

# MINUTES

## Statewide Mapping Advisory Committee Meeting

Date: Friday, March 13, 2026, 1:30 – 3:30 PM

Location: DEQ GS Training Room 1210 and Virtual

### Welcome/Introductions

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

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

### NC GIO Report

Matt McLamb reported on the 2025 Geospatial Maturity Assessment (GMA) grades, conducted by NSGIC every two years based on information gathered from state partners.

North Carolina's grade moved from A to A-minus this cycle. Several grades improved while others declined due to changes in grading methodology, rather than changes in program performance. Specific results are as follows:

Theme	Grade	Notes
Coordination	A	No change
Addresses	A	No change
Parcels	A	No change
Elevation	A	Improved from A-minus
Orthoimagery (leaf-off)	B+	Declined from A; updated methodology automatically deducts a letter grade for any state not collecting its entire area more frequently than every three years
Transportation	B-	Declined from A; updated methodology evaluates only one statewide dataset, and the NCDOT road network dataset does not include address range information, resulting in a deduction
Next Gen 911	A+	Improved from A
Geodetic Control	A	No change
Government Units	A	No change
Orthoimagery (leaf-on)	C	Declined from B; updated methodology automatically deducts if NAIP imagery is not enhanced; no current business case exists in North Carolina for NAIP enhancement beyond baseline use

The committee discussed potential pathways to improve future scores, including developing derived products from NAIP imagery, enhancing the NCDOT road network data with addresses, and the development of a business plan to evaluate the orthoimagery program, including potentially moving to a biannual statewide collection cycle.

Members noted that North Carolina remains among the top-performing states nationally for geospatial data coordination, and that the state's interagency collaboration model continues to be recognized as a model by other states.

Mr. McLamb also provided a brief update on the NCGIS Conference. The RFP for host city and venue has closed and responses are under review, with a contract award anticipated by end of March 2026. Attendees were advised to budget at least \$475 per person for registration (consistent with the 2025 rate) and to plan for a conference in the February–April 2027 timeframe.

## Working Groups and Related Geospatial Data

### Working Group for Orthoimagery and Elevation

#### Orthoimagery

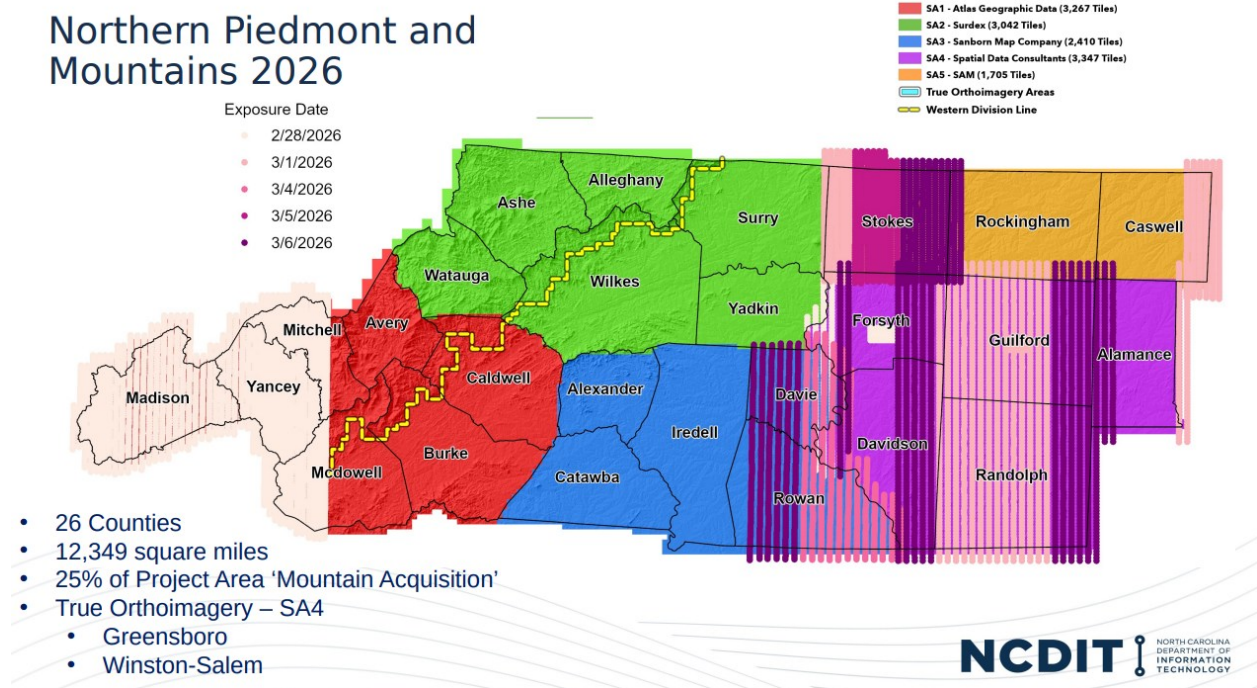


Figure 1 - 2026 Project Area by Acquisition Vendor

Ben Shelton reported on the 2026 orthoimagery acquisition project, covering 26 counties in the northwestern section of the state. The acquisition season has been exceptionally challenging due to persistent cloud cover, snow, and cold temperatures. As of the meeting date, contractors were actively flying, with Surdex covering Surry and Yadkin counties, SAM finishing Rockingham and

moving into Caswell, Spatial Data Consultants completing Alamance and portions of Forsyth, and Sanborn working the western edges of Alexander and Catawba counties. Mountain acquisition had been briefly paused due to recent snowfall at upper elevations but was expected to resume. Pending reflight assessments, completion of the full acquisition area was anticipated within the next day or two.

Looking ahead, the team is beginning to plan for the 2027 project area (21 counties) and is preparing a stakeholder survey to inform the next four-year ortho program proposal to the 911 Board. The survey, being developed as a Survey123 application, will be distributed broadly — to PSAPs, county and local governments, state agencies, the private sector, and the general community — with the goal of releasing it in mid-April to early May 2026 and gathering responses through the summer. Results are expected to be shared at the June SMAC meeting.

Survey topics will include satisfaction with current specifications, interest in derived products (like planimetrics, true orthos, impervious surfaces), use of and demand for oblique imagery, and delivery format preferences. Members discussed the significant cost and storage implications of a statewide oblique program and emphasized the importance of tying any requests for increased frequency or resolution to documented business cases.

Members also briefly discussed gray-sky imagery collection following disaster events. Available mechanisms include FEMA flights, NCDOT photogrammetry aircraft and unmanned aerial systems, and NOAA assets.

### Geodetic Control

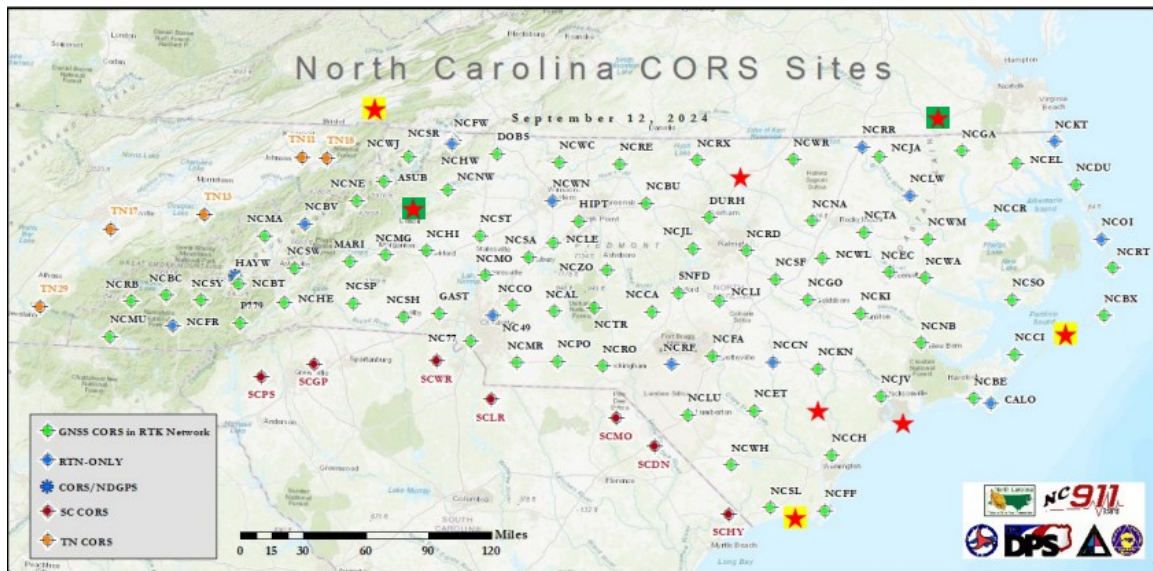


Figure 2 - Current NC CORS Network

Gary Thompson reported on continued expansion of the CORS (Continuously Operating Reference Stations) network. A new station near the East Coast, installed in partnership with Virginia Tech at one of their research farms, is now operational. A second station to the west has been agreed upon but requires cell coverage improvements through Verizon before installation can proceed. On the coast, the team is working with the Park Service to install a station at Ocracoke, and is in discussions

with the Baptist State Association for a location at Fort Caswell on Oak Island. The station in Alexander County, located at a NCDOT facility, is also now operational. These additions help fill network voids and improve both real-time positioning and post-processing capabilities, particularly along the Virginia border.

### Reference Frame

Gary Thompson reported that the NAD 83 datum transition to the 2022 Reference Frame is now planned for spring 2027. North Carolina has legislation in place for the changeover, and Tennessee has similarly passed its own legislation and will also adopt the international foot. The new tidal datum has been pushed back to 2029. The 2022 Reference Frame Working Group continues to meet monthly with participation from state and local government, private sector, and nonprofit partners. Current activities include finalizing a guidance document for local governments, which was shared at the most recent Local Government Committee meeting, and a new three-question Survey123 questionnaire distributed to county surveyors and land records staff to gather input on readiness and needs. Additionally, NCDOT photogrammetry is developing a new tile layout for imagery and LiDAR that will be used beginning with the 2028 imagery cycle and the 2027 LiDAR cycle.

### NC LiDAR Update

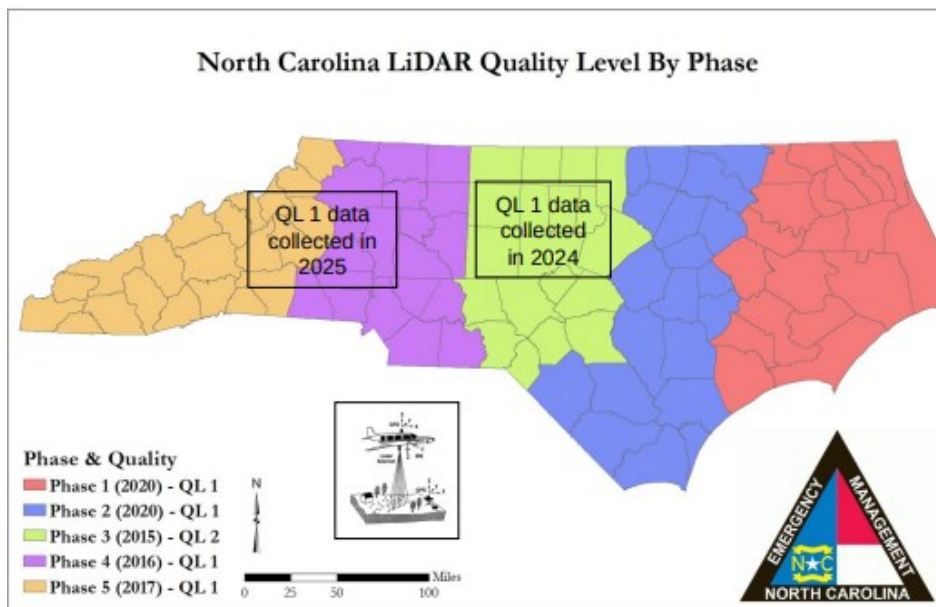


Figure 3 - LiDAR Collection Cycle

Gary Thompson reported that Phase 3 LiDAR data is complete and available through the Spatial Data Download site.

For 12 western North Carolina counties impacted by Hurricane Helene, the Collaboratory LiDAR and imagery have already been distributed to local governments, state agencies, and federal partners. The data for the remaining counties in the collection area is expected to be complete by the end of

May 2026, when that contract concludes; those deliverables are currently moving through quality control.

Separately, funding is in place to re-fly those same western NC counties in 2026. The purpose is to capture post-Helene road and bridge construction changes and to support regulatory floodplain updates.

The National Geodetic Survey is conducting bathymetric LiDAR collection along major rivers in western North Carolina, Tennessee, and Virginia using three contractor teams, with data collection having begun in January 2026. Accompanying imagery is also being collected. NGS data delivery is estimated to be at least a year out.

The Spatial Data Download site has been updated with a new feature allowing transfers of up to two terabytes via AWS S3 bucket, supplementing the existing portable hard drive option.

Planning is underway for the 2027 LiDAR program, which will move to a four-phase structure. Because flights begin before the new 2022 Reference Frame datum is available, data will be collected on the current datum; contractors will be required to deliver two sets of products — one in the current datum and one transformed to the new datum and tile scheme.

Gary Thompson also noted the state is currently working with USGS to transfer its LiDAR holdings to the 3D Elevation Program (3DEP). As part of this, an arrangement was reached to share the state's independent quality control points with USGS.

### **Working Group for Seamless Parcels**

#### Cadastral

Katie Doherty and Elizabeth Daniel reported that 85 counties have updated their parcel data at least once in the first quarter of 2026. The remaining 15 counties last updated in Q2–Q4 of 2025; all 100 counties have updated within the past year, which is the program's primary benchmark. Elizabeth Daniel noted that she has already received CAMA test data from Lincoln County and is actively working with it, and that outreach to the 15 remaining counties has resulted in commitments from several to provide updates this quarter.

A new initiative is underway in partnership with the NCAAO Data Sharing Committee to obtain additional data tables directly from CAMA vendors, to accompany the seamless parcel layer with richer attribute data. A first vendor meeting was held on February 27 with OneTax (Lincoln County), and a second meeting was held on March 12 with Bitech (Moore County), with test data from the latter expected within two to three weeks. Follow-up meetings with both vendors are scheduled within the next 30 days. Members noted that CAMA data could also benefit the building footprints program by providing building attributes and helping resolve cases where multiple structures exist on a single parcel.

### **Hydrography Working Group**

Cam McNutt reported that the Hydrography Management Group (comprising NCDOT, NCDIT, CGIA, and NCDEQ staff) continues to meet every two weeks. MOA signatures are being actively pursued. The team is also developing FAQs in advance of public rollout. A parallel DEQ working group is

currently loading data into servers and testing rendering, editing capabilities, and performance. A preview of the system may be available at the next SMAC meeting.

A factor for the rollout is the expected significant increase in mileage of impaired streams, not because more streams are impaired, but because the new dataset maps streams at greater length.

Separately, the current DEQ data used for linear referencing on the Atlas Hydro / NC Hydro dataset currently reflects conditions through 2020. Updating attribution on the linear referenced dataset in the future requires EPA approval, which remains pending. As a result, the state is already a year behind on updating this data, and the next update may not arrive until 2028.

Progress continues on resolving 2D waterbody connectivity gaps and extending connectors to isolated 2D waterbodies. Post-Helene stream network changes in western North Carolina are expected to be captured through the 2026 LiDAR flights. Mr. Eric Wilson also announced that two additional contractors have been approved and will be hired within three to six weeks to support data development on the DOT side of the hydrography program.

### **Working Group for Administrative Units**

#### **Municipal Boundary and Annexation**

Nathan Bland and John Quinterno reported on the new municipal boundaries tool, now available on NC OneMap. The tool provides the first geo-enabled, online repository of municipal boundary and annexation information for North Carolina. Partners in the effort include the NC Secretary of State's office, CGIA, OSBM, and local governments across the state.

For the 2026 BAS submission cycle, 195 submissions have already been received in the first several months of the year. In 2025, approximately 900 total submissions were collected — up from 600–700 in prior years — reflecting both new development activity and the recovery of previously unsubmitted historical annexations. Over 95% of known annexation GIS files statewide were collected during a two-month push ahead of the March 1, 2026 BAS submission deadline, and the submission was transmitted to the Census Bureau on the morning of the meeting. Members expressed appreciation for the strong participation from local government partners.

John Quinterno noted that OSBM is evaluating the tool for use in the population estimates program, potentially beginning this year, with broader integration planned for 2027 in advance of the 2030 Census.

#### **County and State Boundaries**

Gary Thompson reported that active county boundary work includes Polk/Rutherford, Burke/McDowell, and Carteret/Onslow. Additional boundary requests were recently received, continuing to grow the queue. Completed boundaries are cross-referenced with parcel data to identify and correct any properties that may not be taxed by the correct jurisdiction.

### **NC Board on Geographic Names**

Cam McNutt presented two naming proposals for committee consideration.

**Milkmere Pond** — A proposal to name an existing unnamed one-acre impoundment in Iredell County, formed by a roadbed dam. The proponent had originally sought to name the feature after himself but submitted a modified German-derived form of his name. The NCBGN is neutral on the proposal. The committee discussed the small size of the feature, the multiple adjacent property owners, and the lack of apparent public use. Following discussion, the committee voted to be neutral on the proposal.

**North Gambill Lake** — A proposal to rename a portion of the Middle Gambill Lake complex in Forsyth County, which consists of four impoundments currently all named Middle Gambill. The proponent seeks to rename the northernmost impoundment North Gambill Lake. The NCBGN is neutral pending a more consistent naming scheme for all four features. The committee has previously recommended that the proponent address naming consistency across the entire series of lakes. The committee voted to remain neutral (at the previous SMAC meeting the committee asked the NCBGN to look at this request again), reiterating its recommendation that any approved naming include a consistent directional or sequential scheme for all four impoundments and, where applicable, a name for any connecting stream.

Cam McNutt noted two upcoming naming matters expected to come before the committee in the future: a proposal to rename the unincorporated community of Killian's Crossroads (Catawba County) to Chronicle, and anticipated name changes related to the Lumbee Tribe's river basin.

## **NC Data Projects**

### **Addresses**

Ben Shelton reported on behalf of Darrin Smith. The statewide address dataset was last updated to NC OneMap on January 14, 2026. Since the December 2025 SMAC meeting, approximately 20,000 new address points have been added statewide, with over 115,000 points added in the past year. 70% of addressing authorities submitted a data update since the last meeting, and approximately 45,000 total point changes — including new additions, positional corrections, and attribute updates — have been recorded in that period. The NC OneMap geocoder and direct data download files reflect the January 14 update. Twenty QC result layers are available as web services, allowing any addressing authority to review the quality checks and cleanup applied to their data.

## Growth Example

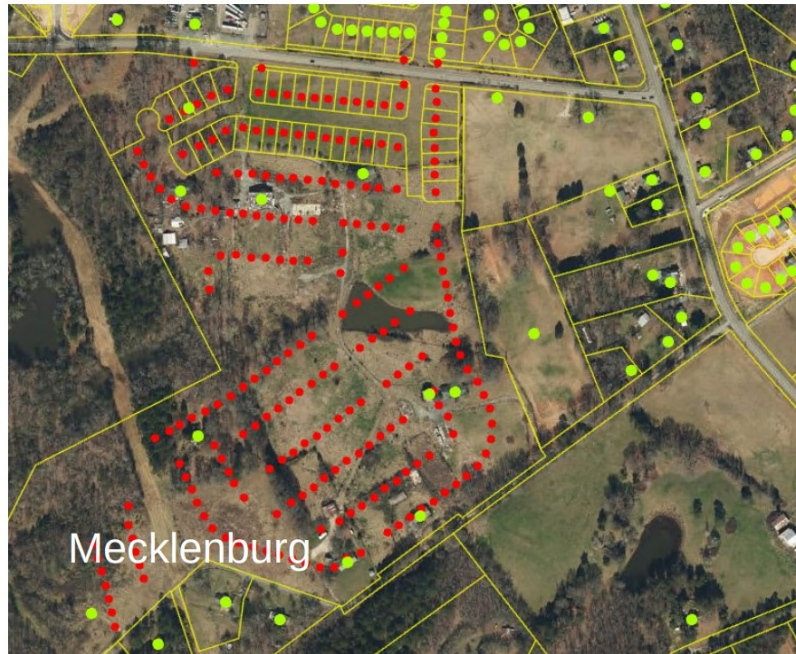


Figure 4 - Growth Example of new Address Points

### **Building Footprints**

Gary Thompson reported that the statewide building footprints refresh is nearing completion, with seven counties remaining. Contractors are using a combination of LiDAR and AI-assisted change detection to finalize the remaining counties, with completion expected by midsummer 2026. Once the current phase is complete, work will shift to updating the coastal area using 2024 imagery to replace data based on older 2020 imagery, with particular attention to Rodanthe, where a significant number of structures have been lost to shoreline erosion. The team is also in contact with the U.S. Census Bureau, which is conducting monthly satellite-based change detection; while that data is not yet shareable, the Census has offered to share its methodology, which could help focus future update efforts.

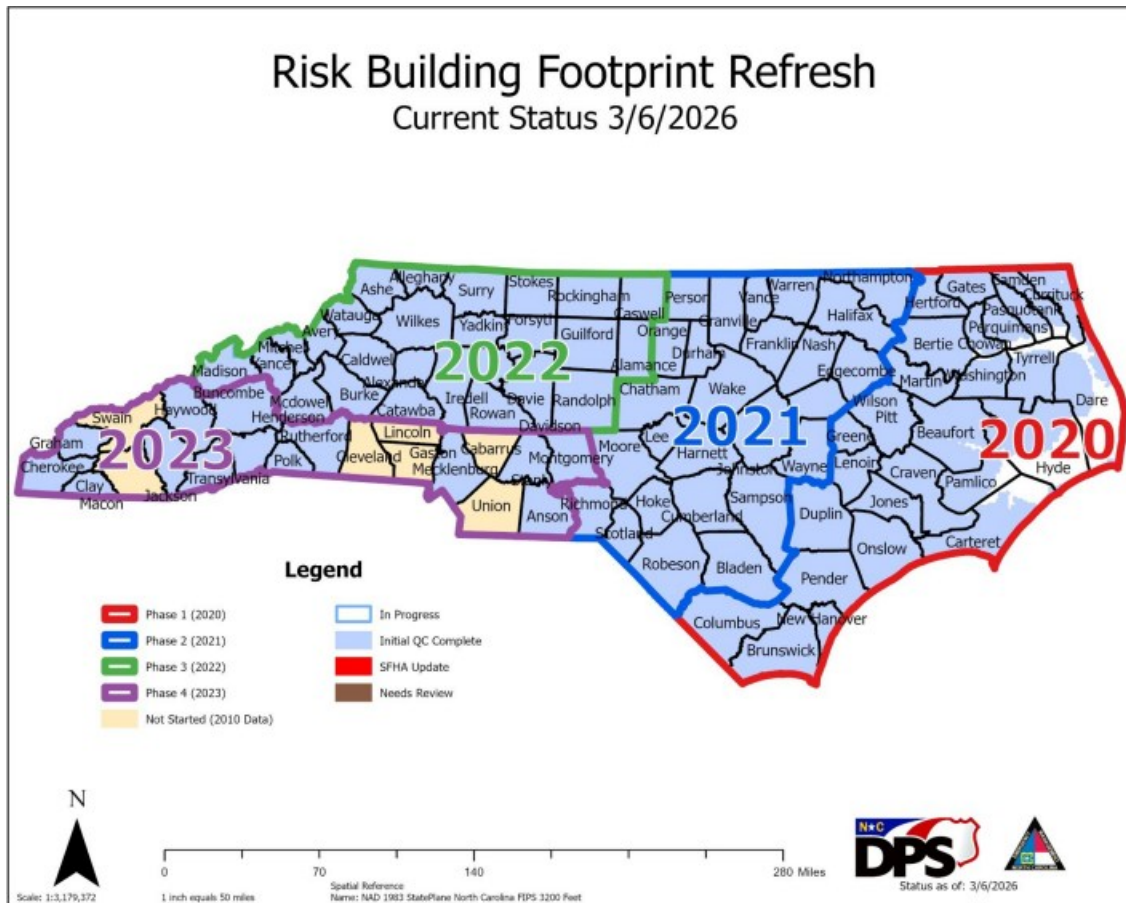


Figure 5 - Building Footprint Status

### **Broadband**

Ben Shelton reported that the federal BEAD (Broadband Equity, Access, and Deployment) program award — approximately \$1.5 billion funding nearly 100,000 locations — has received NTIA approval and is now awaiting final financial audit clearance before project rollouts can begin. In parallel, approximately 320 ARPA-funded projects covering 250,000 locations are in active construction, permitting, and build-out phases; all ARPA projects must be completed by the end of 2026. The program is developing tools to help broadband providers navigate permitting requirements, which represents the largest current construction bottleneck. The broadband team is transitioning from grant administration to build-out compliance and GIS-based validation to ensure projects are constructed in accordance with contract specifications.

### **Regular Status Updates**

#### **USGS/National Geospatial Programs Office**

Jo Baker reported that the USGS Topo Builder application recently surpassed one million custom maps created. Full cartographic specifications for all four Topo Builder map types, as well as US Topo, are now publicly available.

## **NC OneMap**

David Giordano reported that discussions are ongoing regarding the most cost-effective approach to long-term storage of older datasets on NC OneMap, including evaluating whether infrequently accessed full-resolution files (such as historical imagery tiffs) should be moved to lower-cost archive storage (AWS S3 Glacier), while keeping actively used products in standard storage. The team also discussed the possibility of leveraging AWS's Open Data program, which absorbs storage costs for publicly accessible datasets, pending legal review.

## **Other Business**

Gary Thompson reported that the statewide 2D rainfall-runoff grid flood modeling is now available for approximately half the state, with the remainder expected by year-end, available through the Flood Advisory Viewer. An update to FRIS (Flood Risk Information System) will add visual display of non-encroachment areas which were previously not directly viewable.

## **Adjourn**

The next SMAC meeting is scheduled for June 11, 2026.

## **Attendance**

### **In-Person**

<b>Name</b>	<b>Organization</b>
Paul Badr	GPI, SMAC Chair
Ben Shelton	CGIA
Matt McLamb	CGIA
David Giordano	CGIA
Colleen Kiley	CGIA
Melanie Williams	CGIA
Cam McNutt	NC Division of Water Resources
Nathan Bland	NC Secretary of State
Rich Elkins	NC Secretary of State
Gary Thompson	NCEM
Alice Wilson	City of New Bern

### **Online**

<b>Name</b>	<b>Organization</b>
Jo Baker	USGS
Nick Bozdog	NCDEQ
Scott Davis	AECOM

Elizabeth Daniel	CGIA
John Derry	CGIA
Luca Venegoni	CGIA
Katie Doherty	Rutherford County
Corinne Foster	DNCR
Ashley Yandle	DNCR
Christian Vose	NCAGR
Richard Greene	NCDOT
Eric Wilson	NCDOT
Steve Averett	City of Greensboro
John Quinterno	NC OSBM