2025 NC GIS Conference Agenda

Certified for AICP Credit

SSAW: Herb Stout Student Award Winner
SLGAA/W: Herb Stout Local Govt. Award Applicant/Winner

Last Update: Mar 17, 2025

Wed Mar 19

Registration
7:30 a.m. - 10:00 a.m.
Coffee in Exhibit Hall

Opening Plenary - Welcome Remarks, "The Use of GIS Before, During, and After Western NC Flooding"
10:00 a.m. - 11:30 a.m.
Salem 2 Ballroom - Exhibit Hall Closed

Buffet Lunch (provided)
11:30 a.m. - 1:30 p.m.
Located in the Exhibit Hall

Rooms	Salem 1A	Salem 1B	Salem 1C	Salem 3A	Salem 3B	Salem 3C	Salem 2 Ballroom
1:30 PM	Leveraging Technology in Forestry Operations -- Lesley Merkel (GFR Forestry Consultants)	Spatial Interpolation Methods to Best Represent Air Quality Data in North Carolina -- Katelyn Hensley (NCCU; SSAW)	Optimizing Asset and Material Management -- Jay Beadnell (Woolpert)	Locating Optimal Sites for AI Data Centers for Rural Economic Development -- Joe Francica (CoreLogic)	Running a 911 Address Database in QGIS/PostGIS -- Randal Hale (North River)	Using Remotely Sensed Imagery for More Frequent and Comprehensive Water Quality Monitoring in High Rock Lake, NC -- Leila Hashemi Beni (NCA&T)	Helene Impacts and Recovery - local, state, federal, and other perspectives -- Dan Madding (NC Emerg. Mngt), Raquel Bensadoun (NCDOT), Chris Miller (Town of Boone), Benjamin Allamong (City of Hendersonville)
2:00 PM	Everyone's A-buzz about Survey123: Using ESRI's Form-based Application to Make Pollinator Monitoring More Efficient -- Sean Doig (McCormick Taylor)	The Light-bulb Tunicate: A Study of Climate Change, Invasion Ecology and Risk Assessment -- Jackson Fender (Elon; SSAW)	GIS Innovations in Campuses -- Kristin Johnston & Scott Howell (KCI)	Tackling Climate Change Resiliency on the Local Level: Anne Arundel County -- Joe Knieriem (McCormick Taylor)	Using Esri Hub Technologies to Dictate Water Quality Education in Eastern North Carolina -- Timothy Mulrooney (NCCU) & Sarah Radel (ECU)	Connectivity and Disruptions: Geospatial Insights on North Carolina's Transportation Resilience -- Trung Tran (FSU)	
2:15 PM							State Government Users Committee (SGUC) SGUC Enlightening Rounds -- Christian Vose, Adam Blythe, Eric Wilson, Dianne Enright, Mike Cline, Anna Stefanowicz, Gary Thompson, Dean Grantham
2:30 PM	Leveraging AGOL for Stream and Wetland Mitigation Construction Management Projects -- Scott Gregory (Wildlands Engineering)	Spatial Connectivity Analysis Of Plethodon Nettingi Occurrences In The Monongahela National Forest, WV -- Sarah Stevens (UNC-W; SSAW)	GIS for Infrastructure Management -- Josh Lentz (SAM)	Considering Overtopping Potential for over 700 NC Dams -- Jacob Smith (NCDEQ)	Raleigh/Wake MAR in Action- Eliminating Data Silos & False Addresses -- Heather Paxson (Raleigh) & Dianne Saunders (Wake Co)	An automated method for LiDAR-derived impoundment water level elevation -- Doug Newcomb (USFWS) & Anna Petrasova (NCSU)	
3:00 PM	**Break -- Refreshments in Exhibit Hall**						

2025 NC GIS Conference Agenda

Wed Mar 19

Rooms	Salem 1A	Salem 1B	Salem 1C	Salem 3A	Salem 3B	Salem 3C	Salem 2 Ballroom
3:30 PM	Lessons Learned from Conversion of Web App Builder to Experience Builder -- Stacy Culpepper (NCDIT)	Exploring the Relationship Between Spatial Distribution of Residential Solar PV Arrays and Socioeconomic Factors in the Eastern Carolinas -- Tenesha King (FSU; SSAW)	The Why and How of Moving to UN: The Municipal Approach -- Wendy Peloquin & Kent Rothrock (Avineon)	Is your data ready for 3D? Preparing and Capturing Data -- Tripp Corbin (Cultivate Geospatial Solutions)	ATLAS Map: Expediting Project Delivery Using Geospatial Data & Analysis -- LeiLani Paugh (NCDOT) & Brad Wilkie (GeoDecisions)	Spatial Analysis of Racial Disparities in Prostate Cancer Mortality and Socioeconomic Determinants in NC between 2015-2020 -- Oluwatosin Ibrahim & Andy Egogo-Stanley (NCCU)	Local Government Committee (LGC) Enlightening Rounds -- Jenny Jessen, Timothy Blanchard, Jason Clodfelter, Kim Garrett, Sallie Vaughn, Kristian Forslin
4:00 PM	Utilizing machine learning to improve efficiency in big data processing -- Colin Flynn (Dewberry)	The Role of the North Carolina Community Information Portal for Community Engagement and Community Science in Eastern North Carolina -- Sarah Radel (ECU; SSAW)	Mapping Stormwater Infrastructure -- Connor Badgett & Sean Burke (Gannett Fleming Transystems)	Lidar Derived 2D and 3D Buildings -- Andrew Peters (Dewberry)	Town of Cary's Street Connectivity and GIS -- Coray Davis (Cary)	Publishing statewide cancer incidence rates in North Carolina at sub-county scales: preparatory steps -- Christian Klaus (DHHS)	
4:30 PM	Increasing GIS Resilience in North Carolina with the Cloud -- Jay Young (ROK Technologies)	A Virtual Walking Tour of Fountain, NC -- Katherine Shearin (ECU; SSAW)	Improving Sewer Rehabilitation Analysis: Using CCTV Manager in ArcGIS Pro to Process Sewer CCTV Results -- Mark Darwin (CDM Smith)	How GIS Aids with Understanding and Preparing for Floods -- Rick Wallace & Travis Schindler (NV5 Geospatial)	Prioritizing Proposed Roadway Improvements: A Data Driven Approach -- Tim Shortley (CAMPO)	GIS Volunteer for Western North Carolina through North Carolina Emergency Management What was I thinking? -- Eli Johnson (Pitt Co)	Statewide Hydrographic Mapping in North Carolina HSSD and ATLAS to NCHydro -- Andy Kiley (NC DWR)
5:00 PM	Social & Poster Session in Exhibit Hall						

2025 NC GIS Conference Agenda
Thurs Mar 20

7:30 AM	Registration Continental Breakfast in Exhibit Hall						
Rooms	**Salem 1A**	**Salem 1B**	**Salem 1C**	**Salem 3A**	**Salem 3B**	**Salem 3C**	**Salem 2 Ballroom**
8:30 AM	Leveraging Advanced Analytics and AI in Telecom Infrastructure Planning, Strategy, and Design -- Dustin Lillie (Olsson)	Understanding the Impact of Vehicular Incidents in North Carolina -- Cameron Schuler (NCCU; SSAW)	Validation and QA/QC of Voter Redistricting Results for Georgia Secretary of State using Spatial Analysis, Automation, and Web Applications -- Ben Masters (Blue Raster)	AddressNC Status and Reports: An Experience Builder Mapping Spree -- Ashton Bailey (NC CGIA)	Authoritative Tagging: Best Practices Help Users Find the Right Data -- Colleen Kiley (CGIA) & Melanie Williams (NCDEQ)	Addressing a new type of development: Build-To-Rent housing -- Dianne Saunders (Wake Co)	Into the Weeds of GRASS GIS -- Vaclav Petras (NCSU)
9:00 AM	Drones 101 for GIS Practitioners -- Chris Breedlove (Duncan-Parnell)	Building a Successful Online Graduate GIS Certificate Program -- Zhiyuan (Jean) Yao (ASU)	What to do with all your geospatial data? An interactive discussion of how to handle data produced by IoT devices and other smart government sources -- Adam Reiser (Opendatasoft)	NC 911 Board Statewide Orthoimagery - A Foundational Dataset -- Ben Shelton & John Derry (NC CGIA)	ArcGIS Indoors: Experiences and Lessons Learned with Developing Floor Aware Maps -- Laurel Krynock & Matthew Laska (NCSU)	2030 Census Geographic Preparations -- Bob Coats (NCOSBM)	
9:30 AM	Break - Refreshments in Exhibit Hall						

2025 NC GIS Conference Agenda
Thurs Mar 20

Rooms	Salem 1A	Salem 1B	Salem 1C	Salem 3A	Salem 3B	Salem 3C	Salem 2 Ballroom
10:00 AM	Cultivating Climate Resilience in North Carolina -- Lindsey Nystrom & Matt Hutchins (Fernleaf)	Evaluating UAV-based sonar for bathymetric monitoring: a case study of Huffman bridge on Rhodhiss lake before and after Hurricane Helene -- Quinn Keefer (ASU; SSAW)	Addressing Organizational Challenges through Strategic Planning -- Niki Miller (JMT Technology Group)	AECOM Project Showcase -- Susan Phelps (AECOM)	Using Neo4j to document your IT landscape -- Eric Wilson (NCDOT)	Designing GIS Tools with Science -- Dave Michelson (UNC-A)	The Need for Time Standards in Geospatial Metadata -- Cassidy Barkalow (Blue Marble)
10:30 AM	Coastal Vulnerability: A Comparison of Multiple GIS Sources of Information -- Joanne Halls (UNCW)	Predicting the distribution of commercial swine premises locations using deep learning and aerial imagery to improve disease monitoring and surveillance -- Felipe Sanchez (NCSU; SSAW)	Data Analytics Has Spatial Powers -- Nate Reck (JMT Technology Group)	Revolutionizing Local Governance: Unleashing the Power of Geospatial Innovation -- Julian Guess (Schneider Geospatial)	Experiencing" the transition from 3.x to 4.x JS.API -- Michael Blair (Innovate)	Empowering Communities and Enhancing Collaboration with ArcGIS Hub -- Juan G. Garcia (Gaston Co)	Tips for passing certification Exams -- Tripp Corbin (Cultivate Geospatial Solutions)
11:00 AM		Building Resilience in Coastal Communities Through Asset Mapping and Vulnerability Assessment: Insights from the Inaugural C-CRIT Program -- Sheridan Ely (NCSU; SSAW)	Building a Dream Team with Virtual and Augmented Reality Tools -- Niki Miller & Nate Reck (JMT Technology Group)	Parcel Management Workflows -- Vijay Kumar & Ian Lamont (Farragut)	Revolutionizing Flood Alert Systems: Modernizing FIMAN utilizing AWS Serverless -- Chaz Mateer (Timmons)	Curating the Public Experience (Builder): GSO Near Me -- Keith Watkins (Greensboro)	Statewide GIS Data Working to Expand Broadband in NC -- Angie Bailey (DIT Broadband)
11:30 AM	Awards Luncheon -- Located in the South Gallery Ballroom -- through the Lower Level tunnel or across Fifth St, below Embassy Suites						
12:00 PM	"Point/Counterpoint: What Does the Future Geospatial Ecosystem Look Like?" Megan Compton, Senior NSDI Advisor; Dr. Leslie Jones, Geospatial Information Officer, State of Alaska;						
12:30 PM	Alan Leidner, Board Member, Treasurer and President Emeritus, New York City Geospatial Info Systems and Mapping Organization Moderated by Hope Morgan and Tim Johnson						
1:00 PM	Exhibit Hall closed						

2025 NC GIS Conference Agenda
Thurs Mar 20

Rooms	Salem 1A	Salem 1B	Salem 1C	Salem 3A	Salem 3B	Salem 3C	Salem 2 Ballroom	Lower Level Conference Rm 1
1:30 PM	Building Effective Solutions for DOT through Enterprise GIS and Enterprise CRM integration -- Durmus Cesur (DZ CIS LLC)	Quantifying Wetland Accommodation Space using Uncrewed Aerial Systems and Geospatial Analysis at Bald Head Island, NC -- Brittany Morse (UNC-W; SSAW)	NC Statewide Lidar and AI: Leveraging AI/ML to classify current Lidar datasets and future collects -- Ryan Lavery (Dewberry)	Small Town Cemetery - Modernizing a Historic Workflow -- Alec Weide (Holly Springs)	Your Web Adaptor is no match for a WAF! -- Travis Penny (NCDIT)	Economic Contribution of North Carolina's Supply Chain -- Steve Bert (ITRE)	NG9-1-1 GIS in the State of North Carolina -- Jessica Beierman (GeoComm)	Enhancing Workflow and Efficiency using Tasks in ArcGIS Pro -- Jason Clodfelter (Davidson Co; SLGAA)
2:00 PM	From the POB, to the old Swamp Oak, to COGO data: the methods of mapping and estimating DOT's ROW -- Sean Burke (Gannett Fleming Transystems)	The Implementation of CAD and Surveying into a GIS Environment -- Austin Barbee (UNC-C; SSAW)	Navigating AI and ML: Considerations in applications (pretrained vs. custom), approach, and scale in order to get your desired outcome -- Dakota Anderson & Ian Hamilton (VHB)	The Past Meets the Future: Integrating Evolving Geospatial and UAV Technologies into Cemetery Mapping -- Timothy Mulrooney & Charles Johnson (NCCU)	Implementing ArcGIS Enterprise on Kubernetes at NCDOT: The journey so far -- Eric Wilson (NCDOT)	Impact of Tropical Storm Debby on Groundwater Levels in Robeson County -- Jesse Rouse (Coastal Carolina Univ)	A Case Study in Youth Research Through GIS: The National 4-H Geospatial Team -- Brandon Estevez, Vrishab Nooka, Srajan Rastogi, Walker Spittal, Dr. Thomas Ray, (Advisor)	A Storm of GIS Needs: The Use of GIS for Hendersonville Water Restoration After Hurricane Helene -- Ben Allamong (City of Hendersonville; SLGAW)
2:30 PM	Street Level Imagery for Asset Management -- Jackson Adams (NCTech, Inc)	TrailSynth: Real-Time Randomized Route Generation for Runners -- Ryan Carter (UNC-C; SSAW)	Leveraging dashboards for a quick overview of operations -- Daphne Brown (Duncan-Parnell)	Taking Advantage of the Best Available: Building a permitting application within the NC DIT and AGOL environment -- John Lovette (NC Wildlife Res. Comm)	Unleashing Polaris v4: Never a dull moment -- Lak Krishnan (Mecklenburg Co)	Comparison of AI Object Detection Tools to Identify Poultry CAFOs in North Carolina -- Carter Mayhew (Catawba Coll)	How GIS Saves Lives! -- Tom Rogers (NC911) & Matthew McLamb (CGIA)	Leveraging the 'S' in GIS: A Non-spatial Permit System Supporting Application, Review, Permit Issuance, and Enforcement -- Dave Almond (Town of Chapel Hill; SLGAW)
2:45 PM						Flood inundation and depth assessment utilizing UAVSAR images during Hurricane Florence -- Rizwan Ahmed Ansari & Timothy J Mulrooney (NCCU)		
3:00 PM	**Break -- Refreshments in Exhibit Hall**							

2025 NC GIS Conference Agenda
Thurs Mar 20

Rooms	Salem 1A	Salem 1B	Salem 1C	Salem 3A	Salem 3B	Salem 3C	Salem 2 Ballroom
3:30 PM	Mapping the Epidemic of Isolation: Spatial Disparities in Loneliness Among US Adolescents and Young Adults (2016-2022) -- Chris Lucero (ASU; SSAW)	Innovations in Urban Forestry: Smart Tree Inventories and Next Generation Tree Canopy Assessments -- Will Ayersman (Davey)	Critical Incident Mapping & Emergency Management for Schools -- John Young (Langan Engineering & Environmental Srvc)	Seamless GIS Modernization: Insights from OWASA's Utility Network Implementation -- Drew Purzycki (Timmons) & Beth Canada (OWASA)	Rendering Aid: Mapping and Utility Repairs Days After Hurricane Helene -- Zach Petersen & Mike Strader (Greensboro)	The City of Charlotte's Community Hub -- Jay Fowler (Esri) & Robert Cerrato (Charlotte)	Best Practices for Maintaining Annexation History with GIS -- Rich Elkins (NC Sec. of State Office)

Municipal Boundary Update Tool: The future of BAS Updates -- Bob Coats (NCOSBM) |
4:00 PM	Vegetation Health Decline in the Gaza Strip: Analyzing NDVI Changes During the Israeli-Hamas Conflict -- Sidney Hipp (UNC-CH; SSAW)	Transitions at 4:15	Transitions at 4:15	Transitions at 4:15	Transitions at 4:15	Transitions at 4:15	
4:15 PM		Unmanned Fixed-wing High Density Airborne Lidar: Acquisition and Production -- Ravi Soneja (McKim & Creed)	Statewide Indoor Maps for School Safety -- Ethan Credle (GeoComm)	Use of GIS Technology in Lead Copper Rule Revision (LCRR) Service Line Inventory -- Kristin Johnston (KCI) & John Pierre (Dunn)	NC RAFT: A Resiliency Framework Helping NCDOT Prepare for Future Flood Hazards with Digital Solutions -- Kurt Golembesky (NCDOT) & Garrett Shields (WSP)	Unseen Patterns (2.0)- How GIS and Statistical Analysis has Deepened Our Understanding of Overdoses and Suicides in Forsyth County -- Shaylee Bowen (Forsyth Co) & Karen Kesler (Winston-Salem)	Panel: Mike Cline, Nathan Bland, Alice Wilson, Dana Clukey, Rich Elkins, Bob Coats
4:30 PM	Assessing Annual Soil Loss in Phewa Lake Watershed, Nepal Using RUSLE -- Bikesh Jojiju (UNC-CH; SSAW)						
5:00 PM	**Avineon Managed Services User Group**	**Secondary & Higher Education Special Interest Group**					

2025 NC GIS Conference Agenda
Fri Mar 21

	Registration Continental Breakfast in Exhibit Hall until 9am						
8:00 AM							
Rooms	**Salem 1 A**	**Salem 1 B**	**Salem 1 C**	**Salem 3 A**	**Salem 3 B**	**Salem 3 C**	**Salem 2 Ballroom**
8:30 AM	AddressNC Program Experience -- Darrin Smith (CGIA)	Using GIS Data to Visualize Mental Healthcare Access and Revise Estimates of Social Vulnerability in North Carolina -- Chelsea McGraw & Emma Grace Choplin (UNC)	Any Map, Anywhere, inside of Salesforce -- Jon Fisk (G&H Intl. Srvcs)	Preparing for Esri Upgrades and Migrations -- Wendy Peloquin & Kent Rothrock (Avineon)	Executive Order 305 – DEQ Directives and Status for Wetland Mapping -- Jim Stanfill (NCDEQ)	Open Source Tools to save you money and time -- Doug Newcomb	Open / Setup
9:00 AM	Datum change update -- Gary Thompson (NC Emergency Mngt)	How to Achieve Maximum ROI for Your State Imagery Program and Meet the Needs of All Stakeholders -- Chris Ogier (Sanborn)	Visualizing Geographic Data with Tableau Public -- Shannon McAvoy (WSP)	Tool Loan Program Solution -- Steve Averett & Skip Daniels (Greensboro)	High Resolution Land Cover for North Carolina -- Matt Pendelton (NOAA)	NC Seamless Parcel Program: Continuing to Evolve and Improve -- Elizabeth Daniel (CGIA), Katie Doherty (Rutherford Co) & Rich Elkins (NC Sec. of State Office)	
9:30 AM	**Break -- Refreshments in Exhibit Hall**						
10:00 AM **10:30 AM** **11:00 AM** **11:30 AM**	**Geographic Information Coordinating Council Quarterly Meeting -- Hope Morgan, Chair** Located in Salem 2 Ballroom ***Exhibit Hall Closes at 11:00am***						