

# MINUTES

## Statewide Mapping Advisory Committee Meeting

Thursday, June 26, 2025, 1:30 – 3:30 PM  
NCDEQ Green Square Training Room (#1210)

### Welcome/Introductions

In attendance: See attendance sheet at the end of these minutes.

The minutes from the April 10, 2025 SMAC meeting were approved by the committee.

### Working Groups and Related Geospatial Data

#### Working Group for Orthoimagery and Elevation

Ben Shelton reminded everyone of the ortho program cycle (Figure 1). The current project area is shaded green. The project is defined by working with the military installations in the area - Fort Bragg, Camp Mackall, and Seymour Johnson Air Force Base - and true orthoimagery delivery for the cities of Raleigh and Durham.

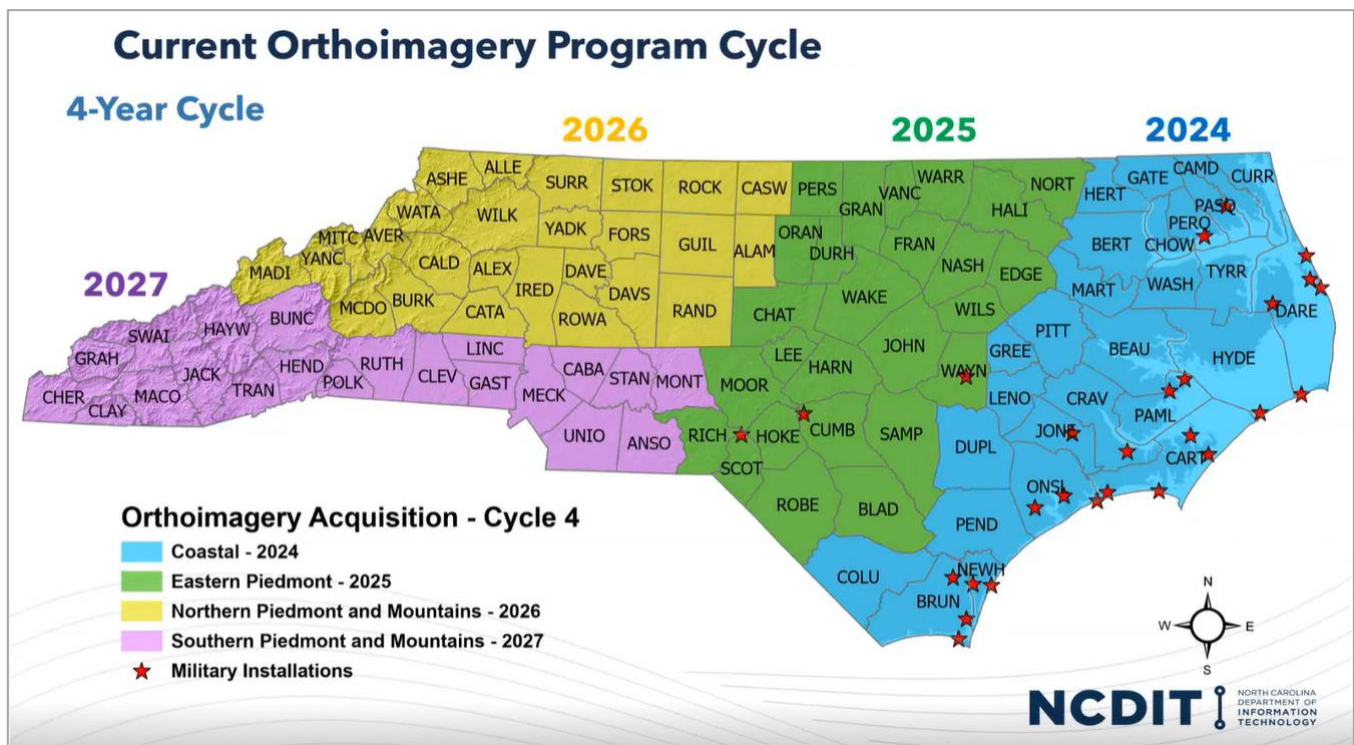


Figure 1 - Current ortho program cycle.

Since the last SMAC meeting the project team has gone through all the post-acquisition production tasks. The tight acquisition window allowed for a better radiometric product because all the imagery is collected at nearly the same time. There is a slight temporal variation but not as much as in previous years. Quality review will begin next month and is outlined in Figure 2.

2025 Orthoimagery Review Schedule								
County	Review Start	Review End	County	Review Start	Review End	County	Review Start	Review End
Cumberland	21-Jul	15-Aug	Chatham	4-Aug	29-Aug	Bladen	18-Aug	12-Sep
Franklin	21-Jul	15-Aug	Edgecombe	4-Aug	29-Aug	Durham	18-Aug	12-Sep
Granville	21-Jul	15-Aug	Lee	4-Aug	29-Aug	Halifax	18-Aug	12-Sep
Harnett	21-Jul	15-Aug	Moore	4-Aug	29-Aug	Hoke	18-Aug	12-Sep
Johnston	21-Jul	15-Aug	Robeson	4-Aug	29-Aug	Northampton	18-Aug	12-Sep
Nash	21-Jul	15-Aug	Sampson	4-Aug	29-Aug	Richmond	18-Aug	12-Sep
Orange	21-Jul	15-Aug	Vance	4-Aug	29-Aug	Scotland	18-Aug	12-Sep
Person	21-Jul	15-Aug	Wayne	4-Aug	29-Aug	Wake	18-Aug	12-Sep
Wilson	21-Jul	15-Aug				Warren	18-Aug	12-Sep

Figure 2 - Review period summary.

Geodetic Control

Gary Thompson updated the SMAC on the geodetic control network in NC. He reminded the committee that the NC Geodetic Survey is partnering with Virginia Tech to install a CORS station next month in the Suffolk, VA area. It will assist with post-processing across the state.

Reference Frame

Gary indicated one thing that is being done to prepare for the new datum is the National Geodetic Survey just completed a re-computation of all the CORS on NAD83 to get them to the current version of the ITRF (International Terrestrial Reference Frame). The NC Geodetic Survey will update the CORS positions accordingly. On average the change will be 3mm horizontally and 9mm vertically. This will be done in partnership with SC and TN. The datum change will occur sometime in the fall of 2026.

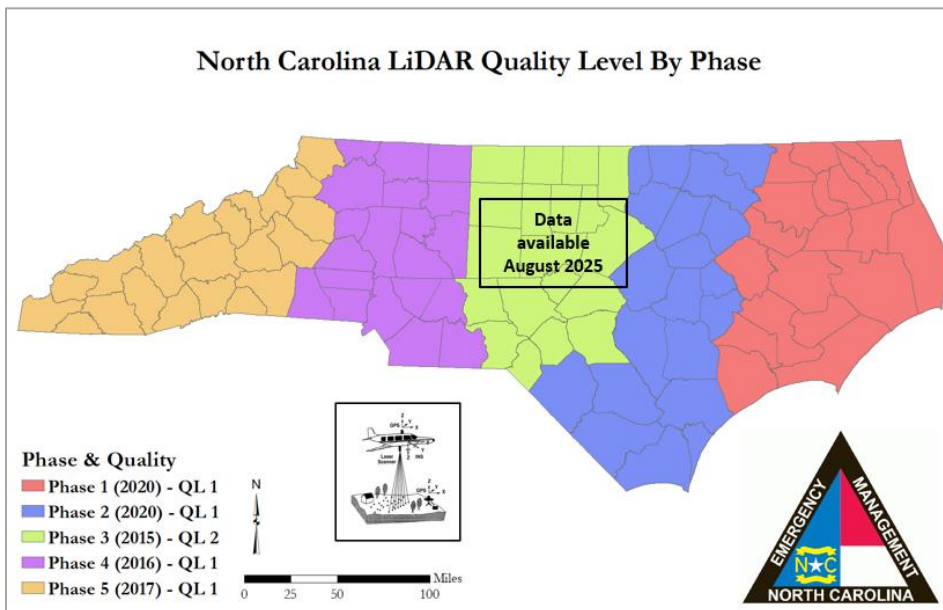


Figure 3 - LiDAR status.

NC LiDAR Update

Gary said NCEM is close to finishing quality control on Phase 3 (in green in Figure 3). Once that is complete the data will be distributed to state agencies and NC OneMap. The data in this area was collected in 2024.

2025 saw a large data collection effort of orthoimagery and LiDAR in

some areas of western NC. It is a collaboration between several entities, including NC Emergency

Management and NCDOT. The counties in pink (in addition to Alexander and Davie) in Figure 4 had imagery and LiDAR collected and will receive a copy of the data. Copies will also be made available to state agencies and NC OneMap. Counties in gray will be available later in the year. Funding exists to collect LiDAR again in 2026.

Working Group for Seamless Parcels

The WGSP continues to work to get data tables directly from the CAMA vendors, to add to the parcel layer appearing in NC OneMap. The group has reviewed all the requests and recommendations from various organizations and finalized a preferred attribute list. There will be a forthcoming meeting to establish a test project with one of the vendors (BI-Tek). The plan is to have some data to start testing sometime in August or September.

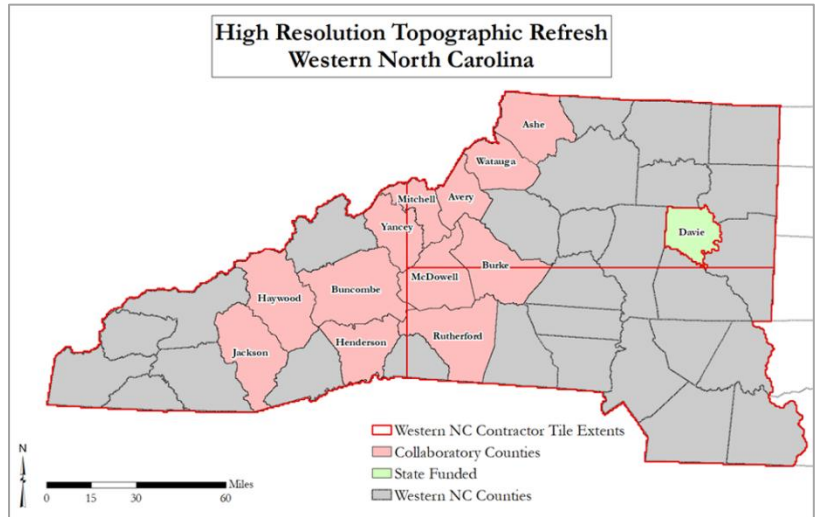


Figure 4 - LiDAR status.

Cadastral

Katie Doherty informed the committee there have already been 90 counties that have updated their cadastral data in the NC Parcels transformer so far this year. Seven counties last updated their parcels data set in 2024 and only 3 that last updated before 2024. The WGSP is aware of the issues prohibiting updates in these 3 counties.

Hydrography Working Group

Cam McNutt told the SMAC the working group has been meeting every two weeks, mostly to take another look at the Memorandum of Understanding between DIT-DOT, DOT business, DEQ-DIT, DEQ business, and CGIA. The DEQ team is not comfortable with the draft at the moment. The HWG is trying to find the right level of detail for the MOU versus the governance document being drafted. Cam will assemble use cases from day-to-day DEQ hydrography users, including those involving cost-savings through permitting. The focus to date has been on the IT-related components of the project (servers, IT staff, etc.) and not how the data will benefit the business staff.

Pieces of the ATLAS hydrography will be used for small area restoration plans - graduate students have been able to achieve a lot of value-added information by connecting the detailed ATLAS hydrography to storm water infrastructure, to identify restoration opportunities that otherwise would not be identified by either imagery or the existing hydrography.

Cam was hoping to provide another update of ATLAS hydrography with DEQ data, but the DEQ data requires EPA approval, which may not be forthcoming any time soon due to federal cutbacks.

## Working Group for Administrative Units

There was no working group report, so Gary asked Bob Coats to update the SMAC on the municipal boundaries data.

### Municipal Boundary and Annexation

Bob thanked Luca Venegoni for putting together a dashboard containing monitoring information. It has been added to the bottom of the Municipal Boundaries [page](#) on the NC OneMap web site. This is timely because NC and the Census Bureau signed an agreement on June 16<sup>th</sup>. This agreement allows the municipal boundary application/resource to officially respond to BAS (Boundary and Annexation Survey) at the next iteration, meaning local governments in NC only need to update their boundaries in the municipal boundary tool. Four counties in western NC were picked as a pilot area. The test was successful proving the process in place works.

The next challenge is to get as many local governments to use the municipal boundary tool as possible. To that end, Bob said he is presenting at the NC Municipal Clerk's conference in August in Cherokee. He will underscore the importance of everyone reviewing their data in the tool. He also drafted a fact sheet that will be dispersed to the Association of County Commissioners and League of Municipalities.

### County and State Boundaries

#### Projects in progress

- Jackson – Macon (monumentation phase completed, will record plats in July 2025)
- Catawba – Lincoln (Plats have been recorded. H173 updated)
- Granville – Franklin (HB438 ratified, in progress to set monuments along the county boundary)
- Mecklenburg – Union (HB457)
- Caswell – Person (working with the counties to finalize the reestablished boundary)
- Forsyth – Guilford (plats recorded and impacted property owners notified)
- Hoke - Robeson
- Polk – Rutherford (contracting in progress)
- Chowan – Perquimans
- Harnett – Johnston
- Burke-McDowell (research in progress)
- Beaufort-Pitt
- Caldwell - Watauga
- Mitchell – Yancey
- Cumberland - Harnett
- Bladen – Columbus – Brunswick
- Buncombe – Henderson

Gary provided an update on county and state boundary surveying. Projects in green in Figure 5 are currently being worked on. Jackson-Macon is close to finishing. Once plats are recorded letters will be sent to the impacted property owners. Forsyth-Guilford is complete and will be removed from the list.

Work continues to develop a boundary commission between TN and NC. Also, there was a recent request to survey the GA/NC boundary. Gary will work with the Governor's Office to get a commission created for this border as well.

Figure 5 - County/State boundary survey update.

### NC Board on Geographic Names

Cam McNutt brought before the SMAC five name considerations.

### Lake Caroline

This feature is a dredged lake in Pitt County. The proposed name is in memory of the proponent's niece. It has the recommendation of the county commissioners. The commemorative name is for someone that did not have an association with the property or the area, and as such the US BGN noted this does not meet their commemorative name policy. The NC BGN's recommendation to the SMAC is that it does not endorse this name to the US BGN. The SMAC, however, voted to approve the name and pass it on to the US BGN.

### Bear Brook

This water feature is currently unnamed in the town of Montreat. It is mostly underground. The proposed name has the endorsement of the town council. It is part of the Upper Swannanoa River restoration plan. Part of this plan encourages the naming of unnamed features to engage the community in the restoration process. The NC BGN recommended this name to the SMAC. The SMAC voted to approve the name and forward to the US BGN.

### Cathys Creek

This unnamed stream runs across the NC/SC border, from Polk County, NC to Spartanburg County, SC. Neither county government has an opinion on this name. The SC naming authority does not oppose the name. The proposed name meets the US BGN commemorative naming conditions. The SMAC approved the naming recommendation from the NC BGN.

### North Gambill Lake

The currently unnamed impoundment is in Forsyth County. The county commissioners have no objection to the name. The NC BGN considers the name Middle Gambill Lake, a name which applies to both lakes to be "directionally inconsistent", as the lake to the north is proposed to be named North Gambill Lake, yet the lake to the south is named Middle Gambill Lake (and should be South Gambill Lake).

The NC BGN proposed the lakes be named consistently, meaning North and South or Upper and Lower. The NC BGN is neutral on this name proposal. The SMAC voted to deny the name request and refer it back to the NC BGN for additional consultation and addressing of the issue.

### Lake Lindsey

This is a proposed name change from Conrad Lake to Lake Lindsey. The feature is in Forsyth County. The Conrad family has a long history in the area. The new property owners (proponents) are starting to demolish the plantation house and the enslaved housing remnants on the property and wish to remove the name "Conrad", as it is associated with "antiquated antics."

The county commissioners have no opinion on this potential name. However, the Lewisville Historical Society opposes the name, and sites renaming the lake will erase history from the community. The NC BGN discussed that the proposed name ("Lincoln") has no local connection to the area. The board also agrees with the historical society regarding the erasure of local history. The NC BGN's recommendation to the SMAC is that they do not recommend the name change. The SMAC agreed and voted to not approve the name change from Conrad Lake to Lake Lindsey.

NC BGN staff is updating the committee's charter to clarify who appoints the members to the board. The group currently has two vacancies.

## **NC Data Projects**

### Addresses

Darrin Smith updated the SMAC on the on-going AddressNC project.

Statewide addresses are current as of June 11 and available from NC OneMap as an address points feature class (map service and download) and geocoder (geocoding service and offline geocoder download). Since the last SMAC meeting in April there have been over 18,000 points added to the data set. Forty-eight percent of all counties had some change in the data.

A Google Maps URL hyperlink has been added to the AddressNC point feature class. When clicked Google Maps will open in a new browser tab and zoom to the same address location. This addition will appear in the data next week.

### Building Footprints

Gary informed the SMAC that EM has as many as 6 interns working to map footprint updates. Most of the state has been updated except for the southern piedmont and mountains area. The footprint updates follow the orthoimagery production cycles.

Gary indicated that EM is still doing updates manually rather than using AI/Machine Learning. He said cleaning up the ML-generated updates was taking longer to clean up than to map the data manually, and added that in the future EM hopes to use ML to help identify where changes occur which will allow the manual updates to occur faster.

### Broadband

Ben reported that the broadband team recently received data showing where providers report service across the state for every location they serve, and what technology is used at those locations. The team then looks at the inverse - what areas don't have adequate service at certain thresholds. The programs to fund broadband expansion started in 2022 with about 376,000 locations that did not have a download speed of 100Mbps and upload speed of 20Mbps. Today that number is approximately 100,000.

Many statewide data sets collected, especially imagery, addresses, and parcels, play a large role in the FCC mapping. The team ingests the FCC data but because of the reliable statewide data, can challenge the FCC product when gaps are found. Almost 50,000 locations across the state have been added to the FCC maps. This validation process is performed constantly. North Carolina was awarded \$1.5 billion from Congress's bipartisan infrastructure bill, the most awarded to any state in the country, in part because of the good statewide base data behind the analysis. Every single location that is funded must be reported to the US Treasury.

All the information is displayed on the NC OneMap [web site](#) - funding programs, planning tools, and leadership materials.

## **Regular Status Updates**

### NC GIO Report

There was no report at this time.

### USGS/National Geospatial Programs Office

Jo Baker brought the SMAC up to speed on NGP activities. The USGS 2025 LiDAR base specification was released June 10:

- Online and downloadable versions of all USGS LiDAR Base Specifications (LBS): <https://USGS.gov/3DEP/lidarspec>
- LBS Revision Status page (links to descriptions of changes): <https://USGS.gov/3DEP/LBSrevisionstatus>

Also, the “nhd@usgs.gov” email address has been retired. NHD questions can now be sent to either [TNM\\_Help@usgs.gov](mailto:TNM_Help@usgs.gov) or [3DHP@usgs.gov](mailto:3DHP@usgs.gov).

### NC OneMap

David Giordano said CGIA is working on a new FY25-26 SMAC work plan and will have it completed soon. In that document there will be a reference to an updated list of data sets the SMAC recommends should be available from NC OneMap. The SMAC will convene an interim meeting before its next quarterly meeting in October to review the work plan and the list.

## **Other Business**

Alice Wilson announced there will be a hurricane preparation July 31<sup>st</sup> in Greenville. The HurriUp Workshop will be held in the Greenville city council meeting space. Paul indicated it would be nice to have a summary of what transpired at the workshop at the next SMAC meeting in October.

## **Adjourn**

**Attendance In-Person:**

<b>Name</b>	<b>Association</b>
Paul Badr	GPI, SMAC Chair
Rich Elkins	NC Sec. of State
David Giordano	CGIA
Cam McNutt	DEQ
Darrin Smith	CGIA
Gary Thompson	NCEM
Alice Wilson	City of New Bern
Eric Wilson	NCDOT

**Attendance On-Line:**

<b>Name</b>	<b>Association</b>
Jo Baker	USGS
Joe Battinelli	Cabarrus County
Nathan Bland	NC Sec. of State
Shelby Bourquein	USGS
Bob Coats	OSBM
Elizabeth Daniel	CGIA
Scott Davis	AECOM
John Derry	CGIA
Katie Doherty	Rutherford County
Mitch East	DNCR
Corinne Foster	DNCR
Kitty Kolb	USGS
Ben Shelton	CGIA
Luca Venegoni	CGIA
Chrisian Vose	NCAGR
Ashley Yandle	DNCR