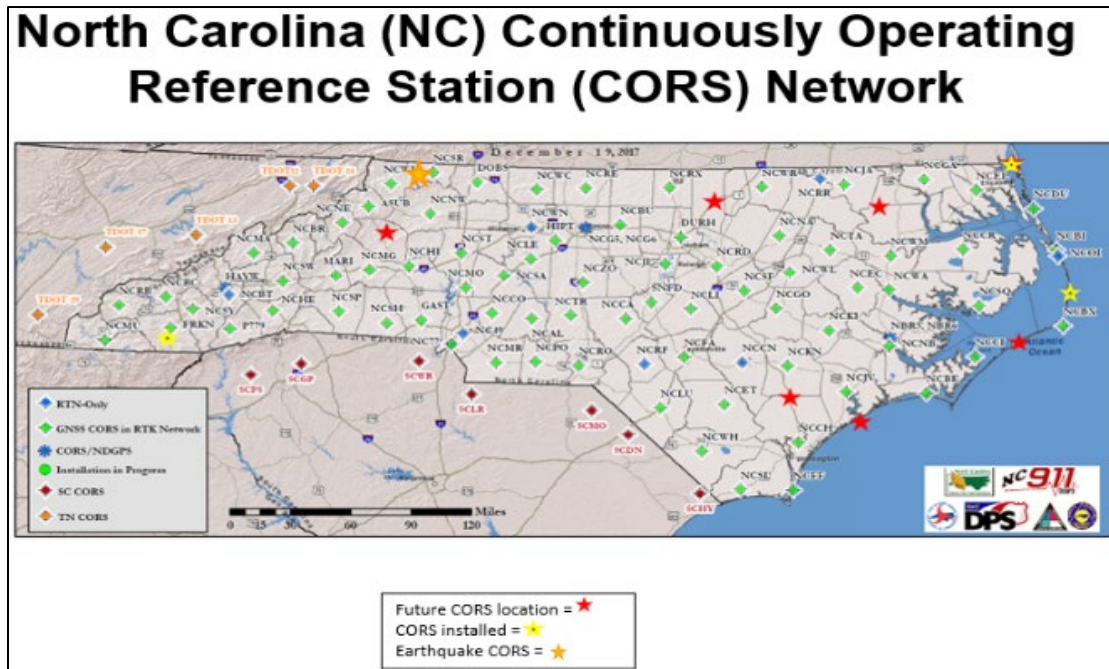


Figure 3: NC CORS network.

Gary reported there are new CORS locations (red stars in Figure 3) that will be installed around the state to increase the network. Additionally, new CORS have been installed in the Sparta area, which was the location of the August 2020 earthquake. These are powered by solar panels which can last 5-10 years.

Reference Frame

After a delay, new horizontal and vertical datums are coming in 2025. Draft revisions to the NC General Statute 102 are currently being developed.

NC LiDAR Business Plan

Figure 4 shows the status of the LiDAR collected by USGS and NOAA.

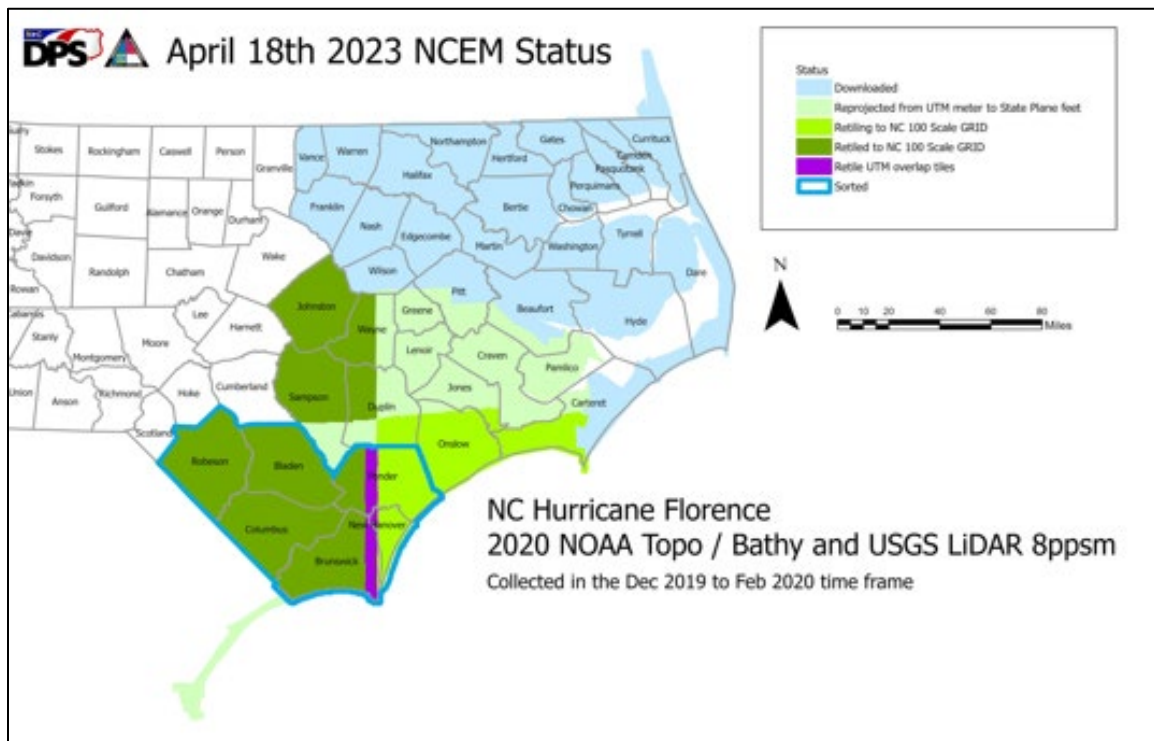


Figure 4: NC CORS network.

NC Emergency Management is converting the data from UTM to the State plane coordinate system and retiling the data to the NC scheme.

In terms of the business plan, the first organizational meeting was held on Monday. Small groups have been established to draft different sections of the plan - standards and data collection, economics, and case studies. The goal is to complete the plan by December 2023.

Working Group for Seamless Parcels

The first meeting of the year for the working group was on April 12. Five members were cycled out and new ones joined. The group discussed future goals and things they hope to accomplish, one of which is a better way to

communicate with those in the counties performing the parcel updates and uploads. There also was discussion about possibly establishing a technical support group within the WGSP to assist those that need it. Each WGSP member will review the list of standard attributes and determine what they think should be required, recommended, or optional. Lastly, the group discussed possible ways to get more building/structure data into the parcel dataset. The group will reconvene in June.

Cadastral

Katie told the SMAC that 11 counties have uploaded their updated parcels data to the transformer in the current quarter, and a total of 80 counties uploaded their data in Q1 2023.

Hydrography Working Group

With Cam's extended absence the HWG has not met since last year. Meetings are scheduled with DEQ, DOT, and CGIA to discuss how the data will be made public, not just the version needed by DOT, and what are the differences between the ATLAS version of the data and what all users are asking for. An extensive document is being assembled highlighting the differentiations.

The group will also discuss roles and responsibilities of those associated with the data set. The goal is to not have multiple versions of the hydro data set, each catering to just the group that needs it, but rather introduce a governance document that establishes on base data set with derivatives for various groups. Cam's goal is to have the gap analysis finished by July and also have a good idea on how the data will be disseminated.

Paul asked about the timeline of the report – something to share with the SMAC, then the M&O in July, and the GICC in August. Cam thought this was attainable and asked if there are specific questions that the report needs to answer to pass them along to him. He and the committee have made good progress on the report, including sections about the gap analysis, roles and responsibilities, and the governance.

Tim added that Hope Morgan requested an outline of the document. Paul asked for it to be sent to him and Colleen Kiley for review within the next two weeks. It will then be passed to Hope, so everybody is on the same page and expectations are equal among all those involved.

Working Group for Roads and Transportation

Evacuation Routes

Eric Wilson reported that there have been internal DOT discussions about the data set with the Traffic Operations Center. The TOC looked at the existing route data, and in coordination with NC Emergency Management, determined no update was needed in the short term. They will continue to discuss over the course of the year to see if an update is warranted in the future.

Working Group for Administrative Units

Municipal Boundaries and Annexation

Bob Coats brought the SMAC up to speed. Many corrections have been submitted through the municipal boundaries on-line tool. There have also been a few approvals and annexations. Those will be incorporated into what is seen on the website in the coming weeks.

Colleen is working with the Secretary of State's office to automate notifications when submissions have been received so the QC process can begin, and feedback can be given to the local government submitting the data.

County and State Boundaries

Gary indicated that the Davie-Yadkin boundary has been finalized and reported. By statute, all the property owners impacted have been informed of the boundary change. The remainder of the surveys are summarized in Figure 5.

DPS Emergency Management
NC DEPARTMENT OF PUBLIC SAFETY

County Boundary Surveys in Progress

Projects in progress

- Davie – Yadkin (Final plats have been recorded)
- **Jackson – Macon (Plats to be recorded in June 2023)**
- **McDowell-Mitchell (Counties have adopted resolutions accepting reestablished county boundary)**
- Catawba – Lincoln (Counties have provided written request to assist with reestablishing county boundary)
- Granville – Franklin (Findings provided to the counties and HB438)
- Mecklenburg – Union (County boundary information provided to the counties and HB457)
- Montgomery – Richmond (reviewing findings report)
- Polk – Rutherford
- Burke-McDowell
- Caldwell - Watauga
- Mitchell – Yancey
- Cumberland - Harnett
- Bladen – Columbus – Brunswick
- Chowan – Perquimans
- Harnett – Johnston
- Buncombe - Henderson

EMAP Accredited

Figure 5: NC Geodetic Survey boundary surveying in progress.

Additional monuments along a 34-mile stretch of ridgeline are needed between Jackson and Macon counties. Both counties have adopted and are using the surveyed boundary.

NCGS continues to work to develop a boundary commission with the Commonwealth of Virginia, which must be requested by their legislature. In addition, Gary and his team have received a request to confirm the location of the Watauga County/NC -TN boundary.

NC Data Projects

Addresses

Darrin reminded the SMAC that AddressNC data comes from local government providers via NextGen 911.

The data update cycle is monthly. The April update has been released. There are two new data sets associated with AddressNC. Address Location Exceptions denotes county exception codes for the address data that the governments add. Also, Duplicate Addresses shows where addresses are duplicated down to the ZIP code level, MSAG level, or the

geometry is coincident. A data table will be part of the project next month at the request of data users that summarizes all inconsistencies, conflicts, duplications, etc. that are found by county.

Last month AddressNC data was shared with the National Address Dataset (NAD) for the first time since the 2014 version of the data was published.

Statewide the project has determined 3.5% of the addresses are duplicates, a majority of them in multi-family units. Also, an improvement in the coding has revealed 215,000 address points that were not discoverable last month. This was due to parent addresses were missing in those points.

Building Footprints

John Lay reported the last part of Phase 1 will be finished when the remaining 30% of Duplin County is completed. All that will remain are a few conflation issues. From there NCEM will move into Phase 2 (the phases coincide with those of the NC Orthoimagery Program). Four interns will start working in May. The hope is they can complete the assignment within 10 weeks.

Gary added that Phase 1 data creation was all manual. For Phase 2 NCEM is working with CGIA to use automatic extraction of footprints from the NC orthoimagery. It is anticipated the workforce for building footprint creation will shift from interns to contractors after the completion of Phase 2.

Ben mentioned that CGIA is talking to Amazon to find a way to speed up the footprint extraction with a combination of new processing tools and server to streamline the workflow.

Regular Status Updates

USGS/National Geospatial Programs Office (NGPO)

David read Chris Cretini's report. Chris and Cynthia Ritmiller were unable to attend due to a meeting.

The 2020 Hurricane Florence project is ongoing. USGS has provisionally accepted 11 of 15 work units.

There are two tiles in one of the work units where there are some data voids and corrections have been requested. The remaining 4 work units are part of the NOAA portion that is being integrated into the data set. Those 4 NOAA units have been received and quality checked, and are back with the contractor for corrections. The contractor has been quick to acknowledge correction requests, which are due back to USGS within 30 days.

With regards to the liaison position at NGPO, the agency is reviewing position descriptions for a couple National Map Liaison positions, which will include coverage for North Carolina. We don't have a timeline yet for when positions will go through HR and be filled. Please continue to contact me to discuss any items of interest.

NC OneMap Update

David informed the SMAC that CGIA has brought back the cached version of the NC Orthoimagery Program's "orthoimagery latest" image service. It is now discoverable again in [NC OneMap](#). The cached service performs better than the dynamic service of the latest imagery.

Other Business

2023 NSGIC Geospatial Maturity Assessment

As an informational point, Tim told the SMAC that the National States Geographic Information Council (NSGIC), which is a body consisting of state GIS directors from around the country, has a very detailed survey about the mapping and funding of each state's geospatial framework data sets. He added that he and Colleen will be giving the maturity assessment survey questions to those in NC that can best answer them. In the last assessment in 2021 North Carolina overall grade was among the top 7-8 states in the country.

Priority data layers for the next two years (for GICC planning)

With the current focus on building footprints, hydrography, and addresses, what are the data sets the NC GIS community needs to solve for in the next two years? Paul mentioned Smart Cities – what does it take to become one and what is the data required?

FY 2022-23 Work Plan Major Task Review

The committee discussed each of the in-progress tasks in the FY 2022-23 work plan.

Item 2.2 – Draft and implement an elevation business plan: This has been extended to December 2023.

Item 3.1 – Define an approach and requirements for an enterprise data set for surface waters: This has been extended to July 2023.

Item 3.3 – Review and update GPS guidelines: This has been extended to September 2023. Gary needs metadata assistance.

Item 3.4 – Assemble working group to map K-12 school locations: This has been extended to December 2023.

Item 4.4 – Update metadata tools and documentation given change in GIS technology: This has been extended to September 2023 pending the identification of a new chair.

Item 4.5 – Research and recommend solutions for land cover data in collaboration with NOAA: This has been extended to September 2023.

Item 4.8 – Present refreshed road centerline content standard to SMAC and GICC: As a first step it was determined to send the existing standard to the SMAC for comment with a modified deadline of July 2023.

Meeting Action Item Review

1. Cam to produce outline of HWG report and send to Paul and Colleen by May 3rd (Hydro Working Group update, page 4).

Adjourn