

Geographic Information Coordinating Council Summary of the November 13, 2024 Meeting

Introduction

Hope Morgan opened the meeting with the standard ethics reminder, emphasizing council members' responsibility to avoid both conflicts of interest and the appearance of conflicts. She announced that the GICC bylaws had been updated to ensure accurate reference to general statutes and current state agency names. These technical corrections will be followed by more revisions to address the current way the council operates. Members were reminded of the upcoming 2025 NCGIS Conference scheduled for March 19-21 in Winston-Salem, with the GICC meeting to be held on the morning of March 21st from 10am-12pm.

Tim Johnson provided an update on the National Spatial Data Infrastructure (NSDI), announcing that the draft strategic plan for national specialized infrastructure has been fully adopted by the National Geospatial Advisory Committee. The plan addresses three key areas: governance, data and technology challenges, and implementation strategies across private sector, public sector, and national stakeholders.

Presentations

LiDAR Business Plan: Recommendation from Statewide Mapping Advisory Committee (Paul Badr, GPI)

Paul Badr presented the comprehensive [LiDAR Business Plan](#), highlighting its thorough coverage of North Carolina's LiDAR history and future vision, and the council voted to adopt the plan. The plan estimates annual benefits of over \$60 million to the state through various applications including floodplain mapping, engineering studies, land surveying, hazard analysis, and mission-critical activities for government agencies. Mr. Badr highlighted the lack of a consistent yearly source of funding as a challenge and recommends acquiring funding from different sources, including USGS 3DEP, other federal agencies like NOAA, FEMA, and USDOT, state and local governments, and public-private partnerships, particularly with energy companies. The plan recommends transitioning from the current five-phase collection process to a four-phase approach, beginning in 2026, that aligns with the statewide orthoimagery program. This new approach ensures that there will be a recent digital elevation model (DEM) created from LiDAR to support the orthoimagery program. Finally, the plan recommends that future LiDAR data should be QL1 (eight points per square meter) or higher to meet USGS and ASPRS standards and must switch to 2022 reference systems after the current cycle is complete.

Disclaimer for local government GIS tools (Tim Johnson, CGIA and Hope Morgan, Chair)

Hope Morgan and Tim Johnson led a discussion regarding the new GIS disclaimer requirement scheduled to take effect in January 2025. The Council reviewed concerns gathered from local governments, particularly regarding implementation challenges and technical implications. Key issues include the definition of "tools," whether it applied to various web services and REST services, and the timeline for implementation by local governments with limited resources. Steve Averett compiled specific examples and concerns from multiple municipalities including Greensboro and Wilmington to help illustrate implementation challenges.

The Council reported that discussions have been held with DIT legal staff and the legislative liaison, who intend to seek an audience with the bill's author when the legislature returns to session. While efforts are being made to potentially extend the January deadline, local governments are advised to proceed with implementing the disclaimer to the best of their ability. The Local Government Committee will use their December 3rd meeting to provide implementation guidance. The Council emphasized the importance of documenting any issues or roadblocks encountered during implementation for future legislative consideration.

Environmental Justice Mapping Tool (Matt McLamb, CGIA)

Matt McLamb presented the newly launched Environmental Justice Hub and mapping tool, developed in response to Executive Order 292 from October 2023. The project, led by CGIA in collaboration with DIT's Project Management Office and the Environmental Justice Council, successfully met its one-year implementation deadline, going live approximately three weeks ago. The tool integrates over 100 data layers from various state agencies including DHHS, DEQ, and DOT, as well as federal partners and Esri's Living Atlas. The hub provides comprehensive environmental justice resources, including grant information, disbursement data, and Council reports. The mapping tool features categorized data layers covering climate, demographics, geographic data, and environmental health. Key features include real-time data updates through direct source connections rather than republished data, detailed metadata access, and mobile-friendly design. The development process included extensive public feedback and testing through Council meetings and community outreach programs. Future enhancements being considered include additional analysis and reporting capabilities, improved mobile functionality, and expansion of data layers. Enhancement requests are being collected for potential future phases, pending the upcoming administration's decisions on continuing the initiative.

Hurricane Helene Response: Initial Thoughts (Entire Council)

Multiple agencies and committees shared stories and provided insights into their response efforts to Hurricane Helene, an unprecedented event that resulted in widespread loss of power, water, communications, infrastructure, and roads in western North Carolina. Key highlights from different agencies included:

Emergency Management:

- Coordinated with partners to fly emergency LiDAR flights in seven affected counties in January 2025, to assess damage, identify potential landslides, and use change detection capabilities to gain potential insights
- Coordinated daily calls with FEMA remote sensing teams to identify where imagery needed to be collected
- Used Civil Air Patrol and National Geodetic Survey imagery for rapid damage assessment

Federal Response:

- Fish and Wildlife Service shared canopy data layers through USGS science base
- USGS established landslide observation dashboard
- EPA coordinated with state agencies on drinking water infrastructure status
- Significant coordination through data sharing and dashboard access

State Government:

- Eight state agencies actively responded to the storm
- DOT reported over 8,500 damage reports (21 times the normal volume) and 265 roads still closed
- DOT published “do-not-drive” boundaries that received significant public usage
- DHHS provided critical hospital helipad data and tracked vulnerable populations
- Office of State Budget and Management completed damage assessment in four weeks, estimating \$54 billion in damages

Local Government:

- In coordination with state partners, activated the Working Group for Enhanced Emergency Response
- Utilized existing mutual aid agreements to support affected areas
- Benefited from previously established statewide parcel and address standards
- Successfully deployed GIS support staff across jurisdictions

911 System Response:

- Despite infrastructure damage, maintained call routing capability through Next Generation 911
- Successfully managed alternate routing for 19 affected PSAPs (Public Safety Answering Points)
- Implemented new real-time visualization map for call routing

The discussion emphasized the unprecedented nature of the event and the importance of cross-agency collaboration and knowledge sharing. Recovery efforts are ongoing, with significant focus on long-term rebuilding and congressional funding requests. A more detailed after-action review is planned for the March meeting to address improvement opportunities.

State GIO Report (Tim Johnson, CGIA)

In his final GIO report, Tim Johnson was honored for his 36 years of service to North Carolina and his leadership of CGIA since 2000. Hope Morgan presented him with an award, recognizing his contributions to making the GICC a national example and his dedication to advancing geospatial collaboration and statewide data development.

Mr. Johnson provided a historical perspective of the Council's evolution, beginning with the January 1991 GIS Planning Task Force through its current 34-member structure. He highlighted key milestones including the 1992 inaugural Council meeting, NSGIC's formation, and the 2001 legislation that placed the Council in statute. He emphasized the Council's accomplishments in developing framework datasets and establishing NC OneMap, while noting the importance of state-local government collaboration.

Before concluding his final meeting, Mr. Johnson encouraged Council members to deepen their connections with each other and to identify future leaders who will maintain the Council's commitment to excellence. He announced his plans to continue contributing at the national level while stepping back from direct Council responsibilities.

Looking ahead, Mr. Johnson mentioned that the next NSGIC Geospatial Maturity Assessment will begin in spring 2025, presenting an opportunity for North Carolina to maintain or improve its current "A" rating.