

MINUTES

Statewide Mapping Advisory Committee Meeting

Date: Thursday, September 10, 2026, 1:30 – 3:30 PM

Location: DEQ GS Training Room 1210 and Virtual

Welcome/Introductions

See attendance sheet at the end of these minutes.

The minutes by the June 11, 2026 minutes were approved.

Working Groups and Related Geospatial Data

Working Group for Orthoimagery and Elevation

Orthoimagery – John Derry

John Derry reported that the quality review for ortho imagery began on July 20th and was scheduled to wrap up on September 11th, with 60% of the tiles in the 2026 study area (Figure 1) reviewed using the NV5 data reviewer. Contractors are addressing quality issues (Figure 2) before final delivery, and

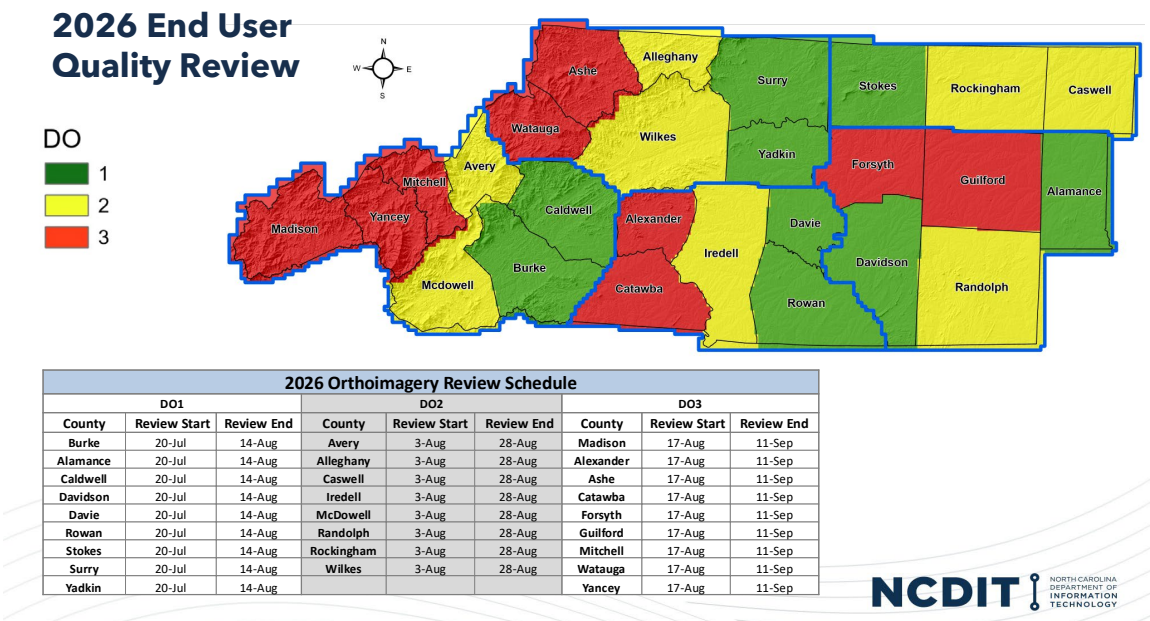


Figure 1 - 2026 Orthoimagery project area and delivery orders

the team is preparing to validate and distribute the tiles to PSAPs. In Figure 2, the green tiles have passed review. The purple tiles contain quality review issues.

NPM26 Quality Review

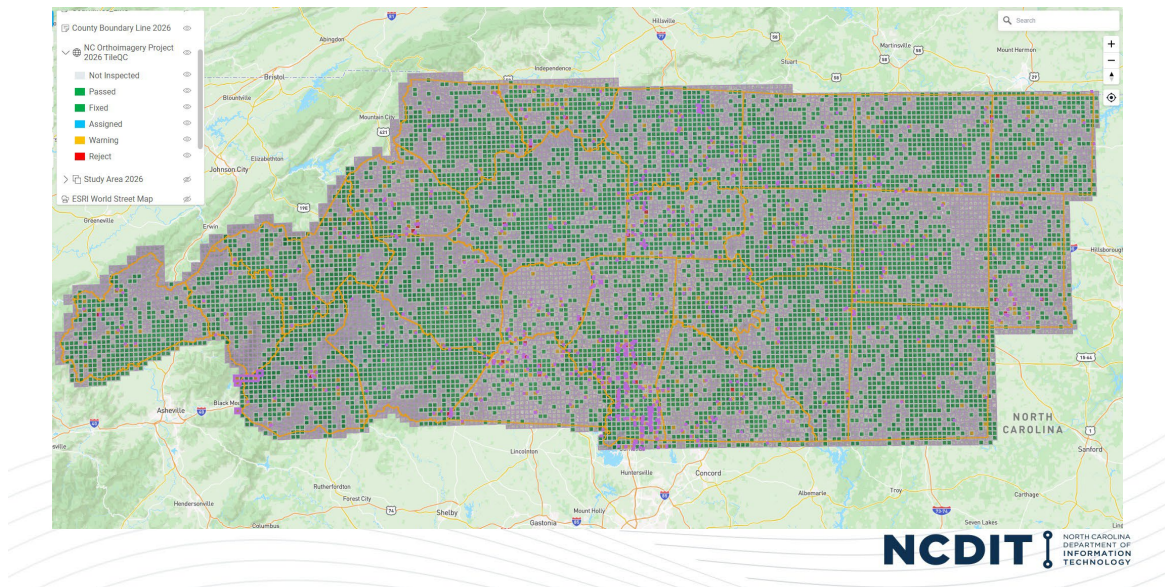


Figure 2 - Orthoimagery project detailed review status

The project team assembled an ortho imagery needs assessment survey. One hundred and twenty-five responses have been received so far, but with only 25 unique counties and 22 municipalities participating to date. The survey revealed high satisfaction with the imagery product but lower satisfaction with delivery methods. Stakeholders, particularly those in state government, prefer cloud-optimized geotiffs for analytical purposes.

There are differences in update frequency preferences between state and local stakeholders, with local entities desiring more frequent and higher-resolution imagery. Outreach efforts were discussed, including plans to promote the survey at upcoming conferences and through direct engagement during imagery delivery.

Participants discussed technical options such as buy-up opportunities for higher-resolution imagery during flights and the need for more cloud-optimized geotiffs. Funding mechanisms for expanded imagery offerings were considered, with emphasis on gathering use cases from survey responses to inform future funding strategies.

Meeting attendees suggested leveraging upcoming conferences, such as NCAUG and GIS conferences, to increase survey participation and stakeholder engagement. Plans were made to set up booths and encourage feedback from users to guide program improvements.

Geodetic Control – Gary Thompson

The NC 2022 Reference Frame Working Group will reconvene their monthly meetings. The next is 9/24, 1-3pm. Figure 3 highlights the particulars about the changes. Related to the reference frame, the

National Geodetic Survey (NGS) will start to release beta products later this month. Once these are released

the

software

vendors can start to build their transformation/projection tools.

Gary summarized ongoing efforts to install CORS network stations in North Carolina, including partnerships with Virginia Tech and the National Park Service. The goal is to complete installations by year-end for inclusion in the national datum adjustment.

The new tiling scheme for the 2022 datum will include different nomenclature to distinguish it from the previous format, and that tile numbers will change significantly due to new coordinate bases. The tile naming will shift from XYXYXY to XXX-YYY. The working group will discuss the NCDOT-Photogrammetry releasing the newly developed tiling scheme once it is finalized.

NC LiDAR Update – Gary Thompson

Gary reported that all deliverables for the 2025 LIDAR project have been received and are undergoing final QC, with plans to load data for the last 29 counties onto the NCEM spatial data download ([SDD](#)) platform by late October.

Collections for the 2026 area are complete, and contractors have begun delivering data for QC. The project is expected to wrap up by February 2027, with final data loading onto the NCEM SDD scheduled for the following month.

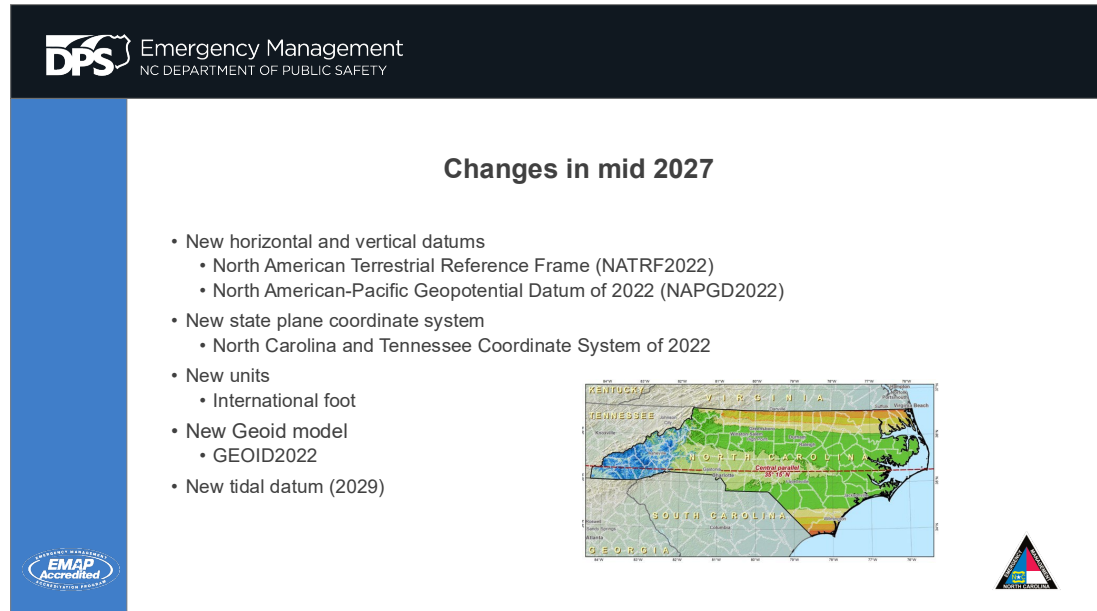


Figure 3 - Details about forthcoming datum changes

Bathymetric LIDAR was collected by the National Geodetic Survey covering major rivers in Western North Carolina. Preliminary data has been provided to NCDOT, with final delivery expected mid-to-late next year. Gary offered to provide more detailed stream extent information upon request.

Working Group for Seamless Parcels - Elizabeth Daniel

Elizabeth reported that the working group last met in May and have been working with CAMA vendors BI-TEK and Cox and Company to directly integrate parcel and building attributes into the cadastral dataset.

Cadastral

Elizabeth reported that 25 counties have been transformed and 58 are being processed, with 74 counties providing REST services. The quarter is progressing slowly due to field mapping updates, but most counties have current data. There are only 3 counties that have not provided an update in 2026 (Clay, Alexander, Northampton). Elizabeth is working with these counties and anticipates future improvements through vendor integration.

Hydrography Working Group - Cam McNutt

Cam updated the SMAC by commenting that version 3 of the dataset schema is being evaluated by the working group. Currently, DIT, DOT, DEQ, and CGIA are working out the details to ensure data readiness and setting a timeline for enterprise deployment. Yesterday, the governance document referenced in the MOA was approved.

Cam proposed replacing the Hydrography Working Group with a formal governance group (HGG - Hydrography Governance Group) chaired by signatory agencies (DIT, DEQ, DOT), meeting quarterly and providing public access and advisory functions (to GICC and SMAC), as outlined in the governance document. A charter would need to be drafted. The group would act in an advisory role, meet quarterly, ensure requirements are being met through a survey of users and subsequent recommendations to the Hydro Management Group (HMG). The HMG would be the internal, technical group that meets more regularly, and works to implement requirements, updates, changes to the data, and informs the HGG of the dataset status.

The task before the SMAC is to assign the current HMG with developing the HGG charter that is in alignment with the existing MOA and governance document. Cam will present a comprehensive report at the December 3rd SMAC meeting, including a draft charter and an update to better inform the SMAC's discussions.

Working Group for Administrative Units - Gary Thompson

Municipal Boundary and Annexation - Nathan Bland/John Quintero

Nathan thanked Melissa Mitchell at CGIA for her important work coordinating and building the GIS for the next phase of the NC boundaries portal dashboard.

As of today, Nathan reported 496 annexations collected so far (through the portal and traditional filing methods), with an expected total of 700 by year-end. The NC OneMap portal is improving effectiveness in ordinance and map file uploads. The NC Secretary of State's office is pulling data from the portal and has learned through users that the portal is providing significant efficiencies over traditional filing. The next main effort will be the accounting and reconciliation of the filing totals to the dashboard to meet the Census BAS report for 2026.

John Quintero discussed recent changes to Census disclosure avoidance policies, resulting in less granularly published data and potential impacts on agencies relying on this information. Policy changes may affect the collection of race and ethnicity data, raising concerns for derived uses and community representation.

County and State Boundaries - Gary Thompson

Gary reported that the survey for Caswell-Person is wrapping up with Polk-Rutherford and Burke-

Projects in progress

- **Caswell – Person (plats will be recorded in September 2026)**
- Polk – Rutherford (research phase)
- Burke-McDowell (research phase)
- Carteret – Onslow (recommendation provided to the counties)
- Guilford-Randolph (field work to begin by October 1st)
- Davidson-Forsyth (project kick-off meeting September 16th)
- Chowan – Perquimans
- Harnett – Johnston
- Beaufort-Pitt
- Caldwell - Watauga
- Mitchell – Yancey
- Cumberland - Harnett
- Bladen – Columbus – Brunswick
- Buncombe – Henderson

Figure 4 - All current county boundary surveys

McDowell in the research phase. A kickoff meeting for Davidson County is scheduled, and once surveys are recorded, impacted properties will be alerted. The full list of surveys in progress is in Figure 4.

Infrastructure Working Group

The SMAC chair and staff are actively seeking a candidate to chair the Infrastructure Working Group, highlighting the group's significance and encouraging participants to express interest.

NC Board on Geographic Names - Cam McNutt

AB Fisher Creek

Cam McNutt presented to the SMAC the proposal to name an unnamed creek, recommending:

- The initials “AB” be dropped from the name
- The to-be-named feature be extended to the south to Adams Creek

As senior staff to the USBGN, Shelby Bourquein respected the time the NCBGN puts into the name change deliberations but found the process cleaner if state name authorities voted to accept or decline simply based on the original proposal as sent to the USBGN (i.e. no conditions attached). As such, Cam withdrew the proposal to the SMAC and will take this back to the NCBGN to discuss at their next meeting.

Killian Crossroads

The NCBGN recommended the SMAC not change the name of Killian Crossroads to Chronicle, citing local preference and lack of clarity about the proposed new name's location. The SMAC voted to not change the name.

NC Data Projects

Addresses - Darrin Smith

Colleen Kiley filled in for Darrin. The address data in NC OneMap is current as of June 30th, with a new update scheduled for September 14th. Over 71,000 changes have occurred since the last update in June, averaging 34,000 changes per month, with 74 of 100 counties participating. Darrin is working on a dashboard that will show how the statistics have changed over time. Esri included the address data in their September community maps program update.

Three counties and the Eastern Band of Cherokee Indians participated in LUCA testing, revealing the need to flag residential parcels and address schema mapping challenges. CGIA assisted one county in resolving SQL errors, resulting in 48,000 additional points being realized.

North Carolina was recognized for frequent updates to the National Address Dataset (NAD), receiving a quality score of 99.4% from USDOT, indicating leadership in address data quality.

Plans are underway to work with local governments on tagging residential addresses and mapping schemas to census requirements, aiming to improve readiness for future LUCA participation.

Building Footprints - Gary Thompson

All counties in eastern North Carolina have been updated using 2024 imagery, with Duplin County pending. The next phase will update eastern Piedmont buildings from 2021 imagery to 2025. All the data are available on the NCEM SDD.

In response to a question, Gary confirmed that both new and old buildings are reviewed during QC, with outdated structures removed and new ones added to maintain data accuracy. The building footprints project is ongoing and critical for flood mapping, flood warning, and emergency response. Figure 5 summarizes what areas were updated when.

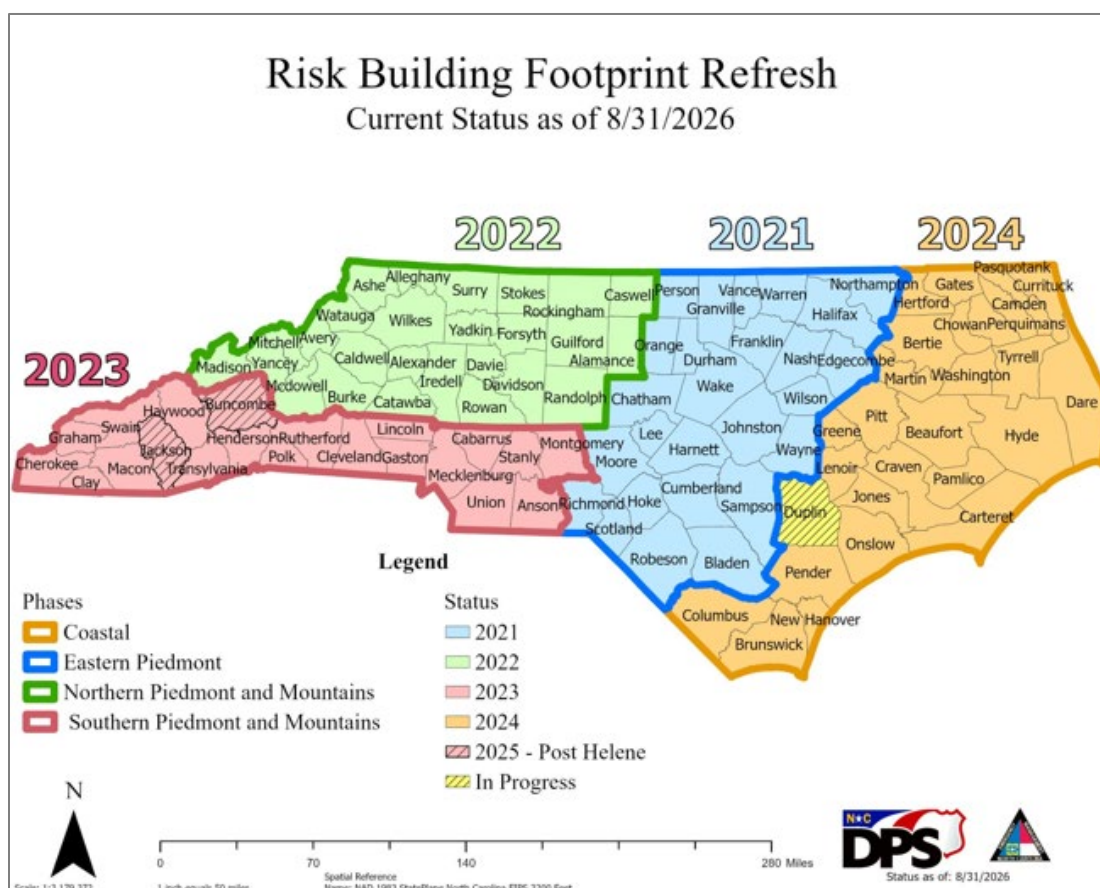


Figure 5 - Building footprints update cycle

Regular Status Updates

NC GIO Report - Matt McLamb

Colleen discussed preparations for the upcoming GIS conference, including abstract submissions, session themes, and efforts to secure APA credits. The conference program team is soliciting abstracts for the conference, with a deadline of September 18th, and is seeking more technical presentations. The theme is

“40 Years of Geospatial Innovation.” Rich Elkins suggested panel discussions on seamless parcels and municipal boundaries to enhance engagement.

USGS/National Geospatial Programs Office - Jo Baker

Adam Bentham filled in for Jo Baker. USGS is integrating the NC 2024 phase 3 LIDAR in the USGS 3DEP program and the National Map, with 80% of North Carolina covered and full integration expected by December.

QL1 LIDAR flights are planned for the northern edge of North Carolina in collaboration with NRCS, with a small area of overlap to be flown in winter (see Figure 6). Also, USGS is developing a seamless 1m LIDAR dataset exclusively from 3DEP data to address hydraulic modeling and cross-state integration.

USGS will release a request for proposals for LIDAR and hydrography project funding later in the month, inviting state agencies to partner for collection and receive support. If parties are interested, Adam can be reached at abentham@usgs.gov.



Figure 6 - overlap of LiDAR flights into NC

NC OneMap - David Giordano

David was not in attendance but there was no report at this time.

Attendance

In-Person

Name	Organization
Paul Badr	GPI, SMAC Chair
Colleen Kiley	CGIA
Melanie Williams	CGIA
Alice Wilson	City of New Bern
John Quintero	Governor's Census Liaison
Mitch East	DNCR

Online

Name	Organization
Nathan Bland	NC Secretary of State, LRMP
Cam McNutt	DEQ
John Derry	CGIA
Steve Averett	City of Greensboro
Bart Matthews	USGS, National Forests
Rich Elkins	NC Secretary of State, LRMP
Gary Thompson	NCEM
Dwain Veach	NC Geological Survey
Zsolt Nagy	AECOM
James Reed	DOT
Scott Davis	AECOM
Shelby Bourquein	USGS BGN
Stephanie Sparkman	USGS BGN
Adam Benthem (for Jo Baker)	USGS, National Map Liaison
Elizabeth Daniel	CGIA
Melissa Mitchell	CGIA
Christian Vose	NC Agriculture
Ashley Yandle	DNCR
Rick Wallace	NV5
Katie Doherty	Rutherford Co.
Jeff Essic	NCSU
Corinne Foster	DNCR