

# MINUTES

## Statewide Mapping Advisory Committee Meeting

Wednesday, October 9, 2024, 1:30 – 3:30 PM

Microsoft Teams only

### Welcome/Introductions

In attendance: See attendance sheet at end of minutes.

The minutes from the July 10, 2024 SMAC meeting were approved by the committee.

### Working Groups and Related Geospatial Data

#### Working Group for Orthoimagery and Elevation

Ben Shelton reported that the 27-county 2024 coastal imagery project is moving along nicely. Quality review is complete. Four-hundred fifty issues (typically a low number) have been rectified in almost 10,000 square miles of imagery QC. Contractors are now submitting their final data to Ben and his team. Two-thirds of the counties are in. The final third will be in by October 18<sup>th</sup>.

Between now and the final delivery to county PSAPs, the project team will be creating MrSID tiles and mosaics, and all the derivative products and formats. The team tries to cover all the various file formats and versions that are in use by CAD and GIS software. As in past years, the team is on schedule to meet its delivery schedule of the first week in December. There will be a series of about five meetings along the coast where hard drives with imagery will be delivered.

Ben is very pleased with the imagery deliverables from the contractors. The data was collected in a tight window, and the radiometry is very consistent.

For the final 3 years of the cycle (2025-2027), Ben and the team are working on a pre-qualified group of vendors that meet the typical QBS process. This will eliminate the need for the selection process every year.

While on the topic of imagery, Gary Thompson brought up the topic of imagery collected in response to Hurricane Helene. Colleen Kiley added the following links to the meeting's Microsoft Teams chat:

- [Esri \(pre/post imagery slider\)](#)
- [NOAA](#)
- CAP (Civil Air Patrol) – [1](#), [2](#)
- [NASA](#)

#### Geodetic Control

Gary Thompson updated the SMAC on the geodetic control network. With the implementation of the new datum approaching, the NC CORS (Continuously Operating Reference Stations) network will be the primary foundation for the adjustment. The current network can be seen in Figure 1.

No new stations have been installed since the last SMAC meeting. The latest installation was in Bertie County. Red



Figure 1 – Current NC CORS network.

starts are proposed sites in Figure 1. The CORS in Kinston must be moved. It currently is installed on a building that has changed ownership. The station will be moved to a research facility nearby owned by NCSU.

The newest installation will be on Ocracoke Island. This will extend the network as far east as possible. It will be co-located with a NOAA tide gauge which is important to filter out ground movement compared to tide. This will benefit Global Navigation Satellite System (GNSS) users and tidal datum users alike.

Reference Frame

Gary reminded the group that the datum change will occur in 2026. NGS has produced an implementation [timeline](#). Gary is creating a step-by-step guide for local governments. It should be completed by the end of the month.

NC LiDAR Business Plan

Paul Badr commented that the draft business plan was very thorough and well-written. Dr. Ken Taylor and Tim Johnson echoed those observations. Paul also noted his pleasure with how the LiDAR acquisition plan would be tied into the statewide orthoimagery program, as good LiDAR is needed to produce good orthoimagery.

Gary thanked Colleen and Ben for piecing together and finalizing what the WGOE came up with. He views this as a dynamic document – as the GIS community discovers more applications that can use LiDAR, case studies can be added. The document underscores the importance of LiDAR data and the myriad of uses.

Tim added an addendum could be a year-by-year budget for producing LiDAR, as the document outlined collection in 4 phases. An annual outlay to put in front of people who would be able to provide funding (private/public partnership (utilities), and others) could be beneficial, showing the value statement and budget.

Colleen commented 3 big uses of LiDAR by state agencies (another possible funding source) and possibly others:

- Stream mapping – River locations have literally changed as a result of hurricanes and other natural disasters. Mapping done up to this point may potentially not even be accurate.
- Landslides – LiDAR is a great way to show the differences of pre- and post-storm damage caused by land movements.
- Floodplains – Locations have changed because of the landscape scour and urbanization, and stream and river migration.

Paul and Gary added that LiDAR classifications are also important. Bare earth is widely used, but other classifications are as well: vegetation and forestry industries use LiDAR for canopy height and environmental types of applications; DOT uses certain classifications for roads and bridges; building classification is used to map footprints.

With no more comments and discussion, the SMAC moved for a vote to approve and pass to the GICC for adoption. The document passed unanimously.

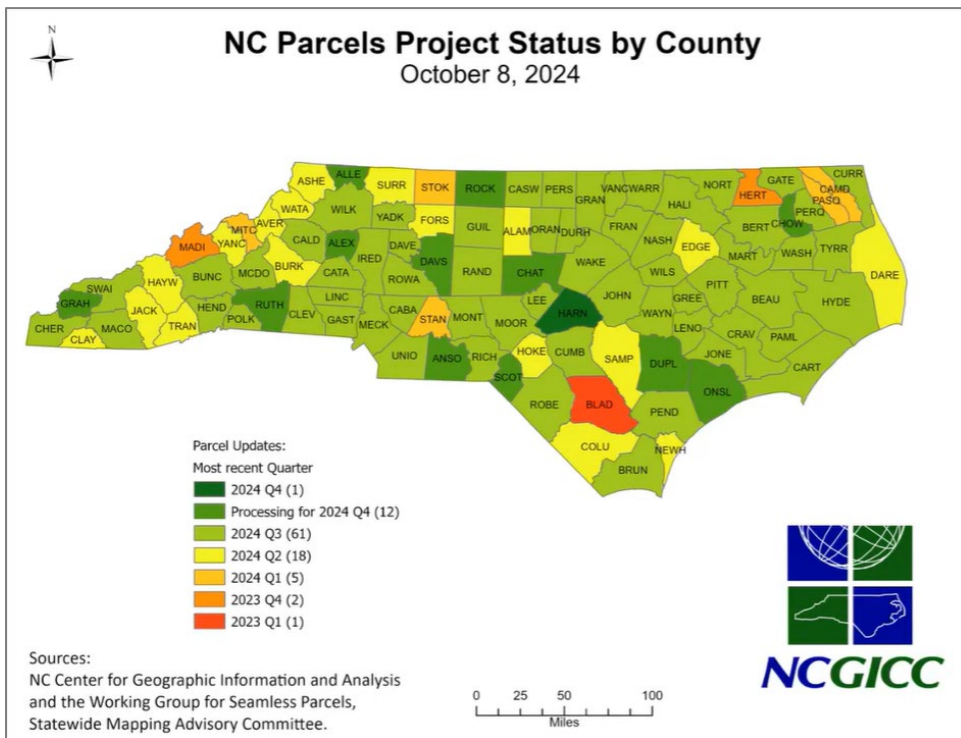


Figure 2 – Current statewide parcels status as of Oct. 8.

Working Group for Seamless Parcels

Cadastral

Katie Doherty updated the SMAC on seamless statewide parcels. Eighty-seven counties uploaded their cadastral in the 1<sup>st</sup> quarter, 85 counties in Q2, 72 counties in the 3<sup>rd</sup> quarter, and so far as of today 13 counties have provided updates in the first week of Q4. Figure 2 shows the status.

The working group is looking at possibly receiving additional data directly from CAMA vendors rather than each individual county. The

committee is still researching this. They held a meeting with Nancy Von Meyer, a renowned and respected expert on cadastral data in the US, about this possibility and her experiences in doing similar things. Katie

also attended the NCAAO (NC Association of Assessing Officers) data sharing committee meeting where there was discussion about combining the data collection efforts from the CAMA vendors. Some NCAAO members have decided to join the seamless parcels group.

The committee is moving to monthly meetings to gain momentum with regards to acquiring data directly from CAMA vendors.

### Hydrography Working Group

Cam McNutt told the SMAC the HWG continues to meet every other week to develop the agreement between DEQ and DOT to host the hydrography data. Discussions continue about the development of a governance document. DEQ is also exploring funding that might be available for maintaining the data set. Cam stressed the importance to keep track of the previous hydro geometry.

Cam, Paul, and Colleen discussed the need for the hydrography program and LiDAR collection to work in-sync, as current, accurate elevation data is needed to map hydrographic features.

### Working Group for Administrative Units

#### Municipal Boundary and Annexation

Bob Coats thanked the community for their feedback to the Census Bureau on the agreement to have a statewide response to the BAS (Boundary and Annexation Survey). Part of the goal is to lighten the workload of local government and have a centralized resource on which they can review and sign off on their boundaries. The hope is to have the agreement in place for the 2026 cycle.

The working group will meet next Thursday. Colleen added CGIA is in the process of hiring a contractor to perform the work of updating the data and providing outreach.

### Projects in progress

- Jackson – Macon (establishing county boundary monuments in progress)
- Catawba – Lincoln (findings report provided to the counties)
- Granville – Franklin (HB438 ratified)
- Mecklenburg – Union (HB457)
- Caswell – Person
- Forsyth – Guilford (findings report provided to the counties)
- Polk – Rutherford
- Chowan – Perquimans
- Harnett – Johnston
- Burke-McDowell
- Beaufort-Pitt
- Caldwell - Watauga
- Mitchell – Yancey
- Cumberland - Harnett
- Bladen – Columbus – Brunswick
- Buncombe – Henderson

### County and State Boundaries

Gary updated the SMAC on the status of county boundary surveying, as shown in Figure 3. Those appearing in green are close to being finished. Jackson – Macon is on the front burner. There are 20 more monuments to set. Gary hopes to finish that one this year.

Counties in blue have just started. There are 2 contractors on board to speed up the process.

Figure 3 – County boundary surveying status.

With regards to state boundaries, there is no commission established with either Virginia or Tennessee.

## NC Data Projects

### Addresses

Darrin Smith started by saying he continues to see active participation and value coming out of the AddressNC project. Fifty-nine of 100 counties are current to the end of August. Since the last meeting there has been a change in 190,000 points, whether that means an addition of new geometry or a modification of attributes. Forty percent of those points were in 1 county, where the county enhanced their street name data. AddressNC data is being included in the Esri world geocoder and the NAD (National Address Dataset). By the end of the year there is a goal to release the “AddressNC experience” – a website presenting all the changes Darrin talked about.

Darrin will be presenting about the project at next month’s NC PMA conference. He presented at the same conference last year and saw a lot of value in doing so. It is a good outreach opportunity. After this, Darrin will coordinate a statewide webinar to orient GIS coordinators and local government managers on the experience website.

### Building Footprints

Gary said with time lost to Hurricane Helene response, DPS is now going to accelerate building footprint updating. There are 2 staff members working on this. A contractor will be brought on board to assist. Gary anticipated that most of western NC will be completed by the next SMAC meeting. The footprint mapping refresh can be seen in Figure 4.

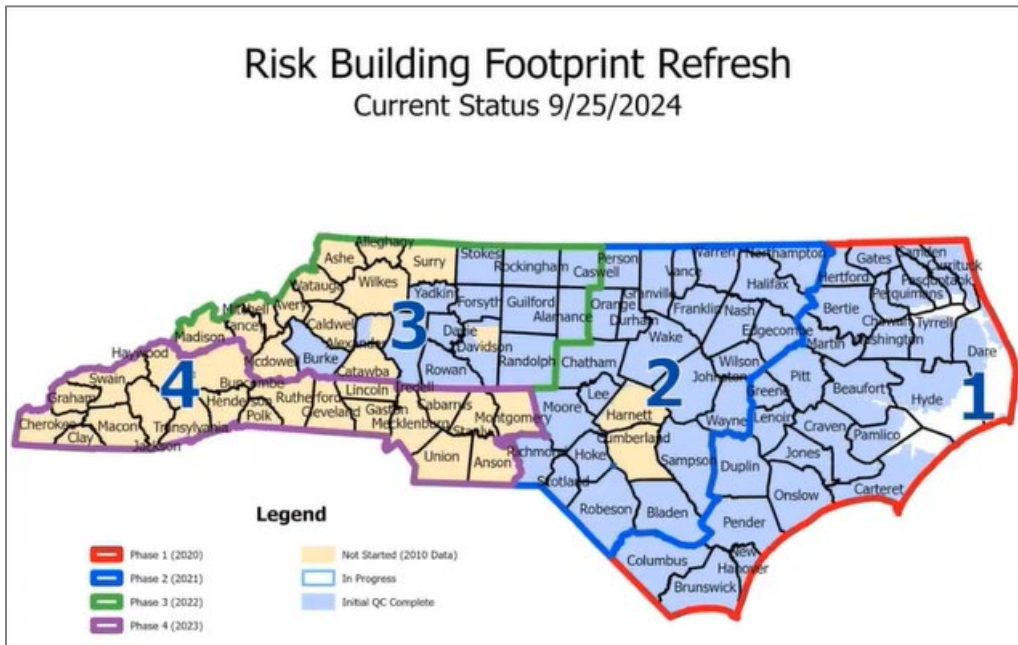


Figure 4 – Building footprint mapping status.

### Landcover

Colleen Kiley summarized an email from NOAA's Nate Herold that said the agency's contracting system issues are resolved and anticipates data development could begin in 2025. It is a hope that better wetland data will evolve from this project.

## **Regular Status Updates**

### USGS/National Geospatial Programs Office

Jo Baker did not have an NGPO report at this time.

### NC OneMap

David Giordano reported that the team has increased the computing capacity of the NC OneMap environment to meet the demand for Hurricane Helene response.

He added that if you are involved in disaster response you can request access to the Working Group for Enhanced Emergency Response (WGEER), which has a collection of geospatial information not publicly available. If interested send him an email at david.giordano@nc.gov.

## **Other Business**

Dr. Ken Taylor, State Geologist, announced to the SMAC he is retiring after 30 years of state service. Similarly, Sean McGuire, SGUC representative on the SMAC, announced this will be his last SMAC meeting as well. Sean is also retiring.

## **Adjourn**

**Attendance (Microsoft Teams only):**

<b>Name</b>	<b>Association</b>
Paul Badr, Chair	GPI Geospatial Inc.
Tim Johnson	CGIA Director, NC GIO
Nathan Bland	NC Sec. of State
Gary Thompson	NC Emergency Management
Colleen Kiley	CGIA
Dr. Ken Taylor	NC Geological Survey
Alice Wilson	City of New Bern
Eric Wilson	NC Dept. of Transportation
Cam McNutt	NC Dept. of Environmental Quality
Matt McLamb	CGIA
Richard Greene	NC Dept. of Transportation, Photogrammetry Unit
David Giordano	CGIA
Ben Shelton	CGIA
Kitty Kolb	US Geological Survey
Ashley Yandle	NC Dept. of Natural and Cultural Resources
Jo Baker	US Geological Survey
Zsolt Nagy	AECOM
Steve Averett	City of Greensboro
Sean McGuire	NC Dept. of Environmental Quality
Darrin Smith	CGIA
Katie Doherty	Rutherford County GIS
Elizabeth Daniel	CGIA
Christian Vose	NC Dept. of Agriculture and Consumer Services
Joe Battinelli	Cabarrus County GIS
Rich Elkins	NC Sec. of State
Jeff Essic	NC State University
Bob Coats	OSBM