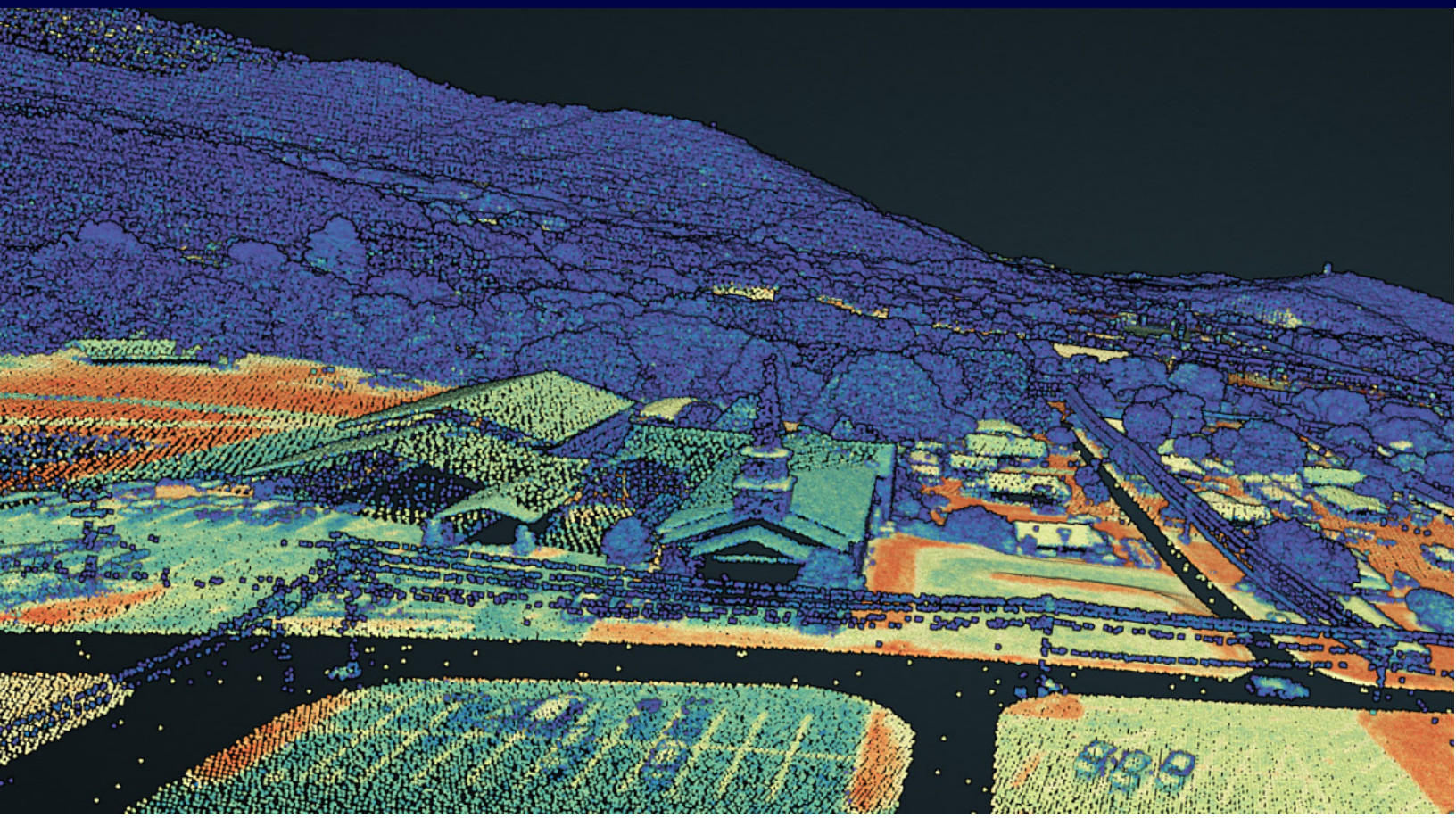
North Carolina Geographic Information Coordinating Council

2025 Annual Report

Fiscal Year 2024–2025



Presented to:

Josh Stein, Governor
Joint Legislative Commission on Governmental Operations
Nate Denny, State Chief Information Officer and Secretary
N.C. Department of Information Technology

Presented by:
Hope Morgan, Chair
With Consensus from the
N.C. Geographic Information Coordinating Council

NCGICC

Contents

NCGICC

Executive Summary

The N.C. Geographic Information Coordinating Council (GICC) was established by the N.C. General Assembly in August 2001 and is supported by the N.C. Department of Information Technology (NCDIT). The N.C. Center for Geographic Information and Analysis (CGIA), housed within NCDIT's Enterprise Data Office (EDO), staffs the council and its committees.

North Carolina General Statute (N.C.G.S.) §143B-1421(g) requires the council to report annually to the Governor and the Joint Legislative Commission on Governmental Operations. The council submits this report to share its strategic focus on data-driven collaboration, outline priorities and challenges, and update the Governor and the Commission on its Fiscal Year 2024–2025 accomplishments.

Fiscal Year 2024–2025 was focused on North Carolina's emergency response efforts to Hurricane Helene. The storm struck western North Carolina in late September 2024, causing widespread loss of power, water, communications, and road infrastructure. In the aftermath, Geographic Information Systems (GIS) and the data maintained by GICC-coordinated programs proved crucial. Next Generation 911 rerouted emergency calls from 19 overwhelmed public safety answering points (PSAPs) to 23 operational PSAPs across the state. Thanks to this effort, every 911 call that was able to connect either via wireline or wireless was answered. Standardized statewide address and parcel data allowed GIS professionals who volunteered to assist in the impacted counties to begin lifesaving work immediately. State, local, and federal agencies coordinated damage assessments, landslide mapping, water infrastructure evaluations, and road closure information, among other efforts through shared GIS platforms and services.

Over its more than twenty-year history, the GICC has coordinated groundbreaking GIS framework datasets and serves as a model for other states' programs. Council coordination for important framework datasets such as orthophotography, seamless parcels, road networks, and addresses form the backbone of spatial analytics that support state, local and private sector initiatives. These mature datasets, supported by the work of the council, provide immense value to public and private programs.

The council's work involves not only enhancing data and analytic tools but also works to bring the state's geospatial community together to improve North Carolina's GIS as a whole. It is the dedicated geospatial community that volunteers for council working groups and creates beneficial projects that make it so successful. The GICC's leadership and forward-thinking members support a strong geospatial community, and Fiscal Year 2024-2025 continued these successful efforts.

Introduction

The N.C. Geographic Information Coordinating Council was established by the N.C. General Assembly in August 2001 and is supported by the N.C. Department of Information Technology (NCDIT). The N.C. Center for Geographic Information and Analysis (CGIA), housed within NCDIT's Enterprise Data Office (EDO), staffs the council.

The council is the state's central point for geospatial collaboration and mapping and supports local and state geospatial programs and services. The council serves to improve the quality, access, and cost effectiveness of geospatial resources for state, federal, local, academic, and private organizations while promoting the value of geographic information.

Figure 1. Committee Chairs report what progress has been made towards accomplishing Council priorities during quarterly meetings.

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About the Council

The council meets quarterly to consider policies, issues, and initiatives. It is composed of a broad set of stakeholders representing perspectives from local, state, and federal government, higher education, and private business. The council's collaboration promotes better decision-making across all sectors in North Carolina. The council has three user-oriented standing committees: the Local Government Committee (LGC), the State Government GIS Users Committee (SGUC), and the Federal Interagency Committee (FIC). Two technical committees, the GIS Technical Advisory Committee (TAC) and the Statewide Mapping Advisory Committee (SMAC), address policy, guidance, standards, and technical issues in collaboration with the user-oriented committees. Chairs of all five standing committees as well as the council chair and council representative from the Office of State Budget and Management comprise the Management and Operations Committee (M&O), which handles the council's business between quarterly meetings.

Figure 2. GICC Members are appointed by a range of organizations to represent the entire Geospatial community in North Carolina.

Committee members, the state's geospatial community and the public use the council's website (it.nc.gov/gicc) and NC OneMap (nconemap.gov) to keep current on initiatives, meetings, opportunities, and news about both entities.

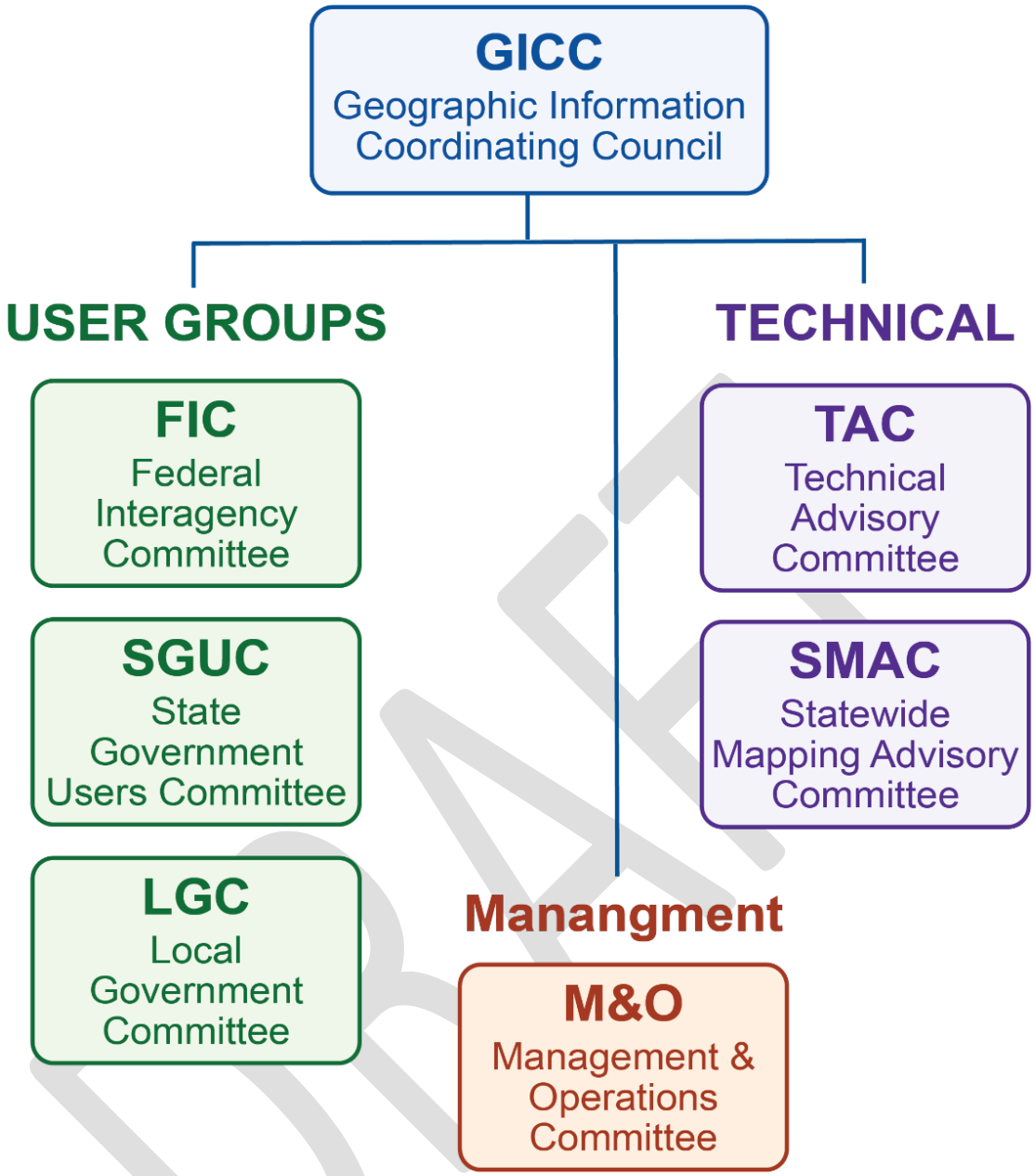

Figure 3. GICC Statutory Committees

What is GIS?

More than just map-making or cartography software, Geographic Information Systems, known as GIS, are information technology systems that connect data to maps, supporting planning and decision-making across a wide range of industries and users. Most people already use GIS-enabled applications in their daily lives every time they route themselves to work, order rideshare, or get packages delivered. GIS is more than a static map; it is a powerful tool that ties together spatial and non-spatial data to support critical decisions.

GIS data forms the foundation for daily decisions in transportation planning, emergency response and public safety, economic development, public health, and more. Addresses

and road networks may be the two datasets most often used by the public, yet the coordination involved in collecting addresses and roads from local governments into a standardized, regularly updated, statewide database is invisible to most people in their daily lives. When these datasets are not complete or accurate, online purchases are delivered to the wrong location, households are missed when expanding access to broadband internet, or emergency responders take longer to find the correct home. Without GIS data, many of the tools we use daily would not exist.

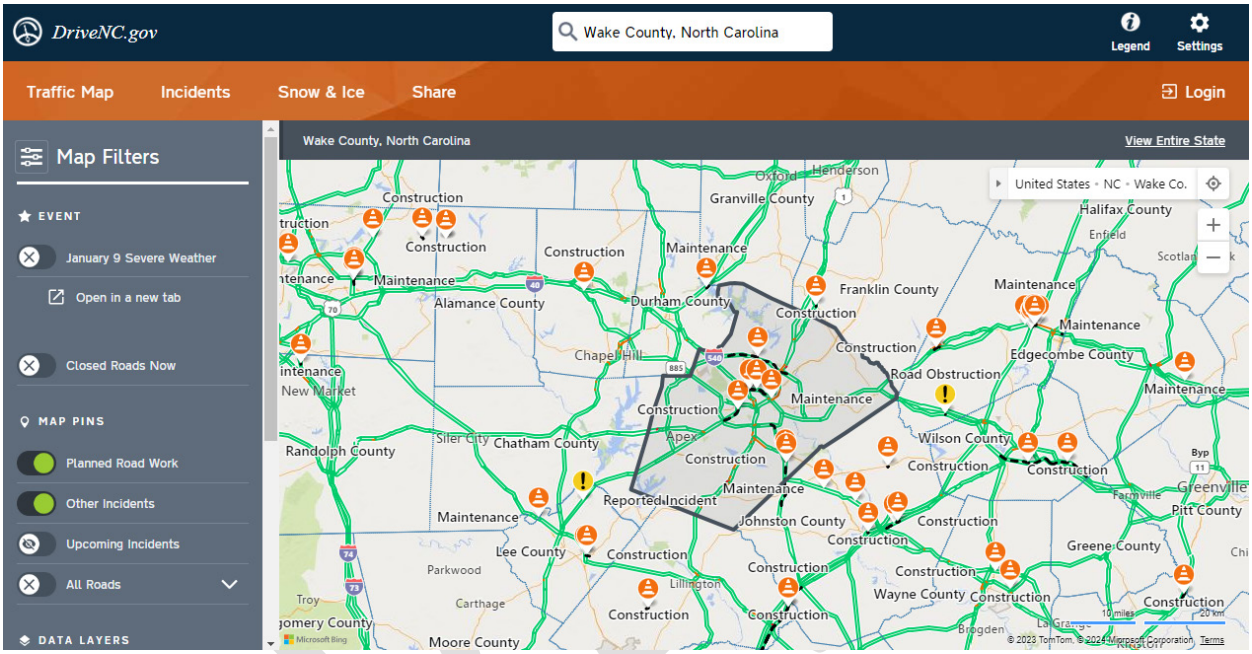

Figure 4. GIS is the foundation for decision-support tools that make government more transparent and efficient. Tools like DriveNC's Traffic Map are critical to communicate road closures and detours during natural disasters like Hurricane Helene.

Because of the critical importance of GIS to government functions as well as the private sector's reliance on accurate, well-maintained data, the council must include a wide range of stakeholders in its committees and working groups to ensure that geographic data produced in North Carolina meets the needs of our citizens. These local, state, federal, private sector, and education stakeholders direct the data-driven collaboration necessary to meet the needs of North Carolinians now and in the future.

FY24-25 Council Highlights

Introduction

Figure 5. The GICC celebrated the contributions of Tim Johnson, retired State GIO and long-standing GICC Secretary, during the November 2024 GICC meeting, prior to his retirement at the end of 2024.

The GICC meets quarterly; for Fiscal Year 2024–2025, the Council met August 21, November 13, March 21, and May 14. At the November meeting, Tim Johnson delivered his final State Geographic Information Officer Report. Tim was director of CGIA since 2000. The council and NC GIS community recognized his 36 years of service to the state and his pivotal role in building the GICC into a nationally recognized model. The August 2024 meeting was held at Charlotte Water's facilities in Charlotte, continuing the council's effort to expand access to GICC meetings beyond the traditional Raleigh location. The March 2025 meeting was held in conjunction with the NC GIS Conference in Winston-Salem, bringing GICC governance directly to the broader geospatial community.

Additional meetings include committee and working group updates and recommendations, state projects that rely upon GIS data for decision support, issues and needs of the geospatial community, and discussions on how to best integrate and promote GIS as full workflow tools. Fiscal Year 2024–2025 was an extraordinary year for the council, dominated by the impacts of Hurricane Helene and the geospatial community's remarkable response to the disaster. Select highlights from council meetings can be found in this section, while more detailed information about project progress and issues discussed within the GICC and its committees will be covered in the accomplishments section of this report.

Disaster Response for Hurricane Helene

Hurricane Helene struck western North Carolina in late September 2024, bringing catastrophic flooding, landslides, and infrastructure destruction that represented an unprecedented emergency in the state's history. The scale of the disaster, causing an estimated $59 billion in total damage as assessed by the Office of State Budget and Management's "Hurricane Helene Damage and Needs Assessment", demanded an immediate and coordinated response from all levels of government. At the council's March 2025 meeting, held in conjunction with the NC GIS Conference, the GICC held an open forum where members described their agencies' response efforts and the central role that GIS played in them.

Table 1. How GIS Served Organizational Responses to Helene

Organization	GIS Use Case
North Carolina Department of Transportation (NCDOT)	Generated over 8,500 damage reports through mobile data collection; shared road closure information with first responders and the public through their DriveNC application, which was viewed over 2.4 million times in the first weeks following the storm.
North Carolina Emergency Management (NCEM)	Coordinated emergency Lidar flights in 12 affected counties to assess damage, identify landslides, and collect imagery in collaboration with federal agencies. Dispatched trained GIS volunteers to local governments who turned data into spatial decision-making tools enabling the ability to make well informed quick decisions.
North Carolina Department of Environmental Quality (NCDEQ)	Coordinated with federal partners to map landslides, spatially tracked emergency operational status of public drinking and wastewater infrastructure, and coordinated effort with federal, state, and local partners to deploy temporary services to the public. Worked with GIS partners at electric utilities and NCDOT to prioritize opening roads for electric utility operators to access and restore power to water and wastewater facilities. Organized longer term efforts to map impacted waterways and sensitive species to reduce further damage to the ecosystems during road and bridge repair.
North Carolina Department of Health and Human Services (DHHS)	Provided crucial spatial data and information relating to hospitals, pharmacies, and grocery stores. Tracked vulnerable populations, such as individuals with intellectual or developmental disabilities, to help them get resources and assistance. Used mapping tools to prioritize where medicines and vaccines were needed the most.
Duke Energy	Coordinated 18,000 crew members across 27 base camps to address impacts to nearly 400 substations. Relied heavily on GIS to prioritize and communicate outages and restoration progress internally and externally.
North Carolina 911 Board and the Center for Geographic Information and Analysis (CGIA)	Through GIS-enabled Next Generation 911 capabilities, 911 calls from 19 damaged public safety answering points (PSAPs) in western North Carolina were re-routed to 23 operational PSAPs across the state, ensuring that no emergency calls able to connect went unanswered. This major accomplishment is not only a key success of North Carolina GIS but actively saved lives and helped many citizens in need of emergency services.

GIS Within Local Governments

In an effort to make council meetings more accessible and increase attendance, the August 2024 GICC meeting was hosted by the City of Charolotte. Holding GICC meetings in different locations across the state helps bring more members and other GIS professionals together face to face, building better working relationships, and strengthening geospatial community partnerships. It also provides the opportunity for highlighting the breadth and depth of GIS use at the local government level.

Figure 6. Natalie Walton-Corbett (Chair of the Local Government Committee) introducing Committee member speakers at the 2025 NC GIS Conference, expanding outreach efforts to the larger statewide GIS community.

Forsyth County showed how pulling overdose data into a spatial representation identified patterns that would not have been discovered through other forms of data analysis. The county analyzed opioid and other substance overdose data by age, gender, substance, and location, revealing surprising results to experienced frontline public health employees. The EMS department was able to deploy resources more effectively and efficiently to hotspot areas. Public health programs were revised to align more accurately with citizens who are more likely to be impacted, saving valuable resources but more importantly, effectively assisting Forsyth citizens in need of help. This type of spatial analysis can uncover community stories that allow decision makers to have a real and direct impact on that community.

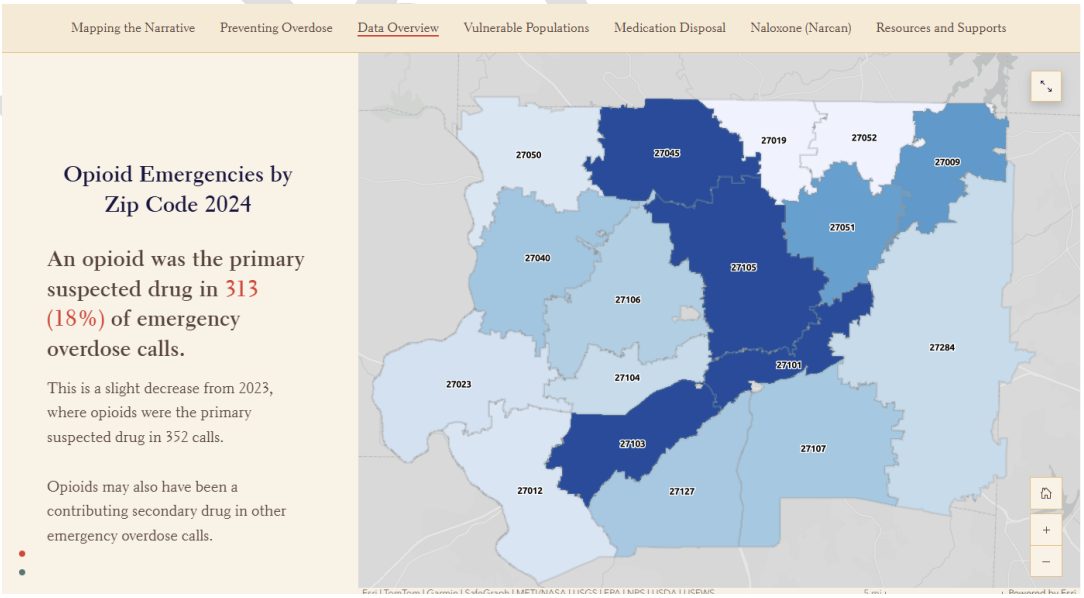

Figure 7. Forsyth County's Unseen Patterns StoryMap informed citizens of where the data showed the highest rate of overdoses in 2024 in comparison to vulnerable populations, as well as where new medication disposal and Narcan sites were placed across the county.

A critical coordination point for the GICC is understanding how all entities utilize statewide datasets and how local GIS programs are able to connect their workflows and data to that framework. The Eastern Band of Cherokee Indians presented their modern GIS system that encompasses all major framework datasets as well as their 911 addressing system that coordinates with other surrounding local governments. The tribe provided examples of how their framework dataset structures are different from traditional county and state structures, identifying an area where the Eastern Band of Cherokee Indians and the GICC could collaborate in the future to make workflows more consistent.

"Bringing people from around NC to discuss current issues."

SB355 GIS Website Disclaimer

Senate Bill 355 (SL 2024-32 Section 13.(a) Article 23 § 153A-463), signed into law in July 2024, required all city and county websites offering public access to GIS data to display a disclaimer users must actively acknowledge before accessing the data, with an implementation deadline of January 1, 2025. The requirement raised practical concerns for local governments around defining what constitutes a 'GIS tool,' technical constraints in implementing required acknowledgment mechanisms across platforms, and meeting the timeline with limited staff and legal resources.

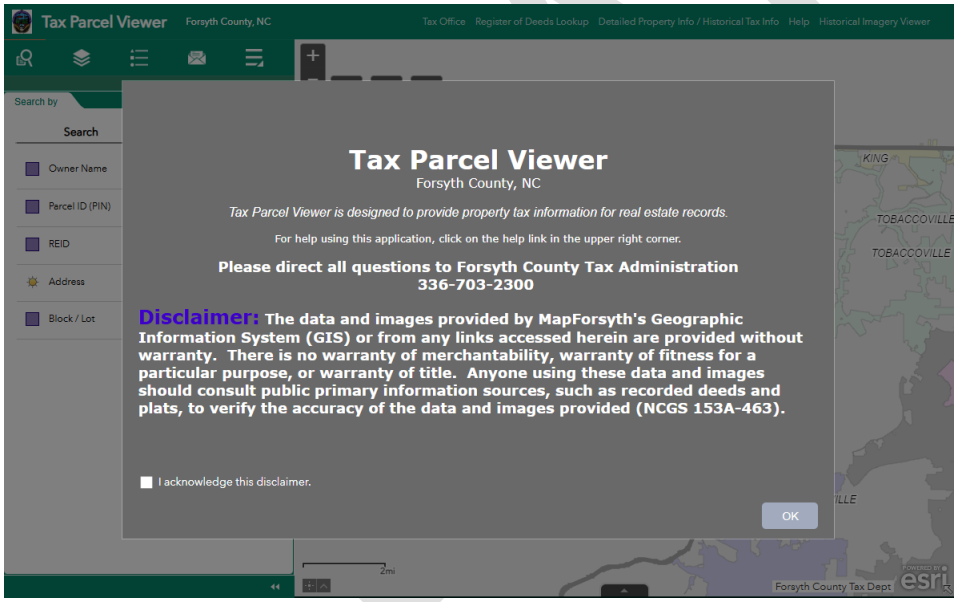

Figure 8. The Forsyth County Tax Parcel Viewer splash screen displays how the new requirement is being implemented on GIS mapping applications.

The council and its Local Government Committee surveyed local governments to assess readiness, engaged the bill's sponsor through the legislative liaison to share implementation concerns, and developed practical guidance to help local governments reach compliance. By the end of the fiscal year, disclaimer implementation was widespread due to outreach and assistance provided by the council and committees.

GICC Spring Council Meeting at NC GIS Conference

The GICC held its spring quarterly meeting at the 2025 NC GIS Conference in efforts to bring the council's activities directly to the broader geospatial community. The council had a goal to expand the reach of its meetings beyond Raleigh and increase awareness of the council and participation. Many conference participants attended the council meeting which focused on roles of the council, committees, and workgroups in Hurricane Helene response efforts. There was a detailed review of what went well, what could have gone better, and how the council can assist to improve future response efforts.

Figure 9. The GICC expanding outreach by holding the 2025 Spring Meeting at the NC GIS Conference in Winston-Salem.

2025-2027 Goals and Priorities

Every two years, the council reviews and updates goals and priorities. These goals, developed over several months in collaboration with all committees, identify areas of needed improvement that will progress the council's mission and have the largest positive impact. The revised goals for 2025-2027 reflect lessons learned from Hurricane Helene, particularly the importance of data preparedness, interagency coordination, and extending GIS capacity to underserved jurisdictions. Focus was also placed on improving and expanding efforts identified within the goals specifically around framework datasets and expanding outreach. Specifying these priorities provides clear direction for the council and its committees during the next two fiscal years to progress the future of GIS in North Carolina.

Lidar Business Plan

In November 2024, the council unanimously adopted the North Carolina Lidar Business Plan, developed by the Statewide Mapping Advisory Committee (SMAC) to address the absence of a sustainable funding model for statewide lidar data collection. The estimated annual economic benefits of lidar data exceed $60 million for North Carolina across applications including flood studies, hazard analysis, engineering, change detection, and mission-critical activities of state and local agencies.

The business plan transitions Lidar data collection from the current five-phase approach to a streamlined four-phase process beginning in 2026, designed to align with the state's orthoimagery program so that updated digital elevation models support orthoimagery development. While the plan recommended a diversified funding approach drawing on federal, state, and local partnerships, there is a need to identify a recurring funding mechanism in the state to ensure that this critical dataset (which supports disaster response, flood modelling, and economic development) attains consistent year-to-year funding, and that North Carolina's elevation data remains current and accessible.

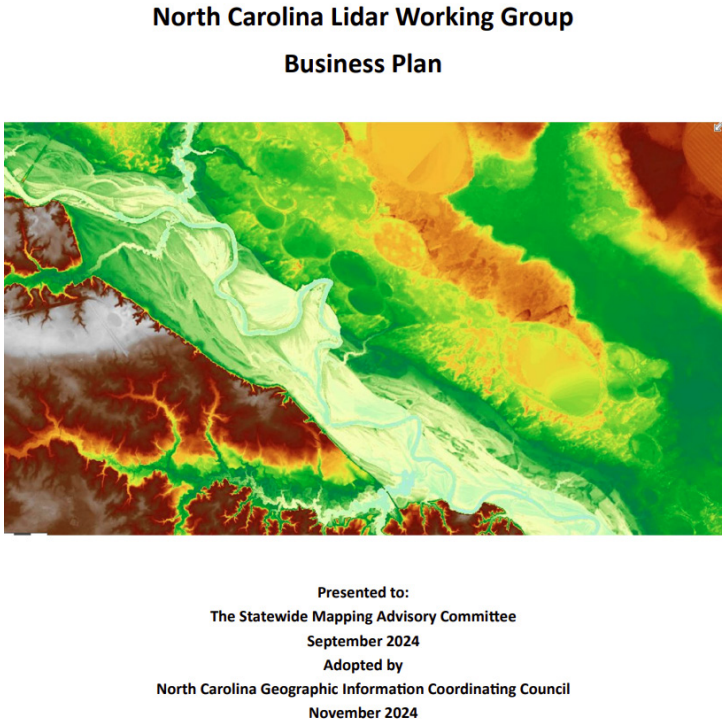

Figure 10. The 2024 Lidar Business Plan identifies the significant cost benefits while acknowledging needed updates which do not currently have secured funding.

Strategic Direction of the Council for Data Driven Collaboration

Every two years, the council reviews its goals and priorities to plan its strategic direction for the coming two years. The council historically has not written a formal three-to-five-year strategic plan but has relied on a biennial planning process to remain nimble and respond more quickly to pressing needs and user priorities. The council's priorities and goals are a mixture of long-term and short-term projects, and this biennial process allows the members to more frequently assess progress, assign tasks, and define new goals or priorities.

The goals listed below represent the 2023-2025 priorities for the council. New goals discussed and planned during this fiscal year will be effective at the beginning of the 2025-2026 fiscal year.

Table 2. NC GICC's 2023-2025 Goals and Priorities.

Goal 1. Improve, expand, and support statewide geospatial data and applications.	
1.1. Promote free and open discovery of and access to geospatial data created and maintained by local governments and support efficient local to state data sharing.	
Need: *Accessible local data is essential for the success of most GICC initiatives.*	There were 138,000 new addresses added/updated to AddressNC which the LGC continued to support the importance of the contributions made by local governments.
	NC OneMap and the Working Group for Enhanced Emergency Response (WGEER) provided valuable support to coordinate data sharing between local, state, and federal agencies during the Hurricane Helene response.
	Six state agencies launched a coordinated effort to streamline updating and maintaining a statewide Municipal Boundary dataset.
1.2. Recommend utility infrastructure solutions that maintain data sharing security to aid discovery and ease of access to geospatial data.	
Need: *Emergency response, planning and development communities need a better understanding of security concerns for infrastructure data and better resources for how to request data and securely treat requested data.*	During the Hurricane Helene response, the need to have data agreements that allow data sharing between local, state, and federal agencies as well as utility companies was identified as a need. The SGUC and WGEER worked together to begin discussions outlining what the agreements would contain.
1.3. Support priority initiatives that compile and maintain statewide geospatial datasets that benefit the businesses and citizens of North Carolina.	
Need: *Continuously improve existing datasets and compile new datasets as needed by stakeholders.*	Municipal boundary data updates continued.
	State agencies continued collaboration on the council's priority of developing an updated hydrography dataset. A Memorandum of Agreement (MOA) to formalize partnerships was drafted between NCDOT, NCDEQ, and NCDIT.
	Building footprints were updated for ¾ of the state through a multi-agency effort.
	New Quality Level 1 (QL1) lidar was collected in the twelve hardest-hit counties to support Helene recovery.
	2024 orthoimagery was delivered on time and 2025 orthoimagery was flown.
1.4. Request all state agencies to make the council's priority geospatial datasets discoverable and accessible through the NC OneMap Geospatial Portal.	
Need: *NC OneMap should serve as a single portal for state GIS data discovery.*	Elevation contour data was added to NC OneMap.
	The Municipal Boundary Working Group (MBWG) developed a streamlined process for boundary approval and annexation submittal.
	Next Generation 911 data directly supplies addresses to AddressNC, eliminating duplication.
	NC OneMap expanded compute capacity during Hurricane Helene response to handle increased load from data requests.
	State agencies continued to add and update authoritative data published on NC OneMap.

1.5. Promote geospatial metadata for standard documentation.	
Need: *Metadata is essential to allow users to understand appropriate uses for data and should be promoted.*	SMAC annually reviews metadata needs.
	Council discussed refreshing metadata training and embedding metadata as a standard deliverable component.
	SGUC presented training on updated methods for developing metadata through ArcGIS Online.

1.6. Support enterprise applications that derive business value from geospatial data assets and analytics.	
Need: *Promote the understanding of the enterprise capabilities of GIS.*	The SGUC Value of GIS StoryMap Hub was updated to include resiliency and disaster preparedness.
	A new web mapping application was launched, integrating over 100 data layers from multiple agencies into a single enterprise application.
	NCDOT demonstrated significant return on investment through streamlining project planning by consuming NC OneMap and other existing GIS data.

1.7. Promote efficient data sharing of large datasets by recommending technical solutions.	
Need: *Promote access to previously difficult to share datasets.*	TAC is working on a best practices guide for big data.
	Lidar visualization layers were added to the NC OneMap cloud.
	Hurricane Helene response demonstrated the value of ArcGIS Online for large-scale efficient data sharing across agencies.

Goal 2. Collaborate and conduct outreach for more integration of geospatial data in information technology for expanded benefits in the geospatial community in North Carolina.

2.1. Identify opportunities to collaborate on GIS solutions in all state departments including divisions not directly represented on the council to add value to state business processes.	
Need: *Collaborate with state agencies to add value and prevent silos.*	SGUC held quarterly knowledge sharing and peer-to-peer training sessions.
	A joint SGUC/FIC meeting was held to share federal geospatial assets with state users and promote intergovernmental collaboration.
	A new web mapping application was developed through cross-agency collaboration involving NCDHHS, NCDEQ, NCDOT, and federal partners.

2.2. Identify opportunities to collaborate on geospatial data and technical solutions on a regional basis, engaging councils of government, educational institutions, metropolitan planning organizations, and rural planning organizations.	
Need: *Eliminate silos and increase resources by working on a regional basis.*	The NC GIS Conference brought GIS users from all over the state in multiple disciplines together to collaborate and knowledge share.
	Council and committee members continuously find ways to provide education and support regionally through networking internally, externally, at conferences and cross-organizational projects.

2.3. Reach out to jurisdictions with the least resources to find ways to add value with geospatial data and applications.

Need: *Provide education to the many small jurisdictions that lack GIS capability or expertise.*	WGEER/NCEM volunteers coordinated the facilitation of local-to-local GIS assistance during Hurricane Helene.
	LGC developed a GIS contacts application to improve community connectivity across all jurisdictions.

2.4. Increase awareness and adoption of council initiatives and priorities through outreach and education.	
Need: *Increase participation in working groups and increase awareness of existing GIS resources to avoid duplication of effort.*	All committees and working group members promote council initiatives within their organizations.
	Meeting summaries were sent to council members and state agency secretaries after each meeting to share with their organizations.
	The Spring GICC meeting was held at NC GIS Conference, bringing council governance to the broader geospatial community.
	GICC participated as a supporting partner for GeoGov Summit in September 2025.

Accomplishments 2024-2025

Value of GIS: Resiliency and Disaster Preparedness

Hurricane Helene demonstrated the value of sustained investment in GIS data and infrastructure. Every major framework dataset maintained through council-coordinated programs (addresses, parcels, road networks, building footprints, orthoimagery, and elevation) contributed directly to the response and recovery effort. Standardized address and parcel data allowed GIS professionals deployed to unfamiliar counties to begin work immediately, road network data enabled real-time routing of crews and emergency responders around thousands of closures, and orthoimagery supported damage assessments across the affected region. The $54 billion preliminary damage estimate was produced in just four weeks using GIS-enabled damage assessment workflows.

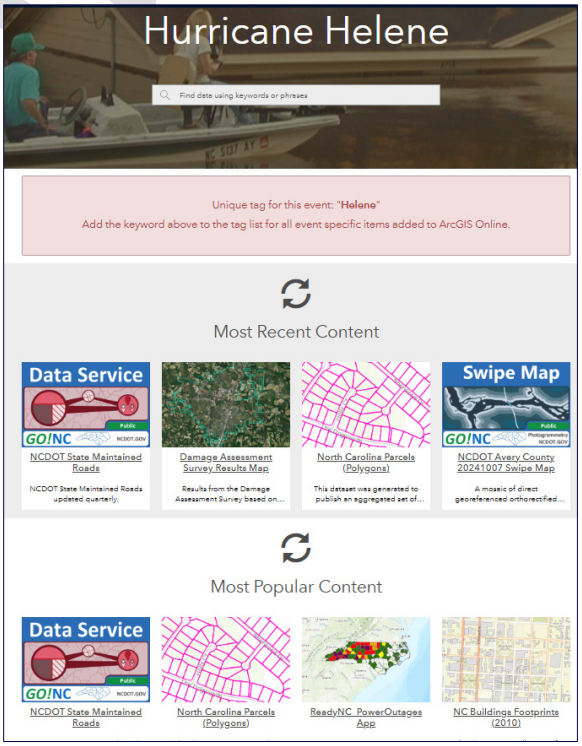

Figure 11. The WGEER is a partnership between state and local governments and the private sector to share data through a common GIS portal saving valuable time.

The Working Group for Enhanced Emergency Response (WGEER) faced its first major test during Hurricane Helene. The working group facilitated data sharing calls and coordinated volunteer deployments, with GIS professionals from unaffected counties deploying to provide direct support in the hardest-hit areas. The WGEER Hub served as a repository for vetted/trusted, event-specific data, preventing the confusion that can arise when multiple versions of critical datasets

circulate during an emergency, saving valuable time.

Following Hurricane Helene, the Local Government Committee initiated development of Blue Sky/Dark Sky checklists to help GIS professionals in local governments prepare their data, systems, and protocols for emergency scenarios before disasters occur. The initiative includes checklists for annual, pre-event, during-event, and post-event tasks, and acknowledges that decisions made in calm periods about data formats, sharing permissions, backup procedures, and integrations determine the effectiveness of GIS response when disasters strike.

Due to a statewide Next Generation 9-1-1 deployment, with GIS data serving as the driver for 911 call routing, every caller that was able to connect via a wireline or wireless device during Hurricane Helene was able to speak to a 911 dispatcher, even if they were physically located in another part of the state. This would not have been as achievable without the reliable GIS data provided by North Carolina local governments each month.

Sharing Information and Knowledge

NC GIS Conference

The NC GIS Conference is held every two years, providing an important networking and learning experience for GIS professionals in the state. The 2025 NC GIS Conference was held in Winston-Salem at the Benton Convention Center, March 19–21, 2025. The conference drew 598 attendees and 40 vendors, and featured more than 120 sessions, making it one of the most substantive conferences in recent years.

Figure 12. Preliminary Session of the 2025 NC GIS Conference.

The conference's programming was significantly shaped by Hurricane Helene, with sessions and discussions focused on lessons learned from the disaster response and opportunities to improve GIS readiness for future emergencies.

The conference encourages expansion of the profession by supporting opportunities for student presentations and awarding geography students for exemplary work. Eighteen

graduate and undergraduate students from ten campuses across the state were awarded Herb Stout Innovative Student Paper Awards.

On the opposite side of the career spectrum, awards are given to those who have demonstrated a career-long dedication to GIS data improvement or to advancing the profession. Jeff Essic (NC State University), Tim Johnson (former state Geographic Information Officer and CGIA Director), Doug Newcomb (U.S. Fish and Wildlife), and Alice Wilson (City of New Bern) were recognized for their contributions to the North Carolina geospatial community.

Figure 13. Herb Stout Student Award Winners received awards and acknowledgement for their hard work at the 2025 NC GIS Conference Luncheon.

Herbert Stout Awards are also given to local governments for outstanding and innovative GIS projects. At the conference, two local governments were recognized with this award: the City of Hendersonville, for their use of GIS to restore water service after Hurricane Helene; and the City of Chapel Hill, for their development of a comprehensive tool covering permit application, review, issuance, and enforcement improving efficiency of street parking.

"Really helped to brainstorm how GIS could be used in unique ways for our city's specific needs."

Driven by positive feedback from the 2023 NC GIS Conference, the conference once again featured two sessions hosted by GICC committees. The LGC and SGUC each hosted a lightning talk called "En-Lightning" Sessions, with each session offering participants examples of the many ways GIS can be used in state and local government to bring efficiency, communicate more effectively, increase data transparency, and provide

valuable tools to citizens. These sessions were an excellent way for attendees to discover new ways to bring the value of GIS back to their organizations.

The conference fosters relationships between professionals in government, academia, and private sectors. The council recognizes the value in ensuring that state-level GIS coordination and priorities are visible, accessible, and connected to the wider geospatial community through communications during the conference. It provides opportunity for in-depth discussions determining if council-led framework GIS datasets continue to meet the needs of stakeholders. These discussions were extended during the GICC Spring Quarterly Meeting held on the final day of the conference and also through a "coffee with the council" event to allow for conversations one-on-one with council members. Broad engagement at these events demonstrated the strength of North Carolina's geospatial community and its commitment to continuous improvement.

State and National Participation

GICC members and staff participated in numerous state, national, and professional organization events during fiscal year 2024–2025, promoting current work from North Carolina's geospatial programs, collaborating on possible solutions to challenging issues, and building relationships that support the council's mission. Members of the council also hold positions on other national organizational boards such as the United States Geological Survey (USGS) 3D Elevation Program (3DEP) Subcommittee, NASA's Advisory Board, American Society for Photogrammetry and Remote Sensing (ASPRS), and the Management Association for Private Photogrammetric Surveyors (MAPPS), providing increased awareness nationally of North Carolina's work and allowing opportunities to better connect North Carolina's dataset to larger nationwide data efforts.

Figure 14. Colleen Kiley presenting at the Coastal GeoTools.

Presentations and Outreach

An important goal for the council is to educate the geospatial community and public about council initiatives and geospatial resources. As staff to the council, CGIA team members coordinate with working groups and committee chairs to present information and updates throughout the year. The following is a list of venues and topics presented this fiscal year outside of regular council and committee meetings.

Table 3. Outreach presentations for Fiscal Year 2024-2025

Venue	Topic
National Emergency Number Association (NENA)	From Copper Wire to IP Network, From the Mountains to the Beaches: North Carolina's Statewide Transition to Next Generation 911 (NG911)
North Carolina Land Records Workshops	GICC Framework Datasets and Working Groups
Coastal GeoTools Presentation	Harnessing Partnerships for Coastal Innovation: Driving Data Access and Resilience Through State and National Collaboration (*A state and national coordination for resiliency.)*
North Carolina Arc Users Group (NCAUG) Fall Conference	Automation, Machine Learning, and Statewide GIS Projects
GeoGov Summit	Geographic Information Officer (GIO) Update: CDO/GIO Summit & Community Assessment of National Spatial Data Infrastructure (NSDI) Geospatial Coverages
National States Geographic Information Council (NSGIC)	Making Sure It's a Cloud and Not a Fog: CGIA's Path to GIS in AWS (NC OneMap)
	Relationships Matter – Care and Feeding for Statewide Success
	Using the Authoritative Badge for Hosted Geospatial Services (*How to know when you should use the Authoritative Badge*)

Wetland Data Hub

North Carolina Governor Roy Cooper passed Executive Order 305, which called for a map to be developed representing important wetland ecosystems like coastal marshes. This task could have been prohibitively expensive if North Carolina had to develop the data from scratch. A previously completed large, coordinated effort between North Carolina and the National Oceanic and Atmospheric Administration (NOAA) to use the Coastal Digital Dataset to map coastal marsh and sea level rise was a major investment towards the state's datasets for natural communities. This was essential for fulfilling this executive order in a timely manner. Because NOAA's Digital Coast data included existing coastal marshes as well as various scenarios for marsh migration due to sea level rise, we were able to quickly supply Governor Cooper with what he requested at minimal expense.

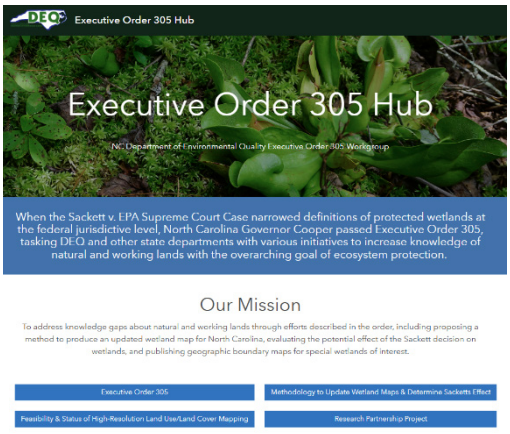

Figure 15. Multiple State Agencies worked together to bring reliable wetland data into one central location.

SGUC Training

The State Government GIS Users Committee (SGUC) coordinates Esri GIS training classes as part of the benefits available through the Esri enterprise licensing agreement. This training program ensures state agency GIS professionals have access to current skills and professional development, directly supporting the quality of GIS services provided across state agencies. During Fiscal Year 2024–2025, the SGUC arranged multiple instructor-led training sessions. By the end of the fiscal year, over 80 employees participated in these trainings.

Figure 16. Statistics of state employees who participated in the instructor-led GIS training.

Web Accessibility Standards

The Americans with Disabilities Act requires all state government entities to comply with new Web Content Accessibility Guidelines (WCAG) 2.1 AA standards by April 26, 2026, for most jurisdictions. This deadline applies to all public-facing web applications including GIS maps, dashboards, and applications created by state and local governments.

The SGUC focused discussions throughout the fiscal year on how state agencies will be able to handle the significant scope of work required to review and remediate the large number of maps, services, and applications shared with the public. The committee communicated with NSGIC to gain insight and guidance as well as reaching out to other states such as Minnesota and Colorado, which have developed state-level accessibility programs. Key guidance was shared with the council including developing agency-level plans and checklists, prioritizing the most frequently used public resources, and tracking progress to ensure compliance by the deadline.

Collaboration for Data Governance and Consistency: Framework Datasets

Hydrography Working Group

North Carolina's hydrography data is a critical framework dataset supporting water quality management, flood risk assessment, transportation planning, and environmental regulation. The Hydrography Working Group (HWG) updated hydrography recommendations to align with the U.S. Geological Survey's 3D Hydrography Program (3DHP), which derives hydrography from elevation data, greatly increasing accuracy.

During Fiscal Year 2024–2025, the HWG made significant progress on development of a memorandum of agreement and coordination among multiple state agencies tasked with maintaining and supporting this framework dataset. This governance document establishes processes for geometry changes and updates, approval workflows, and specifications for map and hydrography assurance.

Addressing the hydrography data gap will improve North Carolina's catalog of framework datasets. The council identified hydrography as a current Statewide Mapping Advisory Committee (SMAC) priority because the federal hydrography layer in common use is not as accurate as the newly developed elevation derived hydrography.

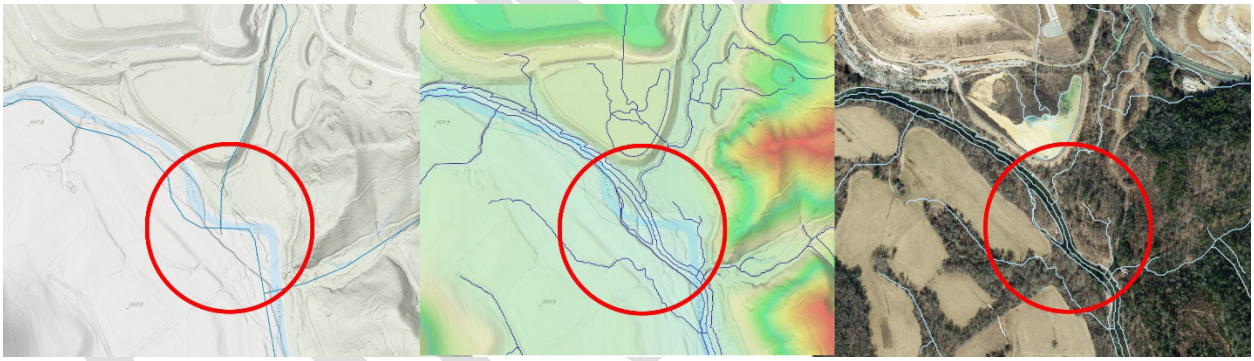

Figure 17. The left image is a representation of the current hydrography data, which is no longer accurate and lacks detail. You can see from the center and right images how the new more accurate hydrography data models streams with significant detail.

Working Group for Seamless Parcels

The Seamless Parcels dataset is consistently the most requested layer on NC OneMap and provides foundational data for broadband planning, tax assessment, emergency response, flood analysis, and dozens of other day-to-day applications. North Carolina's statewide seamless parcels program is recognized nationally, and council members provide guidance to other states through NSGIC on developing comparable programs.

The Working Group for Seamless Parcels (WGSP) continued work in fiscal year 2024–2025 to improve data consistency and quality. Participation remained strong, with 75% of counties updating quarterly. The working group also pursued a more efficient pathway for obtaining consistent attribute data by engaging CAMA (Computer-Assisted Mass Appraisal) vendors who provide tax database services directly to counties, which reduces data requests to local governments and eases their reporting burden. To support open-source

GIS users, NC OneMap added Open Geospatial Consortium (OGC) Geopackage functionality for this dataset.

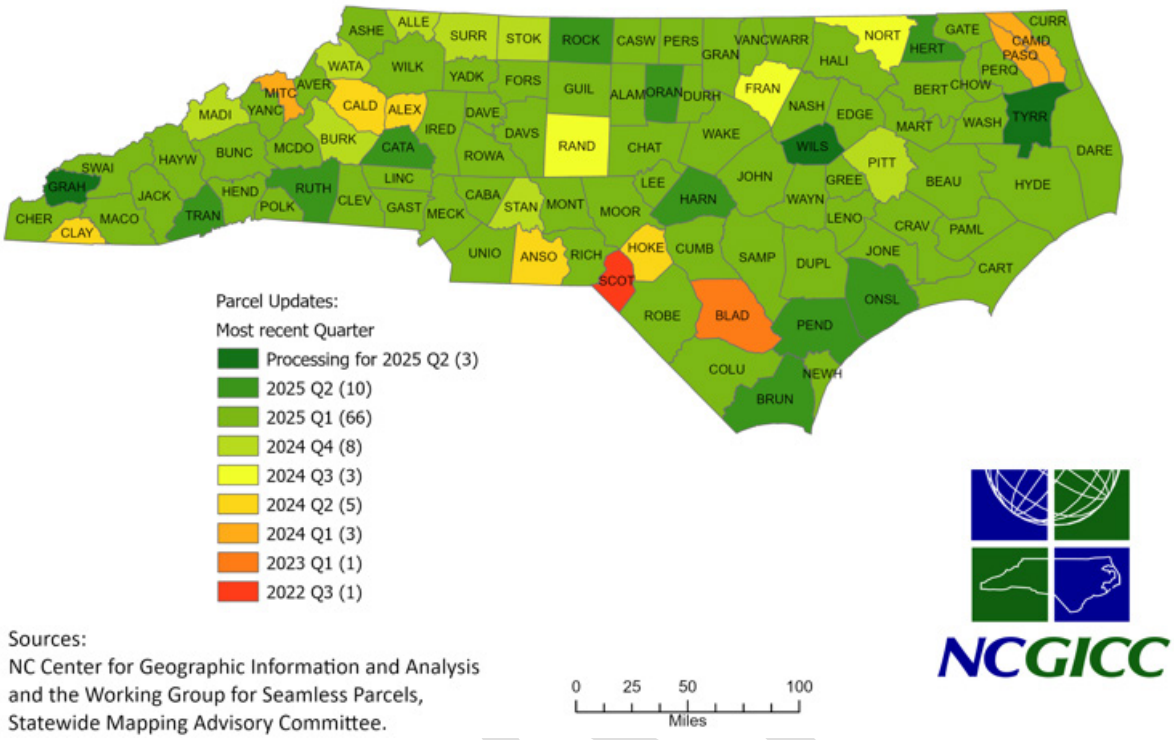

Figure 18. Counties with updated parcel data as of the second quarter of 2025.

Orthoimagery Program

The Statewide Orthoimagery Program, funded by the N.C. 911 Board, delivers a consistent and current visual reference for emergency communications and serves as a foundational layer for most online mapping in the state. The program updates a quarter of the state's counties each year on a rotating four-year cycle. Imagery is available to local, state, federal, and regional government agencies, the private sector, academic communities, and private citizens as map services and downloadable files from NC OneMap.

The 2024 Coastal Orthoimagery Project, covering 27 counties, was completed on schedule with deliveries to county public safety answering points (PSAPs) in December 2024. The 2025 Eastern Piedmont project, covering 26 counties, was flown in March 2025 ahead of schedule. The orthoimagery working group, focused on continual process improvement, established a pre-

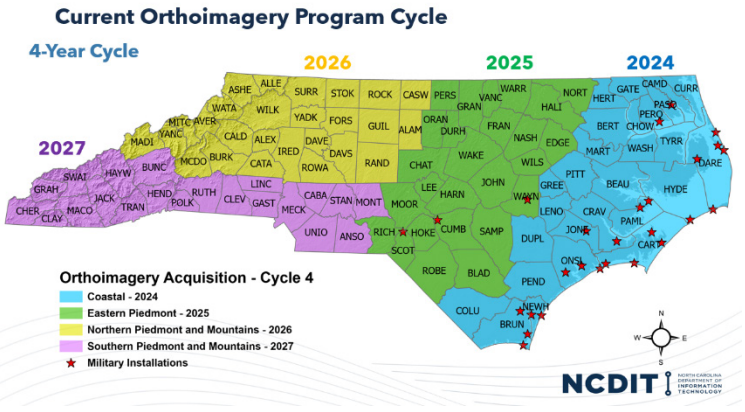

Figure 19. During the 2024-2025 fiscal year, orthoimagery was updated for the easter portion of the state shown here in green and blue.

qualified vendor list covering the remainder of the current four-year cycle through 2027, improving procurement efficiency and eliminating the need for a full vendor selection process each year.

Lidar Working Group

Lidar data provides a high-resolution, three-dimensional representation of the earth's surface and is essential for accurate flood modeling, landslide risk assessment, infrastructure planning, precision agriculture, water resource management, and emergency response. North Carolina has statewide lidar coverage collected in five phases for different areas of the state.

The estimated annual economic benefits of lidar data exceed $60 million for North Carolina across applications to local, state, regional, academic, and non-governmental organizations, according to a 2022 study. Geologic assessment, hazard mitigation, flood risk management, coastal zone management, and infrastructure and construction management accounted for over 50% of the estimated total benefits.

Figure 20. Estimated Annual Benefits to North Carolina from Lidar Data by Business Use (Source: Data from 3D Nation Elevation Requirements and Benefits Study (Dewberry 2022))

The N.C. Geological Survey and USGS use lidar data to identify landslide risks and provide the foundation for flood models that protect North Carolinians through early warning systems. Following the collection of Phase 3 Lidar in 2024, N.C. Emergency Management (NCEM) provided quality control in early 2025, with completion expected in the fall of 2025. The statewide high-resolution dataset now meets the Quality Level 1 standard, increasing the density of lidar collection to eight points per square meter. The adoption of the North Carolina Lidar Business Plan in November 2024 provided a framework for pursuing a diversified, sustainable funding model and proposed a transition to four collection phases aligned with the orthoimagery program schedule beginning in 2026.

Hurricane Helene demonstrated the value of current lidar data through its use by state and federal agencies in assessing damage, identifying potential landslides, completing floodplain mapping updates, and identifying debris for wildfire prevention, all of which help to protect property and save lives. These critical actions were made possible through a collaborative effort between NCEM, NCDOT, and the UNC Collaboratory, and resulted in the collection of Quality Level 1 coverage and imagery across 13 counties in western NC.

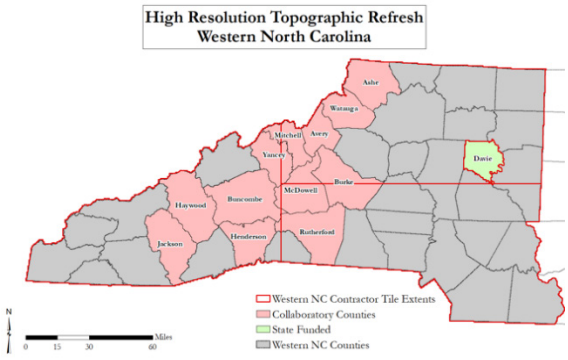

Figure 21. The collaborative effort to update western NC counties with Quality Level 1 – high resolution topographic data included the counties shown in red.

Land Cover

North Carolina has not invested in landcover data since 1996 and has relied on the federally produced National Landcover Dataset (NLCD) at 30-meter resolution, which is not meeting user needs. In prior years, the Statewide Mapping Advisory Committee's Landcover Working Group recommended pursuing NOAA's Coastal Change Analysis Program (C-CAP) one-meter product as a significantly better alternative. This product was partially funded by multiple state agencies. Data development is anticipated to begin in 2025 and will support coastal wetlands mapping, impervious surface analysis, environmental justice assessment, and habitat monitoring, along with other applications constrained by the limitations of existing 30-meter data.

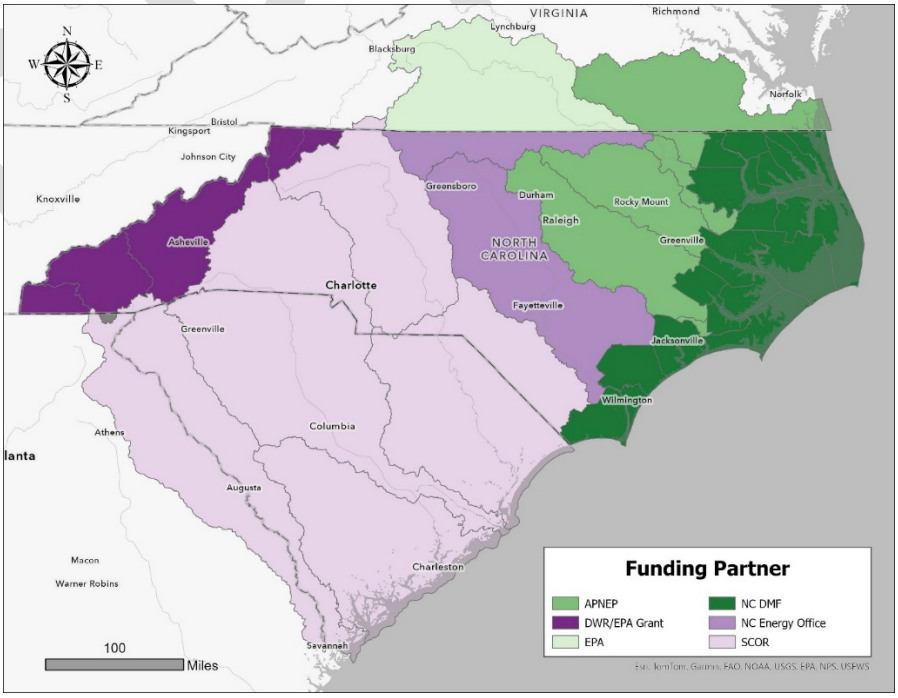

Figure 22. Based on a recommendation made by the Statewide Mapping Advisory Committee, multiple state agencies collaborated to fund the NOAA Coastal Change Analysis Program to collect one-meter Land Cover Data.

AddressNC

Address data is one of the most frequently used GIS datasets, forming the basis for emergency response, navigation, package delivery, broadband planning, Census enumeration, and hundreds of other public and private sector applications. The AddressNC program maintains a statewide database of address points by drawing on monthly updates from Next Generation 911, ensuring the data reflects the most current addressing maintained by local governments.

During fiscal year 2024–2025, the program continued monthly updates from all 100 counties. During that time, hundreds of thousands of address changes and additions were recorded statewide, with all 100 counties providing updates. AddressNC data continued to be incorporated into the Esri World Geocoding Service and the National Address Database (NAD). The AddressNC geocoder, which converts an address or location description into geographic coordinates, was also enhanced with three new return types to improve address matching. A new public-facing website to help county GIS managers visualize data inconsistencies was in final development at the close of the fiscal year.

The importance of AddressNC was underscored by Hurricane Helene, where accurate address data enabled emergency dispatchers to route calls correctly as infrastructure failed, and allowed deployed GIS volunteers to begin work immediately in unfamiliar counties.

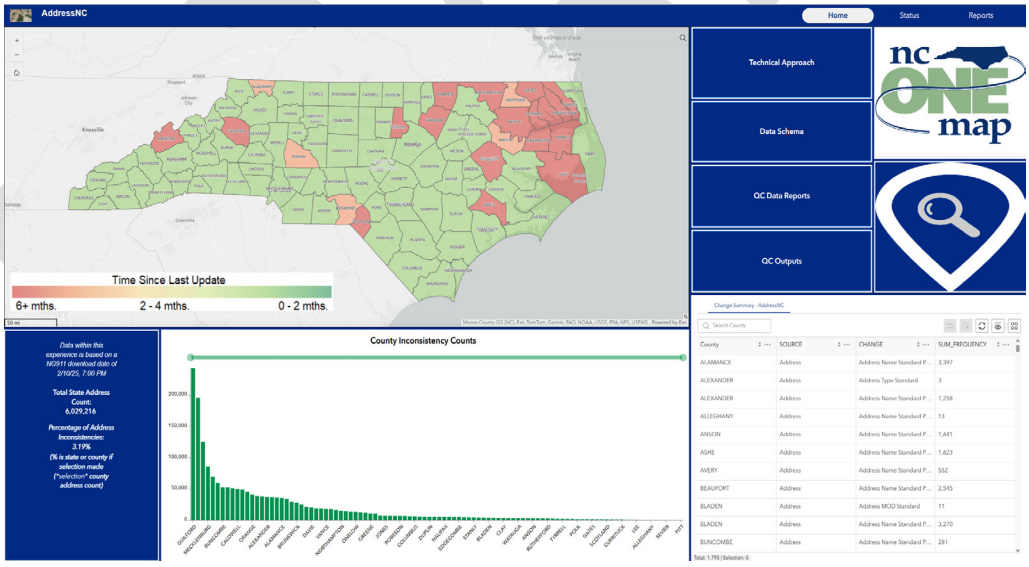

Figure 23. The AddressNC Dashboard tracks the status of which counties have updated Next Generation911 data.

Building Footprints

Building footprint data, or the mapped outlines of all structures, is an increasingly critical dataset for broadband planning, emergency response, tax assessment, and post-disaster damage analysis. The program works with N.C. Emergency Management to coordinate building footprint updates, with staff and contractors supporting mapping across the state.

During fiscal year 2024–2025, significant progress was made across most of the state's orthoimagery project areas. To support Hurricane Helene damage assessment and inspections, building footprints inside flood zones were prioritized for updates. The updated data will be reflected in early warning and flood risk applications including the Flood Risk Information System (FRIS) and Flood Inundation Mapping and Alert Network (FIMAN). The team is evaluating AI and machine learning approaches to more efficiently identify areas where manual updates are needed.

Figure 24. Due to the rate of development in North Carolina, building footprint data requires frequent updating.

The value of current building footprint data was highlighted during the broadband expansion program, where footprints combined with address and parcel data enabled North Carolina to successfully challenge inaccurate Federal Communications Commission (FCC) serviceable location mapping. Consistent yearly funding for data maintenance, storage, and updates is needed to preserve the value of this data for future uses.

Municipal Boundaries

The Municipal Boundary Working Group (MBWG) continued work to increase adoption of the statewide municipal boundary submission tool, which allows local governments to submit annexations through a single portal rather than independently reporting to multiple state and federal agencies. This tool eliminates duplicative effort for local governments and ensures all state agencies and the U.S. Census Bureau receive consistent boundary updates.

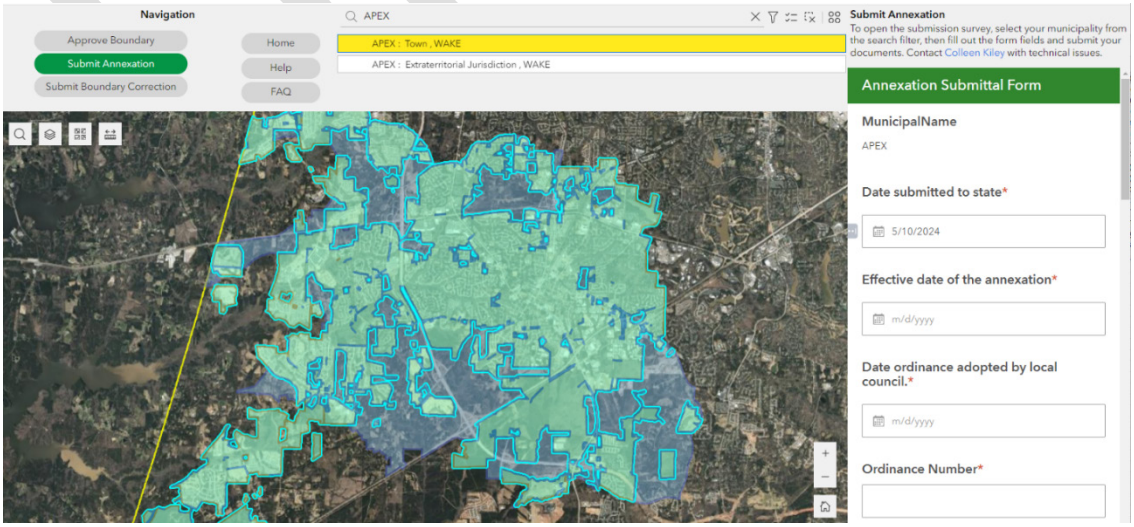

Figure 25. The Municipal Boundary and Annexation application allows municipalities to submit annexation data in one place instead of submitting it to multiple state agencies. This provides a single reliable geospatial statewide data source for municipalities.

During fiscal year 2024–2025, the tool gained meaningful traction with 168 boundary updates and 210 annexations recorded as of April 2025. The program received strong positive reception at the 2025 NC GIS Conference by local governments.

In June 2025, North Carolina and the U.S. Census Bureau signed a statewide Boundary and Annexation Survey (BAS) agreement, allowing the state to report municipal boundary changes to the Census on behalf of its municipalities. The BAS is a survey conducted annually by the U.S. Census Bureau to update the geographic boundaries used in multiple census programs. These boundaries also are used in certain state-specific programs. By streamlining the process, the state both reduces the reporting burden on local governments and maintains a statewide, regularly maintained dataset of municipal boundaries, that serves other state agencies for needs like floodplain mapping, population estimates, environmental permitting, and transportation planning.

Collaboration for Public Access to Geographic Information

NC Broadband Expansion

Broadband expansion, which improves access to high-speed internet in rural or underserved communities, continues to be a priority for North Carolina and relies on geospatial data for planning, program management, and grant tracking. The state's success in broadband expansion is, in significant part, a direct return on decades of investment in GIS data programs coordinated through the GICC.

Building footprint data, address data, and seamless parcel information together enabled North Carolina to submit challenges to the FCC's dataset of serviceable locations. This demonstrates through well-developed GIS datasets that the federal data missed locations in our state. As a result, North Carolina verified more unserved locations than any other state, leading to more funding for broadband expansion ($1.5 billion in broadband infrastructure funding). This outcome is one of the clearest examples of the return on investment from GIS data programs.

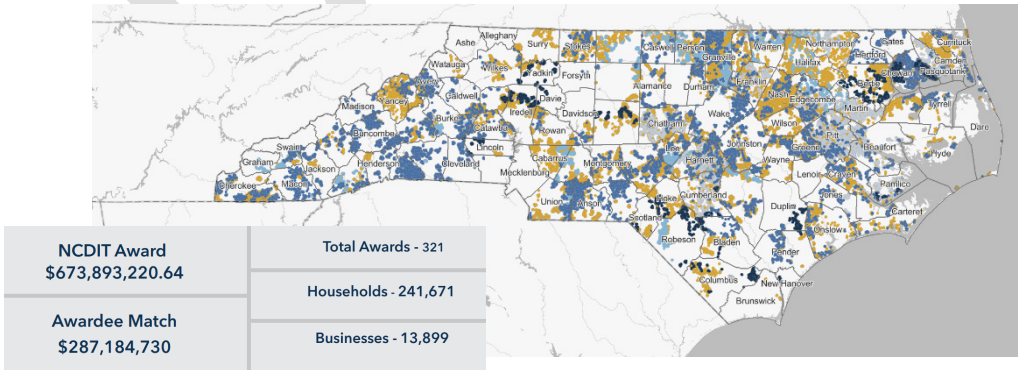

Figure 26. The NC Broadband and Digital Opportunity Award Summary Dashboard make investments and grants transparent to local communities.

Next Generation 911

Next Generation 911 (NG911) is both a public safety system and a GIS data program. The NG911 infrastructure routes emergency calls using geospatial data such as road centerlines, address points, fire, law, and EMS boundaries, provisioning boundaries, and public safety answering points (PSAP) boundaries. The system's performance during Hurricane Helene demonstrated how investment in NG911 data and infrastructure directly results in saved lives.

NG911 road centerlines data is now available through NC OneMap, providing the broader geospatial community with access to this frequently updated, high-quality transportation dataset. Improved data quality standards help local first responders save lives by locating callers more quickly and with greater accuracy. Alternate and abandonment call routing capabilities between PSAPs proved essential before, during, and following Hurricane Helene. This is a reflection of how the council's investment in framework GIS datasets like road networks and addresses are critical for effective emergency response operations.

NC OneMap

NC OneMap is an award-winning GIS data clearinghouse used as an example of governmental excellence across the country. It is the primary portal through which local, state, federal, private, and academic sectors, as well as citizen users discover and access North Carolina's authoritative geospatial datasets. NC OneMap's role in Hurricane Helene response demonstrated its value as critical infrastructure, not simply a data portal.

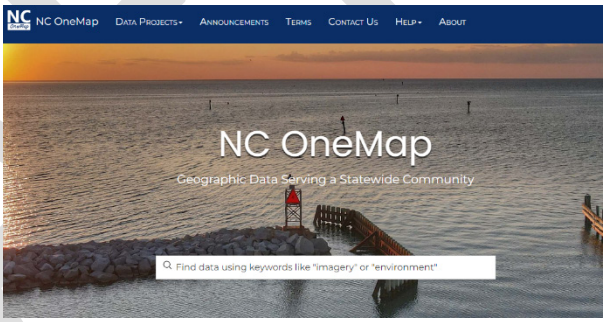

Figure 27. NC OneMap is a one-stop-shop for North Caroling geospatial data. State agencies connect and host their authoritative data to this portal so users across the country can find the data they need.

During Hurricane Helene, CGIA proactively expanded the NC OneMap ArcGIS Enterprise Environment to handle increased loads as users across government and the public sought situational awareness data. NC OneMap also served as a backup repository for critical datasets like parcels and addresses, offering to provide this data back to counties or municipalities that might have lost their local copies during the disaster. This backup function proved to be a vital capability that local governments could rely on when local infrastructure failed or was inaccessible.

NC OneMap serves as the primary servicing point for GICC-coordinated data initiatives and provides the data foundation that broadband expansion, environmental justice mapping, flood resilience planning, and emergency response all rely upon.

Intergovernmental Collaboration for Efficiency

NOAA Digital Coast

The NOAA Digital Coast provides coastal communities with data, tools, and training to address dynamic coastal issues. North Carolina's extensive coastline and coastal communities benefit from this federal resource. GICC members on the Federal Interagency Committee (FIC) maintain relationships with NOAA representatives to ensure North Carolina's needs are understood and addressed. NOAA presented this resource to the State Government GIS Users Committee (SGUC) in a joint SGUC-FIC meeting. The Statewide Mapping Advisory Committee's Landcover Working Group coordinated directly with NOAA through the FIC connection to advance the state's C-CAP landcover acquisition, demonstrating how federal-state relationships through the GICC yield practical data benefits. The GICC, through CGIA, supports Digital Coast information sharing by participating as a member of the Digital Coast Partnership. This role benefits North Carolina by fostering a deeper partnership between the State of North Carolina and NOAA geospatial programs.

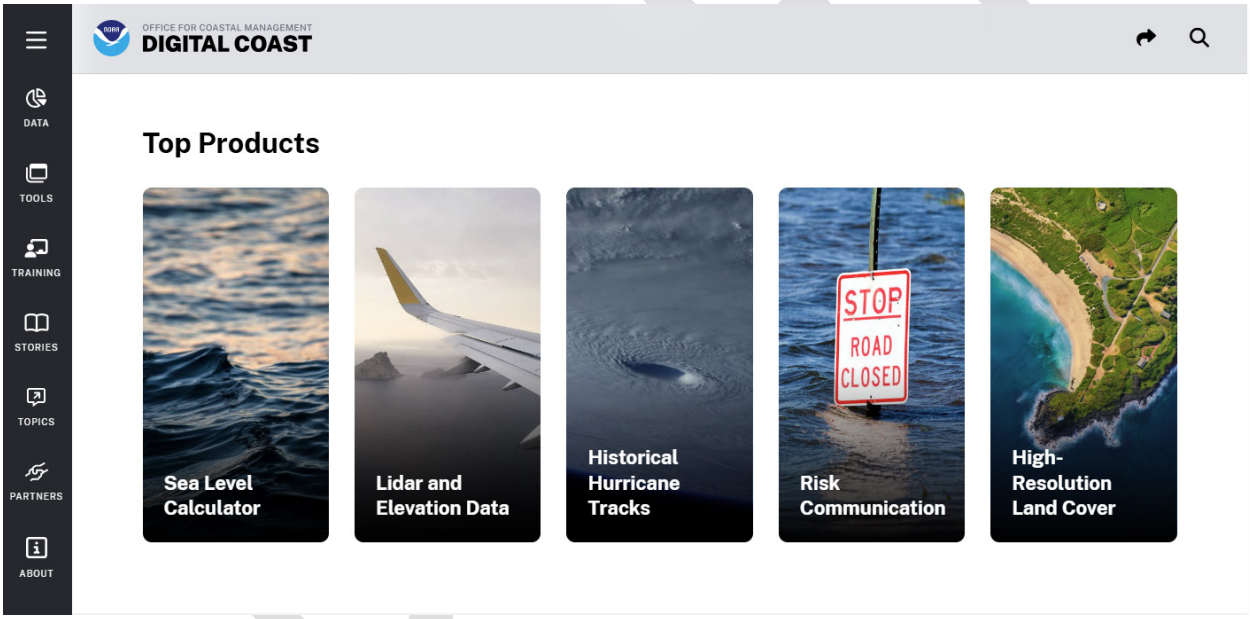

Figure 28. NOAA's Digital Coast Data Hub has become a go-to source for reliable high quality geospatial data which many North Carolina state agencies collaborate to develop, and many local governments benefit from the resources.

Datum Update Coordination

A datum is a set starting point to measure distance and height, ensuring maps and location data line up the same way. Without it, measurements would be inconsistent and distances would not match. The National Geodetic Survey (NGS) is replacing the horizontal and vertical datums currently used in North Carolina, the North American Vertical Datum of 1988 (NAVD 88) and the North American Datum of 1983 (NAD 83), with new reference frames that use satellite and gravity measurements to provide more precise positions and heights. The new datum will improve vertical height information critical to flood modeling,

construction planning, and the management of elevation-referenced datasets. It is scheduled for release in fall 2026. In preparation, the North Carolina Geodetic Survey (NCGS) completed a re-computation of all Continuously Operating Reference Stations (CORS) in the state, the ground-based reference stations that continuously collect and broadcast satellite positioning data.

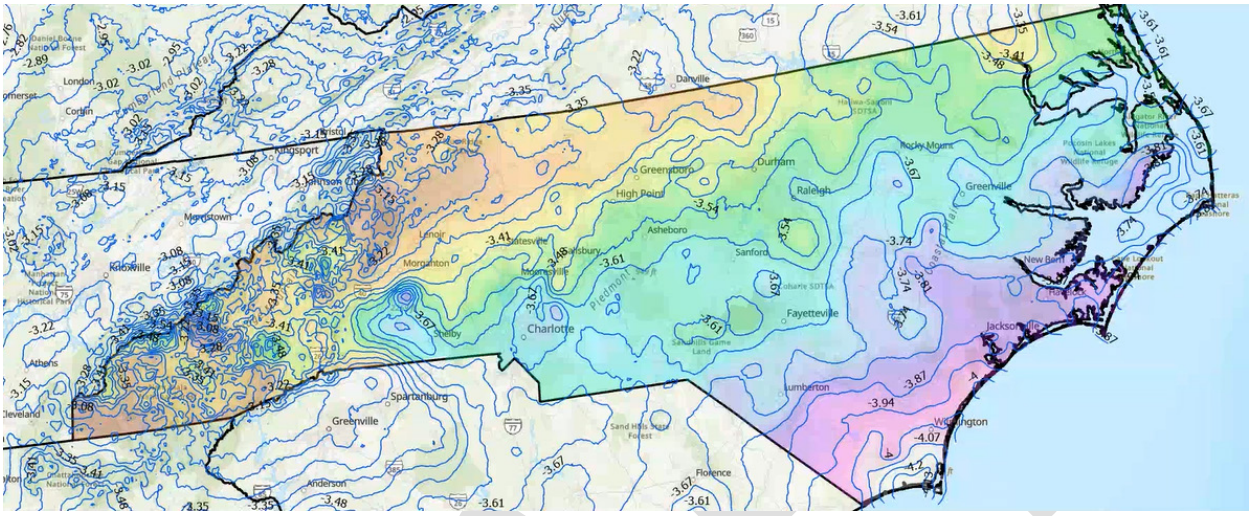

Figure 29. The Datum Working group meets monthly to discuss how it can assist GIS users statewide prepare for the new datum change.

A guidance document for local governments outlining preparation steps was added as a priority task during this fiscal year. A subgroup of the working group will reconvene to help prepare state agencies for the change. Software vendors will be able to provide transformation parameters once the new datum is released, with adoption by the orthoimagery program expected during the 2028 project.

Federal Interagency & State Government GIS Users Committees Joint Meeting

The Federal Interagency Committee (FIC) held a joint meeting with the State Government GIS Users Committee (SGUC) to share information about federal geospatial assets available to state users. This collaboration brought representatives from USGS, NOAA, EPA, NASA, FEMA, and the U.S. Forest Service together with state GIS professionals to share knowledge and identify opportunities. The FIC planned a follow-up joint meeting with the Local Government Committee, which took place in September 2025. These joint sessions reflect the council's commitment to breaking down silos between user communities and ensuring that all levels of government benefit from the full range of available geospatial resources.

Figure 30. Joint meetings between GICC Committees allows for strong connects to develop between points of contacts for various dataset and projects.

Future Priorities

The council's priorities for 2025–2027 are centered on data-driven collaboration, improved disaster readiness, and continuous improvement of access to data products that save time, money, and lives. The goals formally adopted at the May 2025 council meeting provide the framework for this work. Goals are organized around two overarching goals: 1) improving and expanding statewide geospatial data and applications, and 2) collaborating for broader integration of geospatial data across North Carolina.

Data Improvement

- Complete the memorandum of agreement between NCDEQ, NCDOT, and NCDIT to establish a governance framework for maintaining and updating the NC Hydrography dataset.
- Advance the pilot project with CAMA vendors to obtain parcel attribute data directly, reducing the burden on individual counties and improving consistency of the seamless parcels layer.
- Continue coordination with NOAA to obtain high-resolution C-CAP land cover data in support of wetlands mapping and environmental analysis.

Community Coordination

- Update NC OneMap data sources regularly to enhance data access and geospatial community engagement.
- Increase federal to state, state to local, and federal to local GIS collaboration by creating opportunities for direct engagement between partners, including continuation of joint committee meetings.
- Maximize local government participation with the municipal boundaries tool ahead of the next U.S. Census Boundary and Annexation Survey cycle to ensure a complete and accurate submission to the U.S. Census.
- Enhance disaster preparedness through continued development of tools and learning opportunities.

Standards Development

- Prepare state and local governments for the Fall 2026 datum transition through engagement and providing guidance documents for local governments and state agencies.
- Complete the Technical Advisory Committee's Big Data Best Practices Guide and begin work on standards and guidance related to machine learning and artificial intelligence in geospatial workflows.
- Support local and state governments in identifying and remediating accessibility issues in public-facing GIS applications ahead of the WCAG 2.1 AA compliance deadlines.

- Develop pre-authorized data sharing policies for WGEER member agencies to eliminate approval bottlenecks during future disaster response activations.

Members of GICC

- Steve Averett - City of Greensboro
- Paul Badr - GPI, Geospatial Division
- David Baker - NC Association of County Commissioners
- Amy Barron - Duke Energy
- Jeremy Baynes – U.S. EPA
- Christie Burris – N.C. Department of Information Technology
- Lee Clyburn - CBRE
- Bob Coats – N.C. Office of State Budget & Management
- Michael Connolly – N.C. Department of Revenue
- John Cox – N.C. Department of Administration
- Jason Dowdy - CACI, Inc.
- Stan Duncan - Retired, State and Local Government
- Larken Egleston – N.C. Department of Justice
- Dianne Enright – N.C. Department of Health & Human Services
- Dean Grantham – N.C. Department of Environmental Quality
- Joanne Halls - UNC Wilmington
- Pokey Harris – N.C. 911 Board
- Jason Hedley - Colliers Engineering and Design
- Matthew Helms - Charlotte Water
- Sarah Koonts – N.C. Department of Natural and Cultural Resources
- Elaine F. Marshall – N.C. Office of Secretary of State
- Marty McCracken – N.C. Department of Justice
- Gavin Mouat – N.C. Utilities Commission
- Hope Morgan - AECOM
- Chris Nida – N.C. League of Municipalities
- Allan Sandoval – N.C. Department of Commerce
- Allen Serkin - Cape Fear Council of Governments
- Ed Spitler – N.C. Community College System
- Gary Thompson -N.C. Department of Public Safety
- Linda Thurman - UNC Charlotte
- Sallie Vaughn - Person County
- Christian Vose – N.C. Department of Agriculture and Consumer Services
- Natalie Walton-Corbett - City of Greenville
- Melanie Williams – N.C. Department of Environmental Quality
- Eric Wilson – N.C. Department of Transportation
- Ann Winstead – N.C. Utilities Commission
- Vanessa Wrenn – N.C. Department of Public Instruction

Appendix

Acronyms

- ASPRS - American Society for Photogrammetry and Remote Sensing
- BAS - Boundary Annexation Survey
- CAMA - Computer-Assisted Mass Appraisal
- C-CAP - Coastal Change Analysis Program
- CGIA - Center for Geographic Information and Analysis
- CORS - Continuously Operating Reference Stations
- DHHS - Department of Health and Human Services
- EDO - Enterprise Data Office
- EPA - Environmental Protection Agency
- FCC - Federal Communications Commission
- FEMA - Federal Emergency Management Agency
- FIC - Federal Interagency Committee
- FIMAN - Flood Inundation Mapping and Alert Network
- FRIS - Flood Risk Information System
- GICC - Geographic Information Coordinating Council
- GIO - Geographic Information Officer
- GIS - Geographic Information Systems
- HWG - Hydrography Working Group
- LGC - Local Government Committee
- MAPPS - Management Association for Private Photogrammetric Surveyors
- MBWG - Municipal Boundary Working Group
- M&O - Management and Operations Committee
- MOA - Memorandum of Agreement
- NAD - National Address Database
- NAD 83 - North American Datum of 1983
- NASA - National Aeronautics and Space Administration
- NAVD 88 - North American Vertical Datum of 1988
- NCAUG - North Carolina Arc Users Group
- N.C.G.S. - North Carolina General Statute
- NCDEQ - North Carolina Department of Environmental Quality
- NCDIT - North Carolina Department of Information Technology
- NCDOT - North Carolina Department of Transportation
- NCEM - North Carolina Emergency Management
- NCGS - North Carolina Geodetic Survey
- NENA - National Emergency Number Association
- NG911 - Next Generation 911
- NGS - National Geodetic Survey
- NLCD - National Landcover Dataset

- NOAA - National Oceanic and Atmospheric Administration
- NSDI - National Spatial Data Infrastructure
- NSGIC - National States Geographic Information Council
- OGC - Open Geospatial Consortium
- PSAP - Public Safety Answering Point
- QL1 - Quality Level 1 (lidar standard: 8 points per square meter)
- SGUC - State Government GIS Users Committee
- SMAC - Statewide Mapping Advisory Committee
- SPWG - Seamless Parcels Working Group
- TAC - GIS Technical Advisory Committee
- USGS - United States Geological Survey
- WCAG - Web Content Accessibility Guidelines
- WGEER - Working Group for Enhanced Emergency Response
- 3DHP - 3D Hydrography Program (USGS)
- 3DEP - 3D Elevation Program (USGS)