

# Statewide Mapping Advisory Committee (SMAC) Meeting Minutes

Date: Wednesday, December 10, 2025, 1:30 PM

Location: DEQ GS Training Room 1210 and Virtual

## Introductions

The meeting began with introductions of attendees from state agencies, local governments, and federal partners. New members were welcomed, including John Quintero replacing Bob Coats and Kitty Kolb being replaced by Bart Matthews as the federal representative from the FIC.

## Approval of Previous Minutes

The October 7, 2025 meeting minutes were reviewed and approved unanimously. A motion was made and seconded without any corrections or edits.

## Working Groups and Related Geospatial Data

### Orthoimagery and Elevation

Ben Shelton provided a detailed update on the 2025 orthoimagery project (26 counties show in green

in Figure 1). This is the second phase in the 4-year cycle. Hard drives containing mosaics and tile products were distributed to PSAPs and counties, ensuring coverage beyond county boundaries to accommodate emergency dispatch needs. The primary delivery rectangle extends approximately seven miles beyond county boundaries, squared off for broader coverage.

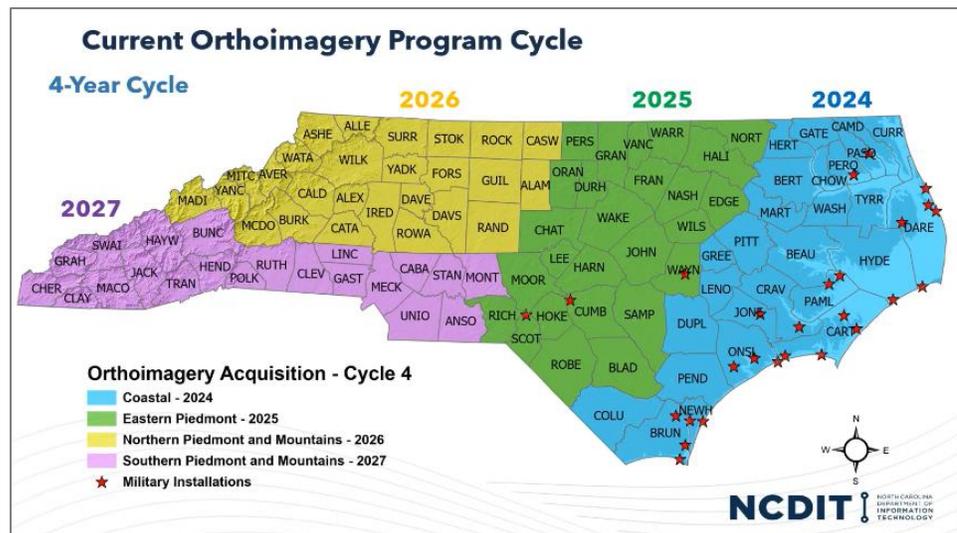


Figure 1 - Current 4-year orthoimagery cycle

Products include full-resolution TIFFs and MrSID files (three-band and four-band), along with single-file mosaics that incorporate neighboring states' imagery for seamless regional coverage. The imagery is now live on NC OneMap for download and viewing, and integration with Esri's World Imagery basemap is underway.

Ben also noted that the most-recent older imagery from previous NC orthoimagery projects was included in the imagery deliverables where needed, ensuring continuity. Future plans involve leveraging AI and raster analytics for impervious surface detection and building change analysis.

Planning for the 2026 cycle includes mountain acquisition areas with enhanced specifications for sun angle, snow coverage, and 3D flight planning (Orange in Figure 2). True ortho will be captured for Greensboro and Winston-Salem. Contracting will begin in January, acquisition in February, and

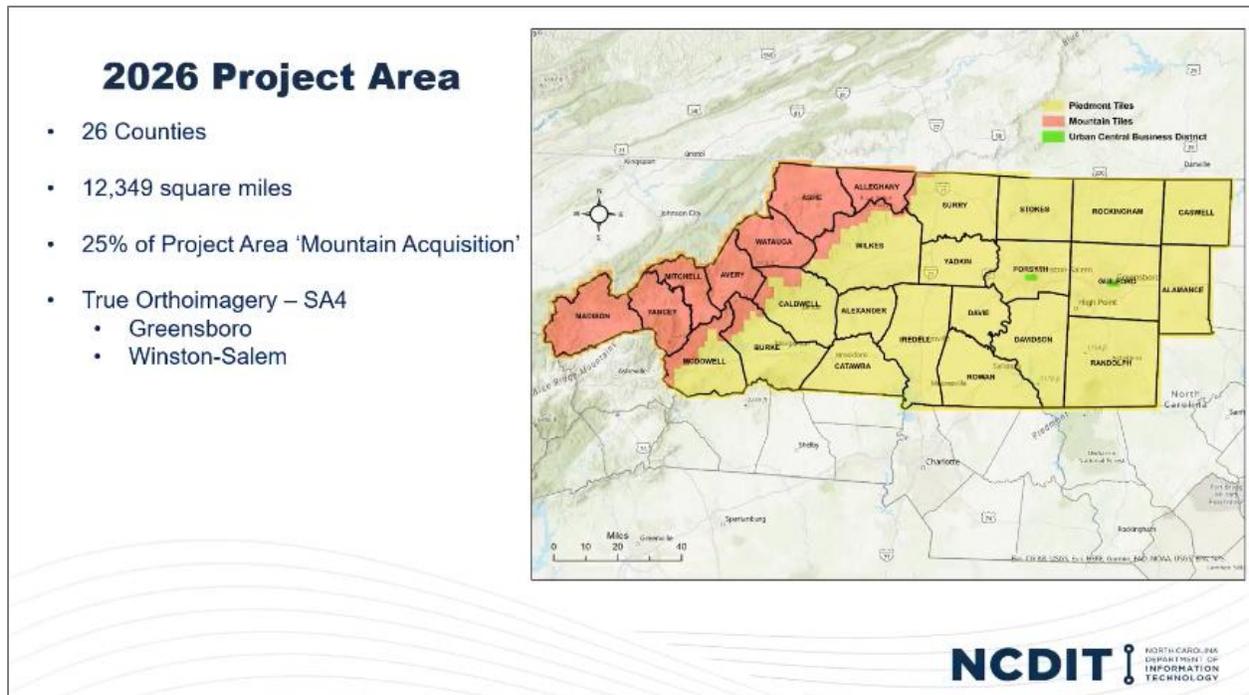


Figure 2 - 2026 project area with "mountain" tiles

delivery is expected by December 2026.

## Geodetic Control and Reference Frame

Gary Thompson reported that the datum change has been delayed to early 2027, with beta transformation products to software vendors available by mid-2026. Preparations include installing new CORS stations, such as the recently completed Taylorsville site, which is solar-powered and uses modem connectivity for low latency. Using this technology allows greater flexibility for installation locations. The CORS network provides the foundation for the new datum. To aid users

along the NC/VA border, the NC Geodetic Survey is working with Virginia Tech to install two new CORS stations.



Figure 3 - Current NC CORS network

NCEM has developed a set of rules on when to use the US Survey Foot and when to use the International Foot (basically the international foot should only be used with the new datums). Public comment on adopting the rules closes soon, with implementation expected in February 2026.

The SMAC subcommittee (Reference Frame Working Group) subgroup meets monthly to address technical impacts, including tile layout changes and guidance for local governments. Outreach efforts aim to ensure agencies are prepared for the transition and minimize disruptions. Their next meeting is January 15, 2026.

### NC LiDAR Update

Gary provided updates on LiDAR collections: Phase 3 (~22 TB) and Collaboratory Phase 5 (~21 TB) are complete, covering over 40 counties. Data is being distributed via portable drives and loaded onto Spatial Data Download for tile-based download.

Plans for 2026 include recollecting LiDAR in select counties to support floodplain mapping and non-regulatory 2D Rain-on-Grid studies. QC for remaining counties is expected by January. Colleen Kiley highlighted the need for a long-term solution between state agencies for data sharing and storage given the large file sizes.

## Seamless Parcels

Katie Doherty was unable to attend. Elizabeth Daniel briefed the committee. There have been 42 counties in Q4 2025 so far. Thirty additional counties are currently being processed. Elizabeth has reached out to the balance of counties. Two counties (Hoke and Stokes) remain delinquent, prompting targeted outreach.

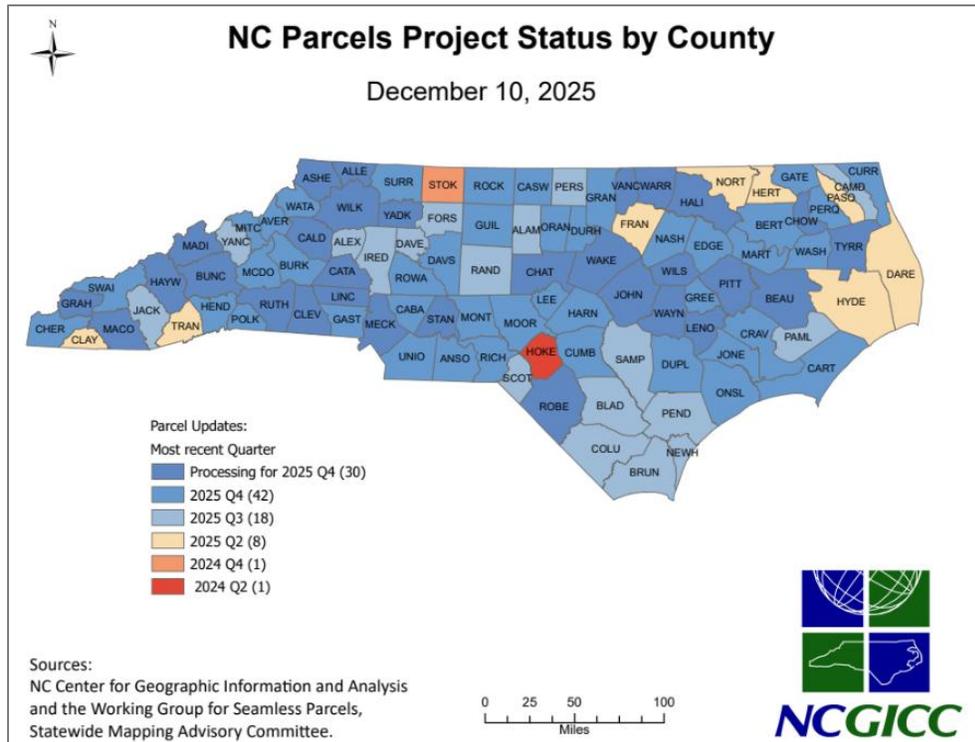


Figure 4 - Current NCParcels status

The working group met on December 2 and is scheduling CAMA vendor meetings in February to improve data consistency.

## Hydrography

Cam McNutt reported the smaller hydro management group has been meeting every two weeks to finalize

the memorandum of agreement between DOT, DIT, CGIA, and DEQ, in order to ensure sustainable management of this large and important data set. Project contractors have given presentations to the DEQ GeoTeam, to gain their buy-in and realize the opportunities within the department to use this data. The larger Hydrography Working Group (HWG) wants to educate as many people as possible. There is still a bit of trepidation concerning how the data will be maintained, however there are quite a few people within DEQ that are starting to use the data.

Paul Badr asked how data updates materialize. Cam said triggers for updates include new LiDAR data, restoration projects, culvert redesigns, and storm-related changes. Local governments expressed interest in accessing version two of the dataset, which is available for preliminary use. Future plans include annual update cycles and improved mechanisms for public access.

Alice Wilson conveyed the desire of local governments to obtain the data and start using it.

## Administrative Units

Mike Cline updated the SMAC. The committee provided an in-depth update on efforts to improve the management of municipal and state boundaries, emphasizing progress, challenges, and upcoming priorities. Significant strides have been made in developing and enhancing a boundary tool that enables agencies to track municipal boundaries according to their respective timelines, such as those used by the Census Bureau and state agencies. Despite these improvements, adoption by local governments remains inconsistent. Outreach efforts included a major summer push and recent targeted calls to encourage participation. The Census Bureau's schedule has shifted slightly due to a federal government shutdown, delaying invitations for boundary updates until February 2, 2026, though critical deadlines remain unchanged: March 1 for submissions to be included in next year's data and March 31 for late submissions that will not be incorporated. Additionally, Western North Carolina has been selected as a 2026 census test site because of its rural, mountainous terrain and American Indian population, which present unique challenges for response rates.

Nathan Bland spoke about the municipal boundary submission tool. The Secretary of State's office, which certifies annexations, announced plans to use the new NC OneMap pilot tool alongside traditional methods to certify municipal annexations. Coordination efforts are underway to advertise the pilot program and ensure municipalities are prepared for certification deadlines. Stakeholders stressed the importance of maintaining a statewide boundary agreement and auditing municipal data for accuracy. While the collaborative development of the boundary tool is a strength, it also creates challenges because there is no single central authority overseeing its use. Resource sustainability and agency support will be critical to maintaining and improving the system, and discussions about formal agreements or MOUs may be necessary to ensure long-term success.

Looking ahead, the group is prioritizing outreach to counties with high annexation activity, such as Wake and Mecklenburg, because securing updates from these areas will address a large portion of statewide changes. Broader engagement with all 100 counties is also planned. North Carolina's rapid population growth continues, with an estimated 157 people moving to the state daily and the state ranking third in domestic migration gains since 2020.

## County and State Boundaries

Gary Thompson provided the update on county and state boundaries. There is ongoing collaboration with Tennessee and Virginia to establish boundary commissions, as well as continued work on long-standing projects like the Hoke-Robeson and Caswell-Person boundaries and new efforts on boundaries related to Polk-Rutherford, Chowan-Perquimans, Harnett-Johnson, Burke-McDowell, and Carteret-Onslow. These initiatives underscore the continuous nature of boundary management and the importance of standardized data for statewide consistency.

# NC Data Projects

## Addresses

Darrin Smith reported NC OneMap is current through October 17, with 79 counties contributing updates and over 16,000 new points added since the last meeting. There will probably be another update before Christmas. A new service showing cumulative address growth is available on NC OneMap.

Future plans include automation for address validation and integration with other datasets to support emergency services and broadband planning.

## Building Footprints

Gary Thompson noted that updates are nearly complete statewide, with only 13 counties remaining. It is anticipated there will only be two counties remaining by the first week of January 2026.

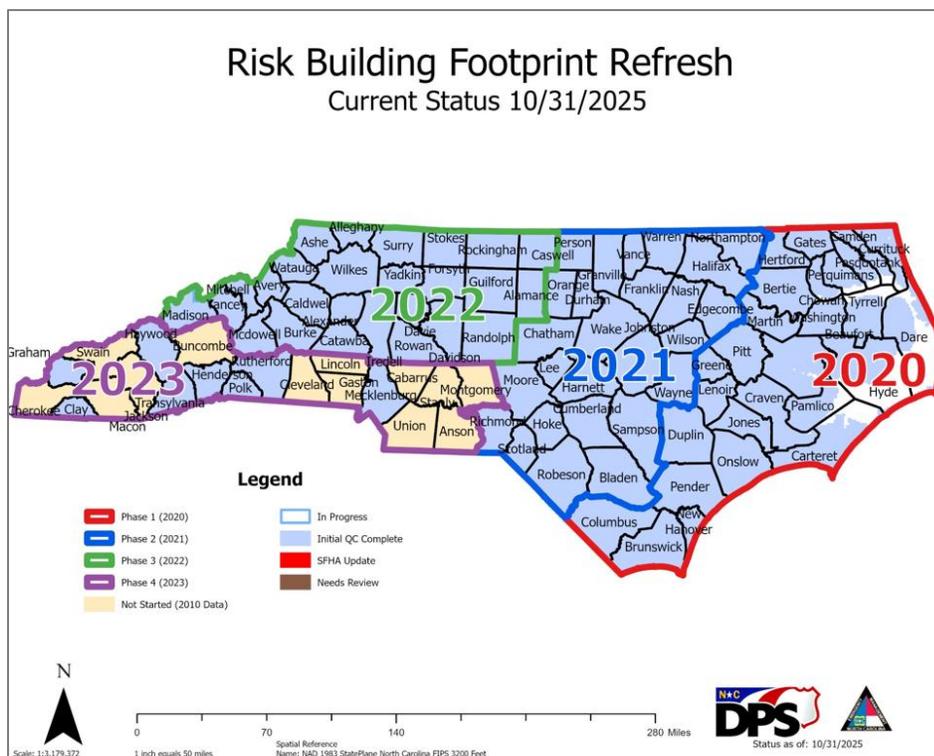


Figure 5 - Building footprint status

Contractors and in-house teams are using new techniques to accelerate processing, and future work will focus on coastal areas using 2025 imagery and LiDAR for change detection.

The group discussed reconvening the building footprint working group to address concerns about deprecating

existing services. AI and machine learning applications for building detection and classification were also explored.

## Broadband

Ben Shelton reported that the state is awaiting final approval for BEAD program funding. Preliminary approval has been granted, but federal priorities have shifted toward technology neutrality, allowing satellite providers to compete alongside fiber.

The group discussed FCC broadband data updates - broadband serviceable locations and provider-reported availability (version 7, service as of June 30, 2025). Ben and the team are using the data to update all their resources. Updates should be complete by the end of the month.

## Regular Status Updates

### NC GIO Report

Matt McLamb was absent, and no update was provided.

### USGS

Jo Baker announced the addition of a new 250K topographic map type to the USGS TopoBuilder [application](#), expanding options for customized maps.

### NC OneMap

David Giordano provided a little more context and highlighted the release of 2025 orthoimagery. The data are available through NC OneMap as downloadable [mosaics](#) and [tiles](#), as well as web services for general viewing and analysis and tools for viewing image acquisition dates ([web service and download](#); web viewer [application](#)).

# Attendance

## In-Person Attendees

<b>Name</b>	<b>Organization</b>
Paul Badr	Chair
John Quintero	OSBM, Governor's Census Liaison
Rich Elkins	LRMP, Director
Christian Vose	DACS
Nathan Bland	LRMP
Darrin Smith	CGIA
Mike Cline	OSBM, State Demographer
Gary Thompson	NCEM
Elizabeth Daniel	CGIA
Mitch East	DNCR
Cam McNutt	DEQ Water Resources
Coleen Kiley	CGIA
Ben Shelton	CGIA
David Giordano	CGIA (Committee Staff)

## Online Attendees

<b>Name</b>	<b>Organization</b>
Joe Battinelli	Cabarrus County, LGC Representative
Jo Baker	USGS, National Map Liaison
Alice Wilson	City of New Bern, LGC Representative
Luca Venegoni	CGIA
Shelby Bourquein	USGS, US Board on Geographic Names
Steve Averett	City of Greensboro
Corinne Foster	State Archives
Ray Chilcote	CGIA
Faye Koenigsmark	DHHS, DPH
Nick Bozdog	DEQ, Geological Survey
Ashton Bailey	CGIA
Richard Green	DOT, Photogrammetry
Jeff Essic	NCSU
Dwain Veach	DEQ, Geological Survey
Eric Wilson	DOT, GIS Unit
Ashley Yandle	DNCR