



February 23-24, 2017
Raleigh Convention Center
Raleigh, North Carolina

2017 NC GIS Conference -- Conference Sessions and Speakers February 23-24 -- Raleigh Convention Center

Presentation abstracts, speaker titles and bios, and much more
can be found online at <http://ncgisconference.com> or using our mobile app.
The Exhibit Hall is open Thurs: 8am-7pm, Fri 8am-11am, Ballrooms A/B

Early Thursday Morning Session 8:30 - 9:10

Creating User Centered Mapping Websites: A How To -- Dave Michelson; Rm. 305A. Moderator: Allan Sandoval
NextGen 911: Daddy Are We There Yet? -- Richard Taylor; Room 305B. Moderator: Scott Bodien
The Underutilization Of GIS And How To Cure It -- Adam Carnow; Room 306 B/C. Moderator: Paul Black

Opening Plenary 9:30 - 11:30

Ballroom C

Welcome and Conference Overview: Tim Johnson, Bryan Townsend, Tripp Corbin
State of GIS in North Carolina: Stan Duncan, John Correllus
Keynote: What's The GEOINT Revolution, And Why Should I Care? Keith Masback

Lunch 11:30 - 1:30

Ballrooms A/B

Special Interest Group Meetings 12:00 - 1:00



Federal Interagency Committee	Room 302B
CURISA and Addressing	Room 302C
NC Academic Community	Room 303
NC ArcGIS Users Group	Room 304



Thursday 1:30 - 3:00 Sessions

Moderator

	Applications -- Apps, Apps, and More Apps	Room 301 A/B	Greg Dobson
	Deploying Esri Maps And Apps For Local Government	Matthew McLamb	
	DWR: Source And Conveyance Identification Tool	Cam McNutt	
	Leveraging The Power Of ArcGIS Online For Disaster Response To Hurricane Matthew	David Jones	
	Look Mom, No IT Needed!	Dave Michelson	
	Vacant City Properties: What's A Community To Do?	Alice Wilson	
	What Would City Data Look Like If It Were Simpler?	Cameron Carlyle	
	Applications -- Fire and Public Safety	Room 302A	David Toren
	Building A Public Safety Open Data Portal With GIS	Matt Still, Richard Tuinstra	
	Integrating City And County Fire Data With Web Services	Scott Barnwell, Stephanie Osbourn	
	Safe Kids And The Power Of GIS Data	Janelle Messer, Michael Forbis, Adam Blythe	
	Technology -- Out of the Box 1	Room 302B	Lak Krishnan
	Make A Map With Vector Tiles And Mapbox-gl	Ralph Dell	
	NCDOT Road Analyzer	John Farley, Ryan Arthur	
	Vector Tiles And The Future Of Web Maps	Tobin Bradley	
	Technology -- Spatial Analysis and Big Data 1	Room 302C	Skip Daniels
	An Open Source Workflow For Creating Unique Web Maps With QGIS, Topojson, And D3.js	Walt Gurley	
	CouchDB, Leaflet And D3: Visualizing Large AVL Datasets Through Time	Tyler Waring	
	Open Source And Open Data In Smart Cities IoT Programs	Ian Henshaw	

 Indicates sessions certified for AICP credit.

Thursday 1:30 - 3:00 Sessions (Continued)		<i>Moderator</i>
Herb Stout Student Award Winners	Room 303	Chaula Jain
An ArcGIS Network Analyst Approach For Congressional Redistricting In NC: Progress, Problems, & Public Engagement	Cortney Cameron	
Examining The Influence Of Urban Definition: A Case Study Of Safe Drinking Water In Nigeria	Elizabeth Christenson	
Exploring SNAPscapes: Making Sense Of The Food Access Landscape In North Carolina	Elizabeth Major	
Visualizing Methamphetamine Production In NC	Garry Raynor	
Data -- AddressNC is a Go!	Room 304	Luis Carrasco
AddressNC Is A Go!	Luis Carrasco, Bob Coats, Joe Sewash	
 Applications -- Public Lands Management	Room 305A	Sean Doig
Managing Natural Resources At NC Military Bases Through GIS Apps	Ryan Belyea	
ParkServe: Creating A National Parks Database	Bob Heuer	
Web GIS For Federal Agencies - A Case Study With The National Park Service Rivers, Trails, And Conservation Assistance Program	Jason Matney	
Enterprise -- Professional Development 1	Room 305B	Kathi Cotney
Ethics In GIS Education And Professional Practice	David DiBiase	
Getting Hired In The Real World Of GIS	Jessica Touchard	
Map Your Way Into Leadership	Richard Serby	
Enterprise -- UAS Policy and Law	Room 306B/C	Stephen Hartzell
UAS Policy And Law Panel	Rep. John Torbett, Kyle Snyder, Wayne Bailey, Chris Gibson	
Break 3:00 - 3:30		
Thursday 3:30 - 5:00 Sessions		<i>Moderator</i>
Applications -- Mobile Apps	Room 301 A/B	Lisa Holzberger
Damage Assessment App	Colleen Kiley	
Lake Data Collection App - Concept	Melanie Williams	
Modern Mobile Field Collection: Using Collector And Survey 123 For ArcGIS To Support Government Services	Ben Strauss, Wright Lowery	
The Esri Modular Mobile Suite Of Apps	Matt Still	
Using the Collector App For Public Works	Sarah Sheldon, Michael Cole	
Workforce For ArcGIS	Justin Greco	
 Applications -- Emergency Management	Room 302A	Rachel Rupe
Interagency Emergency Mapping And Preparedness: Pre-planning For Critical School Incidents	Jonathan Wilson	
School Risk Management Planning	John Dorman	
Sparta	Carla Bissette	
Technology -- Out of the Box 2	Room 302B	Janet Lowe
Open Source Tools For Enhancing Productivity With GIS	Jason Baker	
Python Batch Geoprocessing With ArcGIS	Laura Tateosian	
Squeezing The Most Out Of Python	Anthony "Skip" Daniels	

Thursday 3:30 - 5:00 Sessions (Continued)		<i>Moderator</i>
 Technology -- Spatial Analysis and Big Data 2	Room 302C	Zach Petersen
Immersive Tangible Landscape	Payam Tabrizian, Anna Petrasova	
Linking Immersive Virtual Environments With GIS To Complement Human Perception Research	Perver Baran, Payam Tabrizian	
Virtual Reality And Geospatial: 30 Years Of Virtual Landscapes	L. Jesse Rouse	
Herb Stout Student Award Winners	Room 303	Roy Stine
Development Of An Automated Model To Identify Barrier Island Features From LiDAR Data	Maria Frishman	
High Density Survey And Measurement Of Historic Landscape Features Using Different Remote Sensing Approaches	Stacy Curry	
Quantifying Sargassum Boundaries On Eastern & Western Walls Of The Gulf Stream Protruding Near Cape Hatteras Into Sargasso Sea	Andrew Brumfield	
Temporal Changes Of Surface Elevation And Velocity Of Taku Glacier, Juneau Icefield	Joel Gonzales-Santiago	
Data -- Addressing Matters of Addressing	Room 304	Jason Clodfelter
County Wide Master Address Repository	Wayne Brewer	
How Would You Number This?	Matthew Hamby, Wayne Brewer, Colleen Sharpe, Dianne Saunders	
NG911 and Local Governments: Overwhelmed	Scott Davis	
 Applications -- Environmental Applications	Room 305A	Amy Axon
NC DEQ Waste Management GIS Data Resources And Applications	Dean Grantham	
Using GIS To Support Vulnerability And Risk Analysis In Climate Resilience Planning	Matt Hutchins	
What's New In North Carolina StreamStats Version 4: New Look And Added Capabilities!	Katharine Kolb	
Enterprise -- Professional Development 2	Room 305B	Ryan Koschatzky
GISP Certification Update	Rebecca Somers	
Tips And Tricks For Passing Certification Exams	Tripp Corbin	
Update On Interactions Between GIS And PLS Professional Communities	Bob Brinson	
Enterprise -- UAS Technology	Room 306B/C	Kyle Snyder
UAS Technology Panel	Kyle Snyder, Gary Thompson, Christian Stallings, Rick Lusher, Chris Keon	
Poster Session and Social 5:00 - 7:00		Ballrooms A/B

Friday 8:30 - 10:00 Sessions		<i>Moderator</i>
Data -- 2022 Reference Frame and Statewide Parcels	Room 301 A/B	Jeff Brown
2022 Reference Frame: Getting Ready For Implementation	Gary Thompson, Scott Lokken	
Lessons Learned By The Working Group For Seamless Parcels	John Bridgers, Kathryn Clifton	
NC Parcels & NC OneMap: Getting Data And Services To The Public	Brett Spivey	
NC Parcels: How Does The Transformer Work?	Kathryn Clifton	
NC Statewide Parcels: Where We Are And How Can We Continue Benefitting?	Jeff Brown	
Putting Parcels To Work: Examples Of Informing Decisions	Cam McNutt	

Friday 8:30 - 10:00 Sessions (Continued)		<i>Moderator</i>
	Applications -- Risk Management	Room 302A
Wake County Crime Analytics Web Application		Brandon Herrington
Implementing Disaster Drills In A "GIS For Disaster Mngt" Course		Okan Pala, Cathi Dunnagan
Flood Inundation And Mapping Alert Network		Kurt Golumbesky
	Technology -- GeoINT	Room 302B
Identifying Land Cover And Conservation Opportunities Around NC's Military Bases		Daniel Madding
NGA Provides Open Source Geo Content And Service Mngt Platform		Carter Christopher
The South Atlantic Conservation Blueprint		Amy Keister
	Technology -- In the Cloud	Room 302C
Mobile Data Collection Projects At Transportation Asset Analytics, NCDOT		Stephen Shepard
Streamlining Mobile Data Collection And Reporting With CartoPac And SSRS		Matt Nanney
The Asheville App: Using Technology For A Better City		Scott Barnwell
	Herb Stout Student Award Winners	Room 303
An Automated GIS For Climate and Weather Resilience		William Clark
Carolina Hemlock Site Suitability And Long-Term Forest Health Monitoring Techniques		Lauren Andersen
Developing Wetland Vegetation Phenology As A Climate Change Indicator: A Closer Look At Sensor Resolution Requirements		Christiana Ade
Mapping Glacier Change In Alaska's National Parks		Micheal Letzring
	Data -- Preparing for Census 2020	Room 304
The 2020 Census: Geographic Partnership Opportunities		Monique Eleby, Laura Waggoner, Bob Coats
	Enterprise -- Spatial Law	Room 305A
An Overview Of Open Source Licensing		Anthony Calamita, Jody Garnett
GIS Data Disclaimers: What They Are, How They Protect Your Organization, And Common Pitfalls		Shannon Tufts
Wake County Open Data: Two Years From The Trenches		Carter Vickery, Bill Scanlon
	Enterprise -- Divergent Interoperability	Room 305B
Leveraging SQL Spatial For Analysis And Web Services		Ed Shipman
Managing Your Spatial Odyssey		Joseph Sloop
Visualizing Spatial Data With Tableau		Burke Foley
	Data -- Lidar	Room 306A
NOAA's Digital Coast For Lidar And More		Kirk Waters
Statewide Lidar Collection And New Technologies With Lidar		Hope Morgan
Using Lidar To Extract 3D Buildings And Trees		Geoff Taylor
	Data --Walk, Ride and Drive this Way	Room 306B/C
Keeping "Track" Of Railroads In NC		Katie Kyzer, Larry Sanders
NC's New Statewide Road Centerline Data		Tim Sheldon, Erin Lesh
Pedestrian And Bicycle Infrastructure Network		John Vine-Hodge

Break 10:00 - 10:30

Friday 10:30 - 12:00 Sessions		<i>Moderator</i>
Data -- Metadata		Room 301 A/B
		Jeff Brown
Jumpstart Metadata Creation With The NC Metadata Profile		Lynda Wayne, Craig Pederson, Tim Mulrooney, Sarah Wray, Chelsea Duncan
	Applications -- Urban and Regional Planning	Room 302A
		Chase Barnard
Imagine 2040 / Connect 2045 – GIS-Based Scenario Planning In The Triangle Region Using CommunityViz		Benjamin Bearden
The FUTURES Model: Open-Source Tool For Understanding Where Cities Will Grow, Impact On Local Economies, Conservation Efforts		Dr. Derek Van Berkel
Urban Patterns And Ecosystem Services: Model Integration For Exploring Alternative Regional Futures		Douglas A. Shoemaker
Technology -- Mobile Web		Room 302B
		Jamie Hammermann
ArcGIS for Workforce: Configuring For Your Organization's Needs		Justin Greco
Elon Univ. GIS Study: Changing The Way Students View Their Campus		Ryan Kirk
Technology -- UAS & Remote Sensing 1		Room 302C
		Sean McGuire
Drones And Spatial Analysis In Marine Science And Conservation		David Johnston
OpenDroneMap Present And Future		Stephen V. Mather
The Sky Is No Limit: Building Better Data With UAS Technology		Garrett Shields
Herb Stout Student Award Winners		Room 303
		Marc Peterson
Duke Garden Watershed Analysis		Luke Riley
Mapping Hydrologically-Sensitive Environments In Alpine Forests Of The Western United States		Justin Wells
Pharmaceutical Pollution: A Study Of Potential Areas Of Concern In The Tar-Pamlico River Basin		Stephanie Moffitt
GIS in Schools: K-12 Student Showcase		Room 304
		Hope Morgan
Exploratory Research To Link Prevalence Of Asthma-Related Tweets To Fine Particle Distribution		Navami Jain
Wake County 4-H GIS students: Well-Being In North Carolina		Dylan Dodson, David Flowers, Michael Harper, Arya Battula
	Applications -- Tools for Reporting and Inventorying	Room 305A
		Thomas Martin
Looking For Land In All The Hard Places		Lynn Ruscher, Kaylen Francis
NCDOT - HSP (Highway Stormwater Prog) Field Inventory Prog (FIP)		Stephen Strain, Ryan Mullins
Open Source Solutions For Citizen Science In Environmental Reporting, Sensing And Imaging		Andrew Pilant, Helena Mitasova
Enterprise -- Convergent Interoperability		Room 305B
		Dave Wynne
Doing More With Less: GitHub, Cloud Infrastructure, And ESRI		Cameron Carlyle, Christen McNamara
Implementing An Infrastructure To Serve Secure Data To ArcGIS Online		Meredith Moore, Rob Bailey
Upgrading And/Or Migrating Your SQL Server-Based Enterprise Geodatabase		Kent Rothrock
	Applications -- 3D	Room 306A
		Julie Stamper
3D Solutions Using ArcGIS Pro		Reynolds McFarlane
GIS For Flood Risk And Climate Change Applications		Geoff Taylor, Greg Dobson
Using 3D Visualizations To Tell Stories With Data		Josh McCarty
	Data -- Transportation Analysis	Room 306B/C
		Austin Chamberlain
Enterprise GIS For Traffic Data Management		Durmus Cesur
Estimating The Economic Benefits Of Transit Service		Steven Bert, Brandon Watson, Alyssa Randall
The Sidewalk Doesn't End: The Importance Of Open Data Standards In Transportation		Walter Jenkins

Conference Summary Remarks: Tim Johnson

Presentation of G. Herbert Stout Local Government Awards: Tim Johnson, Mrs. Lewanna Stout

Presentation of G. Herbert Stout Awards for Innovative Student Papers:

Tim Johnson, Greg Belk, NC Property Mappers Association

Special 30th Anniversary Presentation: Dianne Enright and team

Friday 1:30 - 3:00 Sessions**Moderator**

Data -- Finding and Using State Geospatial Data and Services	Room 301 A/B	Jeff Brown
Environmental Data And Services	Melanie Williams	
NC Lidar Spatial Data Download	John Lay	
Statewide Geospatial Data And Map Services For Your Work In NC	Jeff Brown	
Transportation Data And Services	John Farley	
Using NC OneMap Data And Services	Brett Spivey, David Giordano	
Applications -- Academic Potpourri	Room 302A	Leo Martin
Get The Kinks Out: Determining Roadway Radii From PolyLines	Paul Schrum	
NCSU DIY Cartography Class	Sara Glee Queen, Tania Allen	
The Promise And Perils Of Using OSGEO-Live In The Classroom	David Abernathy	
Technology -- UAS & Remote Sensing 2	Room 302C	Jeff Dawson
33 Years Of GRASS GIS As An Innovation Platform	Vaclav Petras	
En Garde: ESA's Sentinels	Josh Gray	
Seamless Fusion Of High-Resolution DEMs From Multiple Sources	Anna Petrasova	
Herb Stout Student Award Winners	Room 303	Dwight Otwell
GIS Enhances Guilford County's Street-Level Photo Project And Improves Productivity	Kimberly O'Neill	
Spatial Analysis Of Gas Stations In NC Using Open Source Data	Sergio Britton	
US Light Rail Systems: A Comparison Of San Diego, Seattle, & Charlotte	Jacob Stein	
Using Public Cycling Data To Recommend Future Bike Infrastructure	Oscar Menzer, Kathleen Lowry	
Data -- GIS in Health Panel	Room 304	Dianne Enright
GIS In Health Panel	Joseph Sloop, PhD; Lovette Miller, PhD; Jennifer Rankin, PhD; Phillip Summers	
Applications -- Utilities	Room 305A	Ray Kurtiak
Beyond The Wires	Amy Barron, Fleming Talton	
Multi-Level Gas Utility Integration: Spatial Data Application Across Multiple Platforms	Brian VanderJeugd	
Data -- Imagery	Room 306A	Josh Norwood
Bringing Higher Resolution Land Cover To Coastal NC And Beyond	Nate Herold	
Extracting Landcover And Single Class Features From NC NAIP Imagery	Frank Obusek	
The Southern Forest Area Change Tools (SouthFACT) Project	David Jones	
Enterprise -- Hurricane Matthew Response	Room 306B/C	Hope Morgan
FEMA's Hurricane Matthew Disaster Journal; Contextualizing Response And Recovery Through A Public Data Sharing Platform	Brielle Davidson	
How Lessons From Floyd Prepared Us For Matthew	Tonda Shelton	
Local Perspective: The Pitt County Experience	Eli Johnson	
State Perspective: The Operations Chief Experience	Joe Wright	