North Carolina Geographic Information Coordinating Council

Minutes

November 5, 2025

PROCEEDINGS

The Council held its quarterly meeting at the Central Pines Regional Council, 4307 Emperor Blvd, Suite 110, Conference Suite 130, Durham, North Carolina, and via virtual meeting connection.

Welcome and Chair Announcements

Ms. Hope Morgan, GICC Chair, called the meeting to order after confirming a quorum was present. The Chair reminded everyone that the meeting was being held in accordance with open meeting laws, aligning the GICC with other statutory boards and commissions.

Mr. Ian McAdoo read the ethics statement to the council:

> *In accordance with the State Government Ethics Act, it is the duty of every Council member to avoid both conflicts of interest and the appearances of conflict.*
>
> *If any Council member has any known conflict of interest or is aware of facts that might create the appearance of such conflict, with respect to any matters coming before the Council today, please identify the conflict or the facts that might create the appearance of a conflict to ensure that any inappropriate participation in that matter may be avoided.*
>
> *If at any time, any new matter that raises a conflicts issue arises during the meeting, please be sure to identify it at that time.*
>
> *Council members should exercise appropriate caution in the performance of their public duties should conflicts of interest or potential conflicts of interest related to issues that come before the Council. This would include recusing themselves to the extent that their interests would influence or could reasonably appear to influence their actions.*

Ms. Morgan informed in-person attendees of the required QR code attendance registration process and acknowledged those attending online, noting that their attendance information was already recorded.

Ms. Morgan introduced new members to the Council. Ms. Martha Wewer, delegate from Secretary Piccione, oversees the Office of Privacy and Data Protection within DIT's Enterprise Security and Risk Management Office. Ms. Morgan also announced Mr. Bob Coats's final GICC meeting, thanking him for his service and inviting him to the next meeting for a formal certificate presentation. Mr. John Quinterno was introduced as Mr. Coats's replacement at OSBM, working part-time through year-end before transitioning to full-time on January 1st.

Approval of 2026 Meeting Dates

Ms. Morgan presented the proposed 2026 meeting dates. The Council plans to hold meetings in various locations throughout the state to improve accessibility for members who typically cannot attend. The proposed dates are Wednesday, February 19th in Greensboro (hosted by Steve Averett), Wednesday, May 20th, Wednesday, August 19th, and Thursday, November 19th. Ms. Morgan noted that November 19th falls on GIS Day and asked members to notify the Council of any major conflicts.

A motion was made to approve the 2026 meeting dates, which was seconded and carried unanimously. There were no recusals.

NC Blueprint Update

Mr. Stuart Brown, Division of Mitigation Services, Department of Environmental Quality, provided an update on the North Carolina Flood Resiliency Blueprint. The Blueprint was established by the General Assembly in 2021 to make North Carolina more resilient to flooding and reduce the cost and disruption resulting from flood events. The initiative represents a shift from the traditional disaster cycle of preparedness, response, and recovery to proactive planning that reduces exposure and vulnerability to flooding.

Mr. Brown explained that the General Assembly directed that the Blueprint serve as the backbone of statewide flood planning, with data, tools, and processes applicable at multiple spatial scales: from municipal to county to river basin. The Blueprint is intended to lower barriers for local governments by reducing the cost and complexity of planning and implementing flood risk reduction projects. The initiative ultimately aims to deliver a prioritized list of mitigation projects and funding strategies for state-level implementation.

The Blueprint is currently authorized in six of the state's 17 river basins: the five eastern basins and the French Broad. Mr. Brown described the Blueprint's core components as data, tools, and processes. For data, the Blueprint relies heavily on existing state, local, and federal resources rather than recreating datasets. New information being developed includes vulnerability metrics beyond building impacts, such as lost wages, rent disruption, and healthcare access challenges. The largest technical development is new 2D rain-on-grid modeling, which better captures real-world flooding behavior. Studies show that between 40% and 60% of flood damage occurs outside FEMA regulatory floodplains. The new advisory floodplains forecast current and future scenarios incorporating changing precipitation patterns, sea level rise, and continued development.

The Blueprint’s decision-support tool provides communities with data-driven assessments of flood risk and vulnerability and allows users to define, analyze, and compare conceptual flood mitigation actions. It estimates cost, impact, and complexity, enabling communities to prioritize resilient approaches. Blueprint planning occurs in tiers: community-level planning informs river basin planning, which will culminate in River Basin Action Strategies submitted to the General Assembly.

During the discussion, members asked about outreach and agency involvement. Ms. Natalie Walton-Corbett inquired about presenting the Blueprint to local governments, and Mr. Brown explained that outreach has focused on technical staff, with occasional participation from elected officials. Ms. Morgan asked how state agencies could become more engaged, and Mr. Brown invited broader agency attendance

at the recurring advisory meetings. In response to questions from Ms. Colleen Kiley and Ms. Amy Barron, Mr. Brown noted the need for comprehensive building footprint data to support modeling and confirmed that Duke Energy representatives are included in regional advisory planning efforts.

Mr. Gary Thompson provided additional information related to the Blueprint's western basin work. He reported that modeling for the French Broad basin will rely on post-Helene LiDAR collected in partnership with the North Carolina Collaboratory. Engineering firms are under contract to conduct the 2D rain-on-grid modeling, with some results expected by June 2026 and remaining parts completed by September 2026. NCGS is also expediting processing of LiDAR collected in partnership with DOT, prioritizing delivery to impacted counties, state agencies, and federal partners. Some data has been loaded onto data download platforms for quick access to small areas, while larger datasets are being distributed via portable hard drives.

NC AI Update

Mr. I-Sah Hsieh, NCDIT Deputy Secretary of Policy and AI, provided an update on North Carolina's artificial intelligence initiatives. Mr. Hsieh began his presentation by emphasizing the value of trust, and how it serves as the foundation for successful AI implementation, noting that without trust from both the people being served and from colleagues or partners, AI initiatives cannot succeed. Mr. Hsieh referenced the Edelman Trust Survey, which measures public trust in government, media, nonprofits, and business across 20 countries. Recent results show government scoring the lowest of these institutions in both ethics and competence, though slightly improved from the previous year. The survey also found that when forced to choose, 35% of respondents are "all in" on AI, while 35% want to "pump the brakes," reflecting public ambivalence about AI adoption.

Mr. Hsieh acknowledged North Carolina's 20% employment gap between the state's workforce and the workforce they need, noting that AI can help fill this gap but must be implemented in a trustworthy manner that encourages trust rather than fear of job displacement. In this context, Mr. Hsieh introduced North Carolina's plans for AI adoption, using the analogy of AI as a "racecar" and AI governance as the "racetrack".

Approximately eight weeks prior, Governor Stein issued Executive Order #24 on Artificial Intelligence with three main requirements:

1. **AI Accelerator**: A space for rapid prototyping where agencies looking for AI solutions can be paired with private sector vendors for 60-day sprints. Agencies provide low-risk or public data, and vendors develop working prototypes. If successful, agencies can proceed with normal procurement processes to issue RFPs. The accelerator creates a safe innovation space, allowing solutions to fail quickly and inexpensively. To date, 34 thoughtful project ideas have been submitted across nine different agencies.
2. **AI Oversight Teams**: Each cabinet agency under the governor must create an AI oversight team. With Mr. Hsieh positing that technology represents only 30% of the adoption journey, with people and processes comprising 70%, each agency can develop its own AI strategy based on their mission, risk tolerance, and culture. NCDIT's Office of AI and Policy provides guardrails and main pillars for management and measurement, while agencies choose their position on those pillars.

3. **AI Leadership Council**: The Governor's AI Leadership Council held its first meeting the day prior to the GICC meeting, bringing together 25 leaders from public sector, private sector, and academia to develop AI strategy for North Carolina.

Mr. Hsieh introduced the concept of "Minimum Viable Governance" with four essential steps every manager across disciplines and organizations should take in relation to AI adoption:

1. **Define AI** for your organization - determine what's in and out of scope
2. **Create an AI inventory** - projects to pilot AI use, evaluated using the RIDE method
3. **Evaluate and monitor AI regularly** - track how AI projects perform
4. **Use the RIDE method** for assessment:
    a. **R**isk level
    b. **I**mpact (how many people affected)
    c. **D**ata sensitivity
    d. **E**thics questions, particularly "for whom does this fail?" and "how can this be weaponized?"

Mr. Hsieh emphasized that AI is 90% data, so following existing data, privacy, and security protocols should cover most AI governance requirements, though new skills and capabilities specific to AI must be developed. Following Mr. Hsieh's presentation, council members shared examples of current AI usage.

Mr. Steve Averett, City of Greensboro, reported his team generated approximately 70,000 lines of code in three months to overhaul over 30 dashboards using Claude AI for Python. His team also used AI to build a full audited inventory system with hundreds of web maps, apps, and map services in a couple of weeks, a task he said would have taken years manually. Mr. Hsieh emphasized the importance of allocating time for quality checks on AI-generated outputs, with frequency depending on risk level and public impact.

Ms. Joanne Halls, UNC Wilmington, described mapping Bald Head Creek with ArcGIS Pro's random forest machine learning tools, using multi-spectral drone data and drone LiDAR. She noted that comparing results from different random forest tools produced nearly identical output, and using the machine learning results as training for processing public data of the island produced far better coarse resolution models than possible without drone data. She acknowledged the need to better close the quality control loop on AI-generated outputs.

Mr. Jeremy Baynes, Environmental Protection Agency, highlighted EPA's recent access to an internal, private instance of a large language model similar to ChatGPT. He stressed the importance of understanding that questions asked to public-facing tools help train those models and data gets saved, recommending organizations consider internal versions depending on risk and needs.

Ms. Morgan built on Mr. Baynes's comments by noting that there are tools that allow you to build your own libraries, so one can create them exclusively for specific projects. She also mentioned a use case of AI for reverse metadata generation when original metadata is unavailable, allowing one to backtrack how values were created within datasets - though validation remains a challenge.

Other use cases were shared: using AI to translate journal articles for 9th grade reading levels; machine learning for building footprint extraction, processing half the state in 48 hours to achieve a deliverable

during a tight turnaround window; and using LLMs for advanced SQL queries and Python scripts, noting the importance of understanding code sufficiently to piece together AI-generated components.

Ms. Martha Wewer raised caution about combining multiple datasets that individually appear non-identifiable but together can piece together sensitive information, emphasizing thoughtfulness when creating new datasets from multiple sources. Mr. Hsieh acknowledged this concern and described work with the state's data office on synthetic data generation using tried-and-true quantitative methods to create statistically identical datasets without sensitive information. Regarding the AI Accelerator, Mr. Hsieh clarified that it currently only allows public or low-risk data and will likely continue this policy for the foreseeable future. Projects with higher sensitivity data may not go through the Accelerator but can be handled as internal projects using state-approved safe tools, or the state can help with synthetic data solutions to step down sensitivity levels.

Ms. Walton-Corbett expressed concerns about capacity and trust, noting that while she wants benefits like automated Python code and Arcade scripting, she lacks time to check outputs and doesn't feel confident enough to avoid "babysitting" the technology. Ms. Morgan suggested the state could provide vetted tools to local governments, establishing trust through state endorsement rather than requiring local governments to conduct their own vetting.

Council discussion addressed public perception challenges, noting that the Edelman survey showed government at the bottom for both competency and ethics in public perception. Even when government does competent, ethical work, communication to overcome this perception gap remains critical, as public perception influences elected officials, budgets, and long-term planning. Mr. Hsieh recommended choosing AI projects thoughtfully, starting with "no-brainer" applications that delight either workers or constituents, citing Wisconsin's unemployment benefits backlog processing as an example.

Ms. Morgan emphasized the challenge of explaining technical concepts to non-technical audiences, suggesting AI could help translate complex information like flood mapping engineering concepts for homeowners. Mr. Hsieh agreed this represents AI's promise and hope, comparing trust-building to GPS navigation systems that earn trust over time through demonstrated accuracy.

2022 Datum Transition Update

Mr. Gary Thompson provided a brief update on the 2022 datum transition. The Datum Change Working Group meets monthly, with attendance welcome from private sector, state agencies, and federal agencies. The group focuses on preparing everyone for the datum change. Mr. Thompson emphasized the critical importance of contacting software vendors and application providers to verify they will support the new datums. He cautioned that sales representatives may not know the technical details, recommending follow-up with technical staff who can definitively answer support questions.

Testing will occur over the next couple of months to determine impacts on current datasets. Mr. Thompson stressed the need for thorough preparation, noting that things will look different under the new datum and organizations must ensure they are ready for the transition.

2026 Planning Session

Ms. Kiley facilitated a planning session for 2026 priorities and activities. Council members were divided into four in-person groups and one online group, with each group assigned two of the following discussion questions:

1. What topics should the GICC consider for discussion in 2026?
2. With what groups or professional organizations should the GICC find opportunities to collaborate?
3. What outreach can the GICC do next year?
4. How can the GICC foster community and leadership?
5. What aren't we doing now that we should be?

After a 10-minute discussion period, group representatives reported their findings:

Topics for 2026 Discussion

Multiple groups identified AI as a priority topic, with specific recommendations including case studies of AI implementation, development of AI guidance and policies for geospatial data within state government, and templates for smaller agencies lacking resources to develop their own frameworks. Digital twins for transportation structures emerged as another recommended topic, including BIM models for seaports and airports. Smart cities initiatives were suggested as a topic that has appeared in past discussions but has not been pursued. One group raised concerns about federal responsibilities potentially shifting to state agencies without clear authority or resources, recommending this as a topic for future consideration.

Professional Organizations for Collaboration

Groups recommended engagement with technology companies including AWS and Microsoft to present on their work with the state. The utilities sector was identified as an umbrella category for potential collaboration. Cities implementing autonomous public transportation systems, such as Jacksonville, were suggested as potential partners for knowledge sharing. County commissioners, municipal clerks, and emergency management groups using GIS were identified as key audiences. The North Carolina Association of County Commissioners and NC League of Municipalities were specifically mentioned as organizations where stronger relationships should be built, though participants noted that initiatives often "die on the vine" at municipal council or county levels.

Outreach Activities

The roadshow approach received strong support for building trust and opening conversations with local governments, with recommendations to conduct such events every 2-3 years rather than annually. When taking quarterly GICC meetings on the road, groups recommended directly reaching out to people in the surrounding radius to maximize participation. As an alternative to comprehensive roadshows, participants suggested attending conferences where Council members or committees could present on different topics at various organizational conferences. One proposal suggested that while full Council travel may not be feasible, local groups could host LGC virtual meetings to gather people together in multiple locations simultaneously. Groups emphasized the importance of visibility and consistency in messaging, and

reaching out to non-GIS groups using simplified, non-technical language to communicate effectively with broader audiences.

Fostering Community and Leadership

Recommendations focused on education and advocacy, with every Council member serving as an advocate for the Council's work and GIS benefits in both organizational and personal contexts. Groups suggested increased outreach to other states' GICC counterparts for disaster coordination across state boundaries and presenting at more local user groups and industry organizations. Bringing younger GIS professionals to GICC meetings was recommended for exposure and future recruitment. Increased collaboration with local universities through meeting participation and project involvement was identified as important for fostering community. Participants emphasized that individual Council members should practice advocacy regularly in their own roles, whether with councils, citizens, planners, or other stakeholders, because no one else will advocate on the Council's behalf.

What the GICC Should Be Doing

Discussion emphasized challenges in getting information to the general public despite substantial Council accomplishments. Groups noted that news coverage of projects frequently omits mention of the Council or how projects were funded. Participants recommended that Council members mention GICC when responding to media inquiries. Social media presence was identified as a significant gap, with suggestions to develop content consisting of brief text and images explaining Council activities. Website improvements were recommended, including reorganization to make information more easily accessible, using AI to summarize GICC activities, and enhancing content to share topics and summaries with people outside the immediate GIS community. Groups noted that valuable information such as the "Value of GIS in North Carolina" collection exists on NC OneMap but is not easily accessible from the GICC website. Making information more accessible to people outside the immediate GIS community through improved communication channels was identified as critical. Participants emphasized the importance of demonstrating and publicizing how GIS data is being used to help maintain funding for data collection and programs.

Ms. Morgan noted that all group notes would be compiled, typed, and distributed to members. The 2026 planning discussion will be the second topic at the February 2026 meeting, following committee status updates, to develop concrete plans based on these recommendations.

Committee Updates

Statewide Mapping Advisory Committee (SMAC) - Paul Badr: The 26-county 2025 orthoimagery project nears completion with delivery expected December 1st. For LiDAR, phase 3 (Central North Carolina) quality control is nearly complete, with all deliverables expected by mid-November. Data will be distributed to counties, state agencies, and NC OneMap. As of October 2025, 21 counties have updated their parcel data at least once this year, with 15 counties updating monthly or bi-monthly.

Local Government Committee (LGC) - Natalie Walton-Corbett: The committee held a successful joint meeting with the Federal Interagency Committee, featuring presentations from Census, USGS, FEMA, NOAA, Geodetic Survey, and NASA. The presentations provided new information and perspectives valuable to local government attendees. The committee maintains over 100 participants in general

meetings and continues efforts to expand the community. For 2026, the LGC is considering focusing outreach on ArcGIS Pro training, recognizing it as the primary mapping platform for local governments. The committee is exploring potential partnerships with Esri for in-person Pro training events.

Technical Advisory Committee (TAC) - Matt Helms: The committee continues work on the big data best practices report and guidelines. The committee is currently seeking one additional member to provide representation for sections lacking coverage.

Federal Interagency Committee (FIC) - Jeremy Baynes: The committee conducted two well-attended presentations in the past year, one with local government and one with state government, resulting in numerous valuable connections. Planning for next year's activities will begin once colleagues return to work. The committee will address how federal work impacts state and local partners and identify any shifting responsibilities at the next meeting.

State Government GIS Users Committee (SGUC) - Melanie Williams: The committee has focused on three main topics. First, state agencies are preparing for accessibility requirements affecting all mapping resources and applications, developing implementation plans. Second, Esri presented on AI resources ranging from small to large scale applications, generating significant member interest. Third, the committee began strategic planning discussions, hearing from other states and brainstorming potential approaches for North Carolina.

Management and Operations (M&O) - Hope Morgan: The committee discussed the annual report, which has been released in draft form as last year's version did not receive final approval from the governor's office. The committee reviewed topics for the upcoming annual report and discussed the current meeting content. Members continue awaiting results from the national geospatial maturity assessment. The committee has begun initial planning for the 2027 NCGIS conference.

Adjournment

Following completion of all agenda items, the meeting was adjourned. Ms. Morgan thanked all participants both in-person and virtual. The next meeting will be held in February 2026 in Greensboro.

2026 GICC Quarterly Meeting Dates

February 19th (Greensboro)

May 20th (Raleigh)

August 19th (Raleigh)

November 19th (Raleigh)

Member Attendance

Last	First	Present	Proxy	Agency/Organization
Averett	Steve	Yes		City of Greensboro
Badr	Paul	Yes		GPI, Geospatial Division
Baker	David	No		NC Association of County Commissioners
Barron	Amy	Yes		Duke Energy
Baynes	Jeremy	Yes		US EPA
Clyburn	Lee	V-Yes		CBRE
Coats	Bob	Yes		Office of State Budget & Management
Connolly	Michael	No		Department of Revenue
Cox	John	Yes		Department of Administration
Dowdy	Jason	No		CACI, Inc
Duncan	Stan	V-Yes		Retired, State and Local Government
Egleston	Larken	Yes		Department of Justice
Enright	Dianne	V-Yes		Department of Health & Human Services
Grantham	Dean	Yes		Department of Environmental Quality
Halls	Joanne	Yes		UNC Wilmington
Harris	Pokey	Yes		NC 911 Board
Hedley	Jason	Yes		Stewart Engineering
Helms	Matthew	V-Yes		Charlotte Water
Jackson	Jeremiah	Yes		Department of Public Instruction
Koonts	Sarah	No		Department of Natural and Cultural Resources
Marshall	Elaine F.	P-Yes	Rich Elkins	Office of Secretary of State
Morgan	Hope	Yes		AECOM
Mouat	Gavin	No		NC Utilities Commission
Nida	Chris	V-Yes		NC League of Municipalities
Sandoval	Allan	V-Yes		Department of Commerce
Serkin	Allen	V-Yes		Cape Fear Council of Governments
Spitler	Ed	Yes		NC Community College System
Thompson	Gary	Yes		Department of Public Safety
Thurman	Linda	V-Yes		UNC Charlotte

Vaughn	Sallie	V-Yes		Person County
Vose	Christian	Yes		Department of Agriculture and Consumer Services
Walton-Corbett	Natalie	Yes		Greenville - LGC representative
Wewer	Martha	Yes		Department of Information Technology
Williams	Melanie	Yes		NCDEQ - SGUC Chair
Wilson	Eric	Yes		Department of Transportation