MINUTES
Statewide Mapping Advisory Committee Meeting

Tuesday, October 7, 2025, 1:30 – 3:30 PM
NCDEQ Conference Room (#5001)

Welcome/Introductions

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

The minutes from the June 26, 2025 SMAC meeting were approved by the committee.

Committee Planning

2025-26 Work Plan

David Giordano introduced the 2025–26 Work Plan, combining ongoing framework dataset maintenance with new strategic goals. Members discussed updating the priority dataset list with current agency contacts and designating agency leads to improve coordination. Priority efforts include updating the spreadsheet for four key datasets (elevation, hydrography, municipal boundaries, and building footprints) and improving NC OneMap accessibility to ensure the Council's priority datasets are readily discoverable and available to stakeholders.

Emerging topics such as artificial intelligence and machine learning in geospatial analysis were highlighted as important future directions. Members discussed how AI could support post-event damage assessment, facility mapping and inventory, and predictive modeling using existing datasets. The committee emphasized the need for creating guidance on responsible AI usage, including documentation of sources and AI-generated content labeling. Members also explored opportunities for shared data warehousing to strengthen statewide access and integration of geospatial data, recognizing that centralized data repositories would enhance the utility of AI applications across agencies.

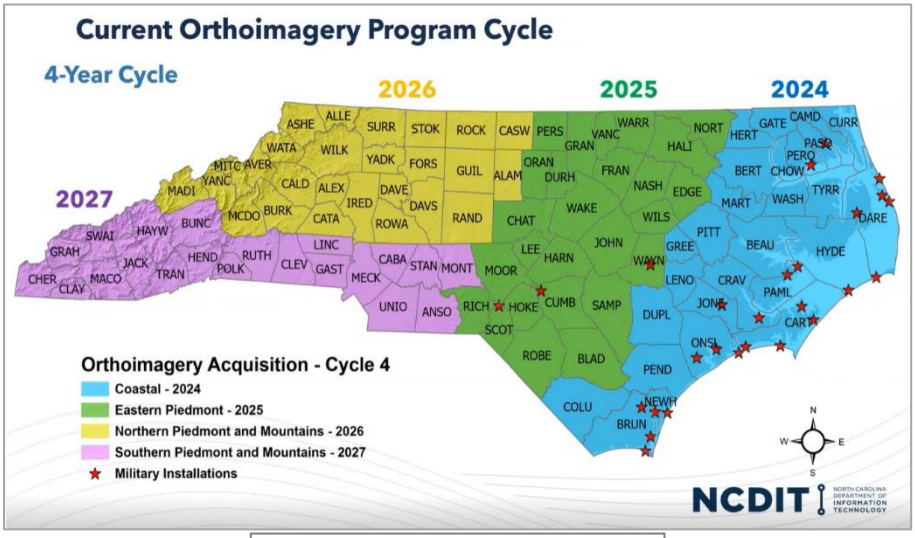

Figure 1 - Current ortho program

Working Groups and Related Geospatial Data

Working Group for Orthoimagery and Elevation

Ben Shelton reported on the 2025 orthoimagery project, which encompasses 15,000 square miles centered on Raleigh-Durham, Fort Bragg, Camp McCall, and surrounding areas (green area in Figure 1). The project includes true orthoimagery delivery for Raleigh and Durham and required significant military

coordination to facilitate aircraft operations in restricted airspace. Post-acquisition production tasks have been completed, and the tight acquisition window resulted in improved radiometric consistency across the deliverables. Quality review of all 26 counties will occur in October and November, with delivery anticipated in early December.

Geodetic Control

Gary Thompson reported on expansion of the CORS (Continuously Operating Reference Stations) network. A new solar-powered CORS with cell modem capability was recently installed at Virginia Tech's research farm. Additional CORS installations are planned at Cocola and Oak Island, with the goal of extending stations as far east as possible along the coast to improve post-processing capabilities and support geodetic control needs.

Reference Frame

Gary Thompson reported on the NAD 83 (2022) datum transition, planned for late 2026. The 2022 Reference Frame Working Group continues to meet with strong participation from state agencies, local governments, private sector, and federal partners. Legislation is in place to support the transition, and a rule regarding use of the international foot has been filed for public review. The new datum specification, originally scheduled for release in 2026, is now expected in early 2028. The working group will continue monthly meetings to develop implementation guidance and coordination strategies.

NC LiDAR Update

Gary Thompson reported that Phase 3 quality control is nearly complete, with all deliverables expected by mid-November. Data will be distributed to counties, state agencies, and NC OneMap. Phases 4 and 5, funded through partnership with the NC Collaboratory, collected orthoimagery and LiDAR across 12 western North Carolina counties impacted by Hurricane Helene. Buncombe, Jackson, Watauga, Ash, and Henderson counties all received data within the last two weeks. All counties will receive copies via portable hard drives. Discussions were had on how to host this data and make it accessible through data portals like NC One Map and Spatial Data Download.

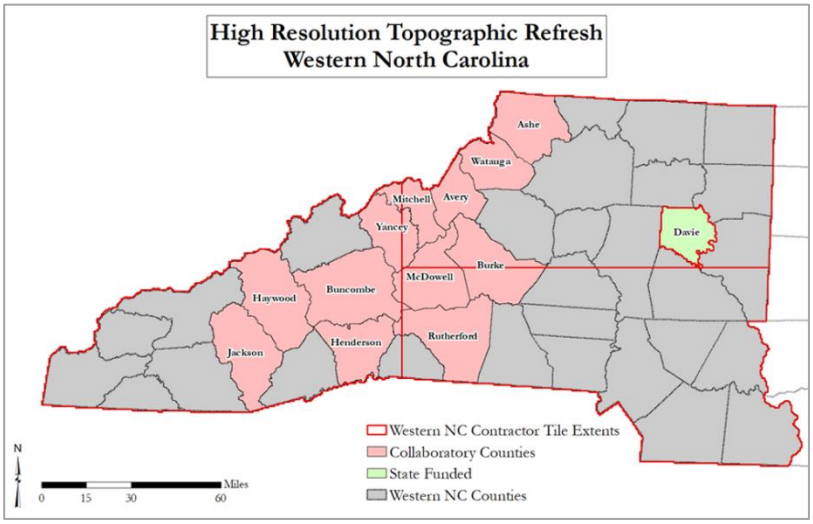

Figure 2 - NC Collaboratory topo

Funding is available to collect QL1 LiDAR again in 2026 in these same counties to capture changes from 2025 and support ongoing 2D floodplain studies. The Spatial Data Download tool (version 2.0) has been updated with new features for accessing LiDAR data, DEMs, and updated building footprints.

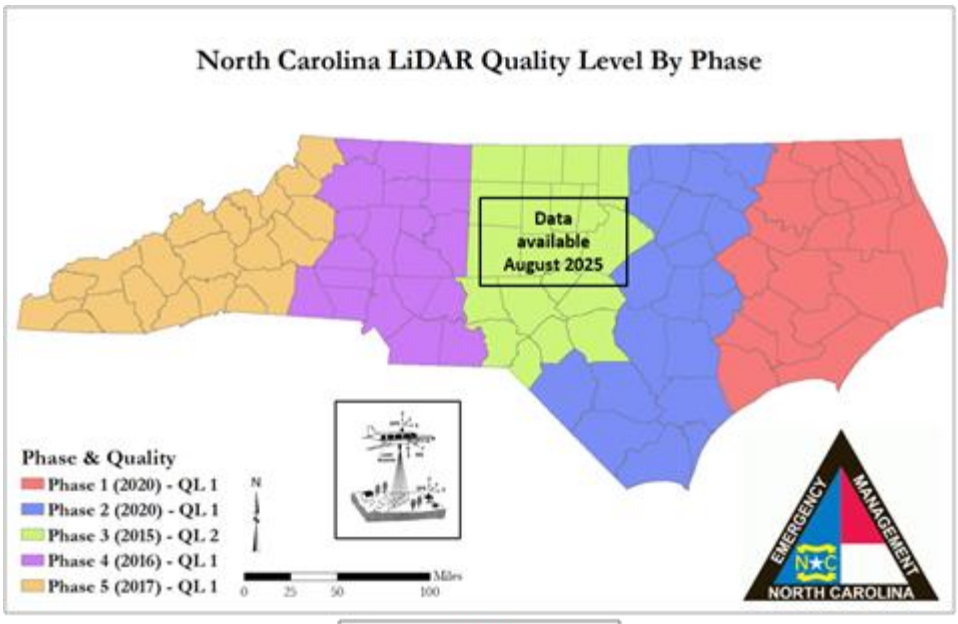

Figure 3 - LiDAR status.

Working Group for Seamless Parcels

Cadastral

Katie Doherty reported significant progress on parcel data updates across the state. As of October 2025, 21 counties have updated their parcel data at least once this year, with 15 counties updating on a monthly or bi-monthly schedule. The majority of remaining counties are updating quarterly, resulting in an 85% average update rate. Recent updates from Bladen, Scotland, and Alexander counties represent a milestone achievement for the working group. Only 3 counties have not yet updated for 2025. Vendor meetings, which experienced scheduling delays over the summer, are being rescheduled to develop a forward momentum plan.

Hydrography Working Group

Cam McNutt reported that the hydro working group continues behind-the-scenes meetings every two weeks with memorandum updates pending with the new Secretary of Transportation, and discussions are underway regarding how to incorporate recent stream network changes related to Hurricane Helene impacts.

Working Group for Administrative Units

Municipal Boundary and Annexation

Richard Elkins reported that Nathan Bland and Mike Cline will assume co-chair responsibilities for the working group. The group continues to identify ongoing outreach opportunities and is conducting targeted engagement at the county level (the primary reporters of boundaries to the BAS system), aligned with the existing communication plan and in preparation for the March 1st, 2026 BAS submission deadline. Upcoming outreach includes a presentation at the School of Government's municipal clerk school covering annexations and filings.

County and State Boundaries

Gary Thompson reported that Jackson and Macon counties have been completed, with monuments reported and recorded in the database. The Catawba-Lincoln County boundary record was reestablished; however, a recent House Bill introduced changes to the county boundaries, and stakeholders must be made aware that the current record does not reflect the official boundaries

specified in the bill. Multiple counties remain in progress on boundary work, with casual person resolutions expected within the next couple months.

NC Data Projects

Addresses

Darrin Smith reported that 73% of counties have updated their address data since June 2025, driven largely by new development and growth across the state. All address points now include automatically generated plus codes, which provide significant value by allowing direct entry into Google Maps without a full address. Google Street View integration has been added to every address point through automated code that pulls from Next Gen 911 centerlines to determine the closest point and bearing to each address. While Street View coverage is not guaranteed at every location, Google Maps remains available as a fallback. These enhancements are fully automated and take approximately one minute to produce statewide. Address data is currently available through the end of July, with an October update expected by end of week.

Building Footprints

Gary Thompson reported that 14 counties remain to be completed, with a year-end deadline to achieve full accuracy with 2023 data. Building footprints are critical to the 2D floodplain studies underway in western North Carolina, making timely completion a priority. Once all counties are completed, the team will update the coastal area using 2024 imagery. Completed building footprints are available through the Spatial Data Download website tool. The working group is utilizing contractors, interns, and additional resources to finish the remaining counties. The team plans to revisit recently completed counties using the new Collaboratory imagery to identify and remove buildings lost during Hurricane Helene, as well as structures in Rodanthe that have fallen into the ocean.

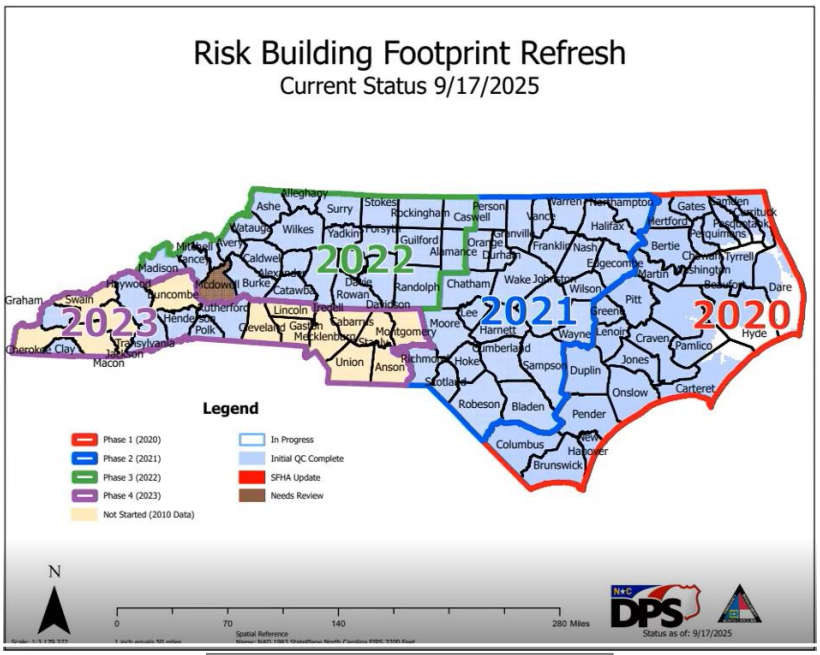

Figure 4 - Building Footprints status

Broadband

Ben Shelton reported that broadband mapping relies on ingesting FCC data through a proprietary location fabric created by CostQuest. Using statewide framework datasets—particularly addresses, imagery, and parcels—the state validates FCC data and challenges inaccuracies, identifying approximately 375,000

unserved and underserved locations. Various programs have funded approximately 250,000 locations representing $900 million in investment.

The federal Broadband Equity Access and Deployment (BEAD) program, funded through the bipartisan infrastructure bill, awarded North Carolina $1.5 billion based in part on the quality of the state's geospatial data. The state processed 347 provider applications and funded 93,000 of 103,000 eligible locations, disqualifying 10,000 ineligible locations through data validation. Awards included 63,000 fiber projects and supplemental technologies including fixed wireless and satellite options. Following depletion of BEAD funds, a stop-gap solutions program will address approximately 17,000 remaining unserved locations using remaining ARPA funds. All funded locations are reported to the National Telecommunications and Information Administration (NTIA) and the U.S. Treasury, and providers must report progress on broadband deployment to the state over several years. Information on all broadband programs, eligible locations, and project data is available through NC OneMap.

Regular Status Updates

NC GIO Report

There was no report at this time.

USGS/National Geospatial Programs Office

David Giordano reported for Jo Baker and said new USGS resources are now available, including 25K recreational topographic maps through the Topo Builder website and Hampton Roads LiDAR point cloud and DEM data from Virginia, which includes approximately 20 square miles within the Alligator River National Wildlife Refuge in North Carolina. A new USGS publication on the next generation 3D program has also been released. (Joe Baker was unavailable to provide a full report.)

NC OneMap

David Giordano reported that Next Generation 911 road centerlines are now available through NC OneMap with automated web services updated monthly. Luca Venegoni reported that the GICC site pages are being redesigned with card-style graphics to make them more user friendly. The SMAC site has been updated using this design style and it will be applied across all GICC committee websites.

Other Business

Alice Wilson reported on the HurriUp event held in Greenville, where NOAA presented resources and local governments were introduced to the Blue Sky/ Gray Sky GIS data checklists to prepare for emergencies. The committee also discussed AI applications in geospatial data mining and digital content accessibility mandates for federal compliance.

Adjourn

Attendance In-Person:

Name	Association
Paul Badr	GPI, SMAC Chair
Ben Shelton	CGIA
David Giordano	CGIA
Cam McNutt	DEQ
Darrin Smith	CGIA
Luca Venegoni	CGIA
Alice Wilson	City of New Bern
Eric Wilson	NCDOT
Elizabeth Daniel	CGIA

Attendance On-Line:

Name	Association
Rich Elkins	NC Sec. of State
Joe Battinelli	Cabarrus County
Nathan Bland	NC Sec. of State
Bob Coats	OSBM
Scott Davis	AECOM
John Derry	CGIA
Katie Doherty	Rutherford County
Mitch East	DNCR
Corinne Foster	DNCR
Ashton Bailey	CGIA
Gary Thompson	NCDPS
Brenden Drumm	CGIA
Dwain Veach	NC Geological Survey
Morgan Weatherford	NCDOT
Richard Greene	NCDOT
Greg Dobson	UNCA-NEMAC
Daniel Turner	CGIA
Kerry Hanko	NCDEQ
Dean Grantham	DEQ
Ray Chilcote	CGIA
Faye Koenigsmark	DHHS