

# MINUTES

## Statewide Mapping Advisory Committee Meeting

Wednesday, July 10, 2024, 1:30 – 3:30 PM

NCDEQ Green Square Cardinal Conference Room (#4001)

### Welcome/Introductions

In attendance: See attendance sheet at end of minutes.

The minutes from the April 10, 2024 SMAC meeting were approved by the committee.

### Working Groups and Related Geospatial Data

Working Group for Orthoimagery and Elevation

Ben Shelton updated the SMAC on the status of the orthoimagery project. For reference, the 2024-27 orthoimagery

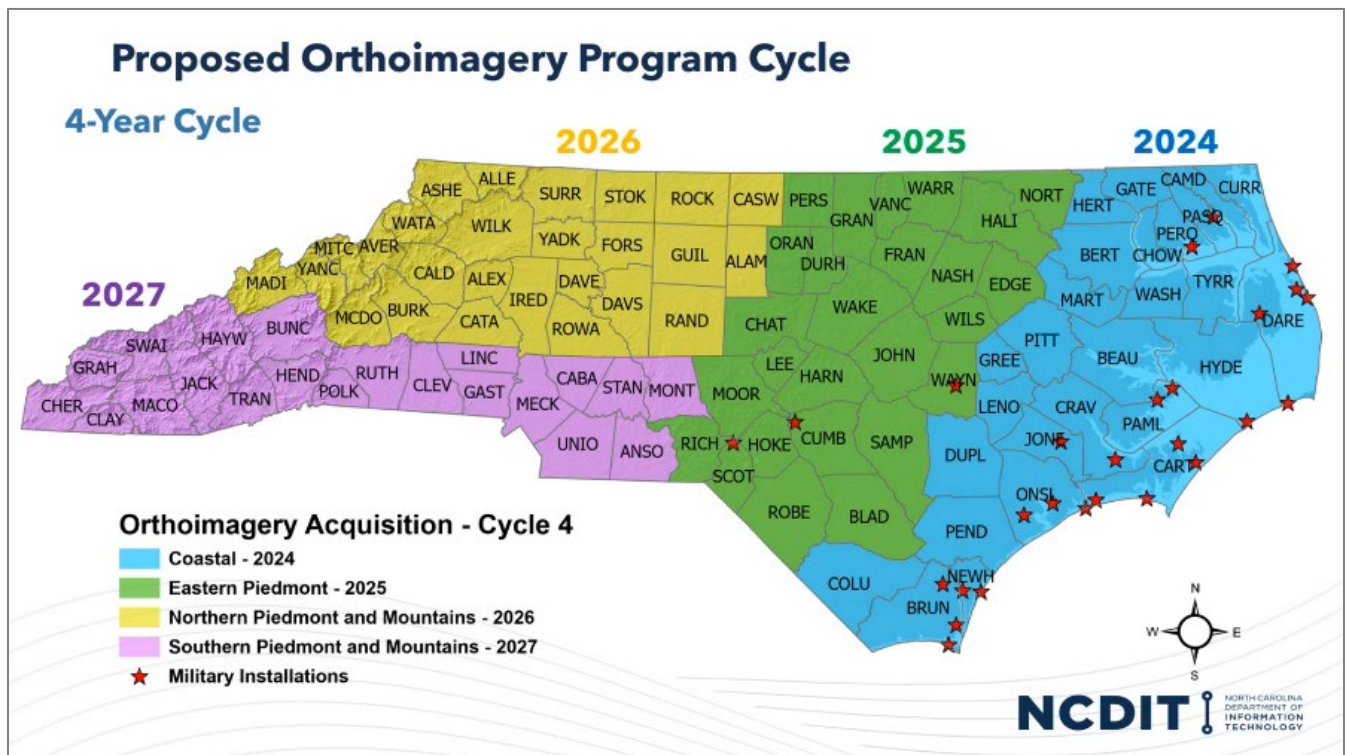


Figure 1 - Orthoimagery cycle for 2024-27

cycle is indicated in Figure 1.

The detailed 2024 project area (Figure 2) is divided among the five vendors. Image acquisition was completed before the last SMAC meeting. Numerous radiometry checks were performed to provide color-balance between vendor

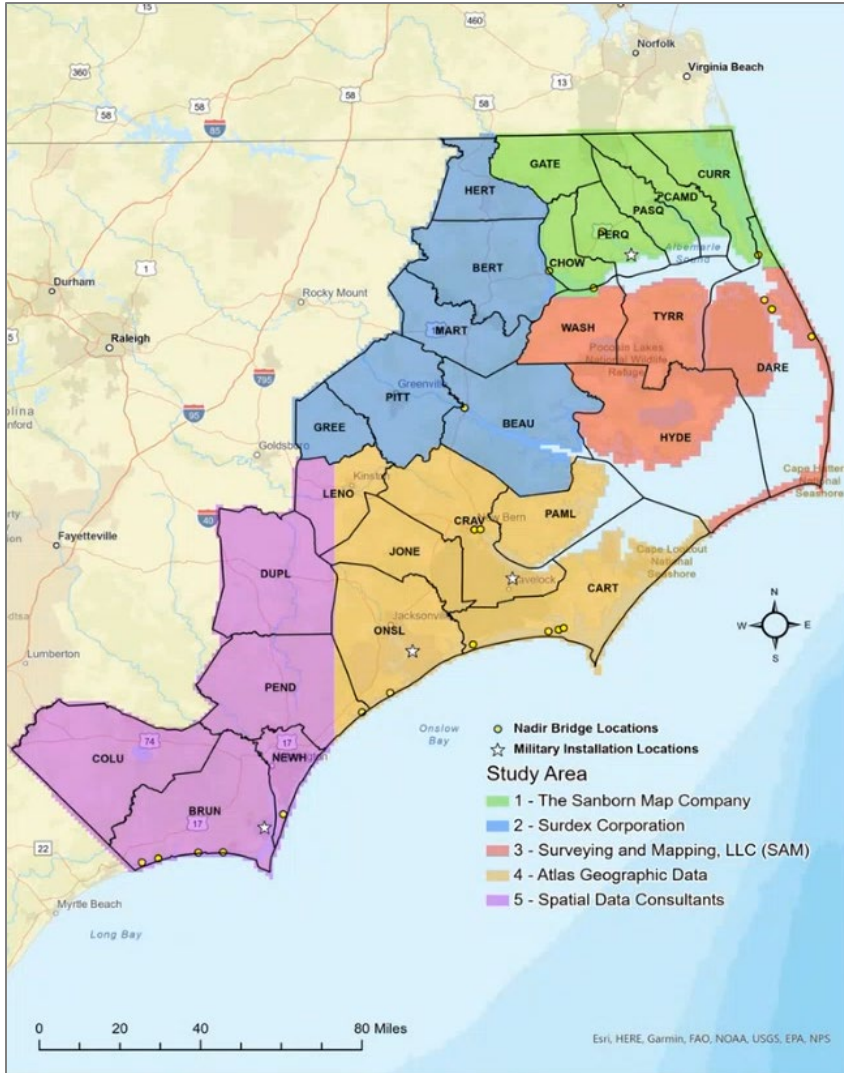


Figure 2 - 2024 project area in detail

products. A webinar is scheduled for tomorrow with the end-users in the 27-county delivery area to add them to the online imagery review platform called Data Reviewer. At the meeting the project team will also go over the review process and the tools used. Nine counties will be added to the review tool every 2 weeks. The review period for each county is 25 days. The entire review period runs from late July to mid-September. Delivery to PSAPs and counties is on schedule for early December.

The 26-county 2025 project was approved by the 911 Board in February. Rather than a single-year pre-qualification process for selecting vendors, a multi-year process has been approved by NCDIT. There will be efficiencies gained by this multi-year process.

The 4-band imagery product will continue. There will also be true orthos flown for the downtown areas of Raleigh and Durham.

Geodetic Control

Gary Thompson briefed the committee on Geodetic Control. The CORS (Continuously Operating Reference Station) network will be the foundation for the new datum in North Carolina. Of note the Kinston CORS will be moved to the airport and there is a proposed CORS for Ocracoke Island. There is also a new station at the Peanut Belt Research Station, in Lewiston Woodville, NC.

Reference Frame

Gary Thompson shared the reference frame update. The National Geodetic Survey (NGS) will release the new datum sometime in 2025. However, it won't become official until the Federal Register is filed, likely in early 2026.

NC LiDAR Business Plan

Gary Thompson stated that the USGS collected LiDAR data in eastern NC in 2019-2020. The data is now accessible from the NCEM Spatial Data Download website.

With regards to the business plan, upon giving the document a final review Gary indicated there are 3 sections that need to be updated. He estimates 2 weeks to complete that update. After that, the document will be reviewed for 1 week by the Working Group for Orthoimagery and Elevation. Once complete it will be distributed to the SMAC for review and comment, with the goal of approving it at the October 9 meeting. Then it will be sent to the GICC for adoption.

Working Group for Seamless Parcels

Katie Doherty reported that 87 counties provided parcel updates in the first quarter of this year, as indicated in Figure 3. A total of 85 counties submitted updates in Q2. Fifteen counties have already updated their data in the parcels

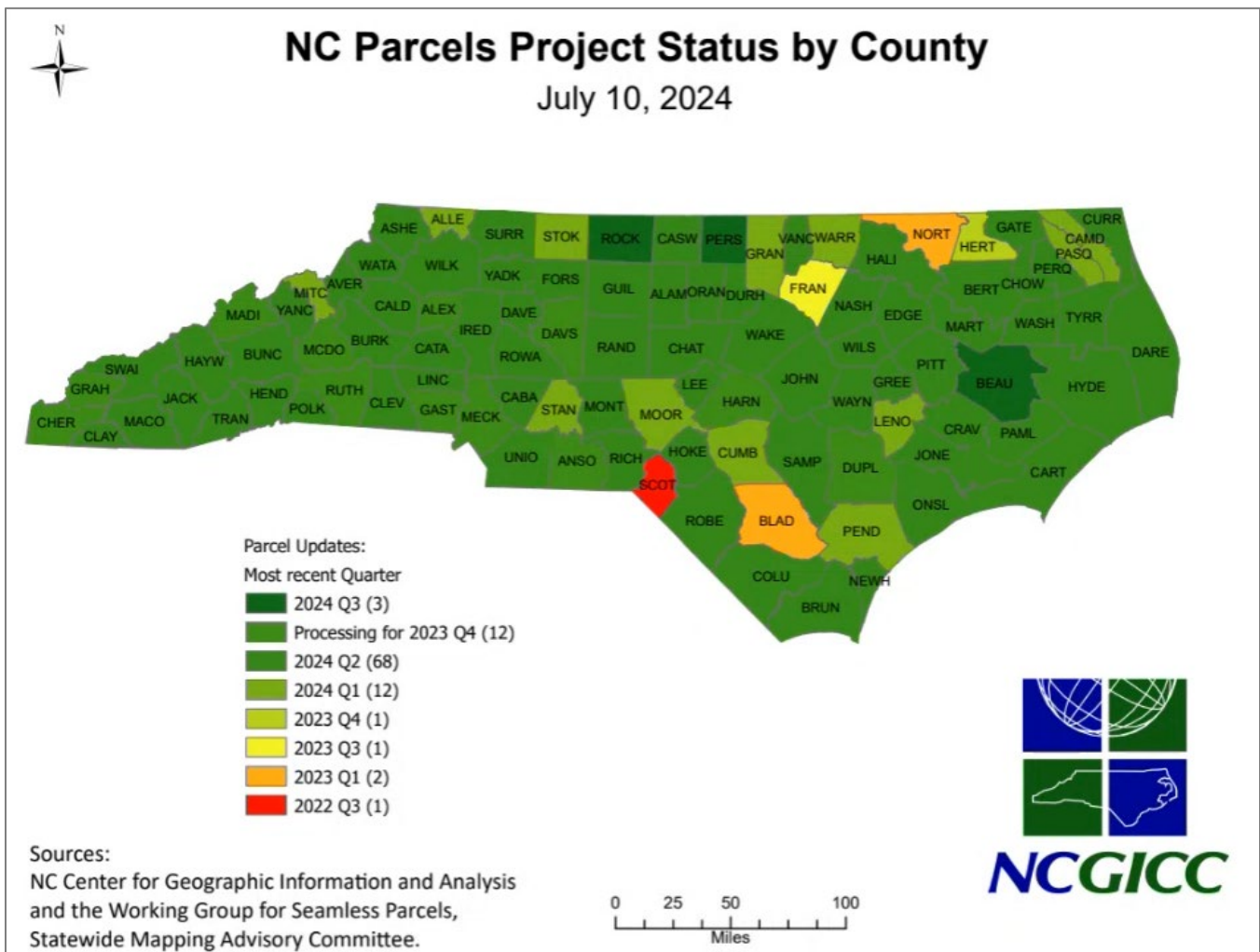


Figure 3 - Parcel status as of July 10, 2024

transformer for the 3<sup>rd</sup> quarter. It appears outreach efforts have been successful in getting more frequent parcel updates from counties.

The committee met last on June 26<sup>th</sup>. More outreach opportunities were discussed, specifically targeting tax assessors and CAMA vendors. Representatives from the group also participated in the Secretary of State's Land Records workshops. In addition, the team hopes to meet with Nancy von Meyer (nationally renowned parcel expert), on how other states have worked more closely with CAMA vendors, rather than individual counties, to obtain cadastral information.

### Hydrography Working Group

Cam McNutt, Chair of the working group, reported the group has started meeting every other Wednesday. They have developed a document that contains all the items that would be included in a hydrography business plan. Discussions are occurring with DEQ to move the data set into an enterprise system. There may be funding available to facilitate this. Memorandums of Agreement are also needed between the agencies involved.

The ATLAS tool will need to be updated soon to reflect the 2024 DEQ water quality assessments.

### Working Group for Administrative Units

#### Municipal Boundary and Annexation

Bob Coats presented to those at the Secretary of State's land records workshops about the NC municipal boundary process. As a result there has been an increase in those in local government using the boundary tool to sign off on their boundary, or at the very least supplying contact information for their jurisdiction. The last workshop meeting will be a week from Friday in Wilmington. The tool is starting to be implemented to the point where it will be useful to supply feedback to the Census Bureau for the BAS (Boundary and Annexation Survey) beginning with the 2026 cycle.

Some were not able to attend the workshops. To that end, the High Country Council of Governments has asked for a training session on August 17<sup>th</sup> with a presentation to their Board that evening.

Related to boundaries, Bob was asked by the Census Bureau Census of Governments if there is a need to map "special district" boundaries? These could be boundaries for: airport authority districts, mental health districts, water/sewer districts, fire districts, school districts, etc. They are based around municipal government needs rather than county or state needs. He asked the SMAC if NC should be looking at collecting this type of information. Colleen Kiley agreed to establish a meeting with the Administrative Units working group to brainstorm what other general boundaries might be needed in the state.

## Projects in progress

- Jackson – Macon (establishing county boundary monuments in progress)
- McDowell-Mitchell (plats recorded and property owners notified)
- Catawba – Lincoln (findings report provided to the counties)
- Granville – Franklin (HB438 ratified)
- Mecklenburg – Union (HB457)
- Caswell – Person
- Forsyth – Guilford Report and preliminary plat completed by mid July 2024
- Polk – Rutherford
- Chowan – Perquimans
- Harnett – Johnston
- Burke-McDowell
- Beaufort-Pitt
- Caldwell - Watauga
- Mitchell – Yancey
- Cumberland - Harnett
- Bladen – Columbus – Brunswick
- Buncombe – Henderson

Figure 4 - County boundary survey progress

## County and State Boundaries

Figure 4 provides the update for the county boundary mapping. In addition to the completed projects in green, the McDowell-Mitchell border has been finished. County borders in blue (Polk-Rutherford, Chowan-Perquimans, Harnett-Johnston, and Burke-McDowell) are the next boundaries to be surveyed.

## NC Board on Geographic Names

Cam McNutt shared an update on NCBGN activities and there are 4 items on the NC BGN docket to bring before the SMAC. The first is

the naming of an unnamed 3 mile-long water feature to Weddington Creek in Iredell County. The NC BGN is neutral (no opinion one way or the other) to naming the feature. The proposed name has a documented local connection but very little information that would be known historically to others in NC. The options before the SMAC are - recommend (without conditions), recommend with conditions, neutral (no recommendation), or not approve. A motion was made to approve and was seconded. The SMAC will recommend to the US BGN the naming of the unnamed feature in Iredell County to Weddington Creek.

The next feature is an unnamed mountain in Cherokee County. The proposal is to name it Will High Top. There is not much documentation, however the name is used locally. The name has been approved by the Cherokee County Board of County Commissioners and the US Forest Service. A motion was made to approve and was seconded. The SMAC will recommend to the US BGN the naming of the unnamed feature in Cherokee County to Will High Top.

The 3rd name for discussion is the renaming of The Peak to Mount Douglass in Ashe County, after Frederick Douglass. The NC BGN found no connection between Douglass and North Carolina. The NC BGN recommended to the SMAC to not approve this name change, but rather communicate with the proponent that, yes, the name should be changed but to find a name that has more of a local connection. A motion was made to not approve and was seconded. The SMAC will not recommend to the US BGN the renaming of The Peak in Ashe County to Mount Douglass.

The last name discussed was the change of Clingmans Dome to Kuwohi. The change is supported by Swain County Board of County Commissioners, the Eastern Band of Cherokee Indians, the National Park Service, the Tennessee BGN, and may other local governments in western NC. The proposal is well-documented. A

motion was made to approve and was seconded. The SMAC will recommend to the US BGN the renaming of Clingmans Dome in Swain County to Kuwohi.

## NC Data Projects

### Addresses

Darrin Smith reported that the AddressNC project has shown continued growth and participation. Since the last SMAC meeting there have been almost 105,000 new points added to the data set. This is a five-fold increase over the number of points added to the data up to the last SMAC meeting in April.

Participation is increasing as well. In the last quarter 84 counties have new data to add. However, since the project inception in December 2022 there are 6 counties that have not changed their data at all. Data currency dates will soon appear on the AddressNC page on the NC OneMap website. The number of counties not submitting sub-addresses has decreased from 17 to 12. Outreach should continue to bring this number down.

The AddressNC data will be included in the Esri Community Maps Program and their World Geocoding Service. This

is the second time Esri has used the address data in their updates. They'll acquire the NC address data again for their next update in September or October.

Darrin is in the process of lining up address providers across the state, through a series of webinars. The purpose is to remind them about NC OneMap and the quality control of the address data, and to introduce them a new web application that will be hosted on NC OneMap. The web app will show the latest changes, latest updates, areas of new locations, heat map densities, hex bin assessments and QC results.

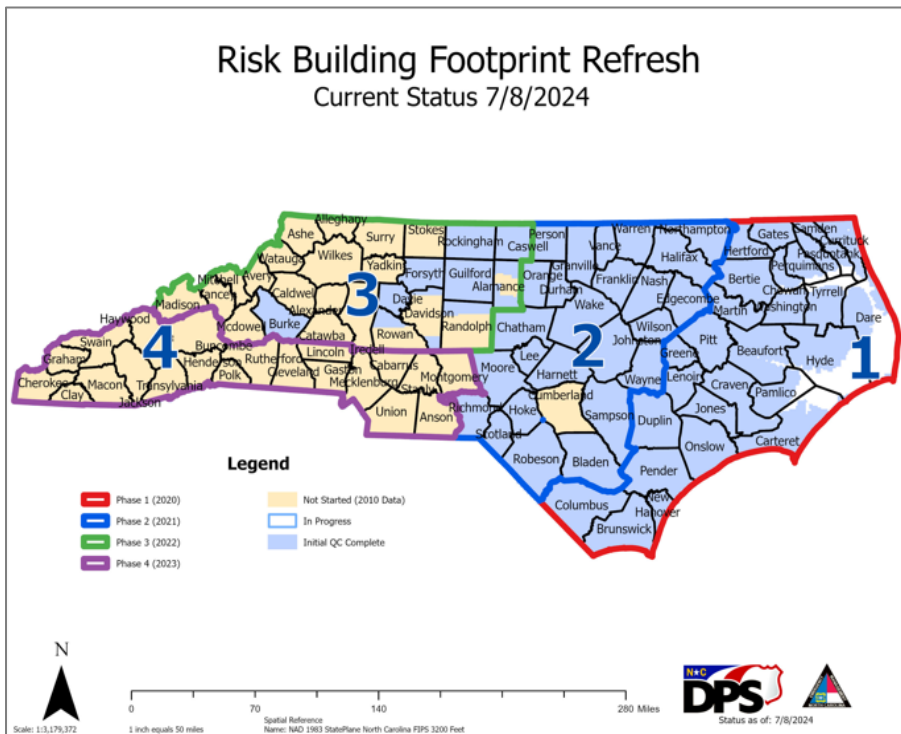


Figure 5 - Building footprint

### Building Footprints

The building footprint update is reflected in Figure 5. Phases 1 and 2 have been completed with the exception of Cumberland County. Once the 2024 orthoimagery is released in eastern NC, NCEMs plan is to update the buildings within that ortho project.

## Landcover

Western counties in NC will be covered by an EPA Wetland Program Development grant. The earliest funding will be dedicated to that is in October. The C-CAP contracting for mapping is being coordinated by APNEP.

## **Regular Status Updates**

### USGS/National Geospatial Programs Office

Jo Baker, USGS liaison for North Carolina, shared that the announcement for FY25 3D NTM data collaboration will be released in August. In preparation for that there will be an instructional webinar August 7<sup>th</sup>. Registration is required.

### NC OneMap

David Giordano shared that the 2023 Southern Piedmont and Mountains orthoimagery has been added to the following Esri basemaps: Imagery, Imagery Hybrid, and Firefly Imagery Hybrid. Esri and CGIA have been partnering on this imagery-sharing program since 2015. Traditional and cached base maps continue to be published by CGIA and are available from NC OneMap.

With regards to elevation data, a host of data and web services have been recently added to NC OneMap. The table below summarizes the additions:

Product	Description
3 ft. DEMs - Downloads	Digital Elevation Models with 3 ft. grid cells in TIF format. The projection is NAD 1983 (2011) NC State Plane, US Feet.
3 ft. DEMs - Web Services	The same data that can be downloaded as referenced above, except it can be streamed to your GIS with no need to store the files on your computer. The web service products derived from the 3 ft. elevation models are: <ul style="list-style-type: none"><li>• DEM</li><li>• Aspect (slope direction)</li><li>• Slope</li><li>• Shaded Elevation</li><li>• Shaded Relief</li><li>• Hill Shade</li></ul>
1 ft. Vector Contour Lines - Downloads	Unsmoothed 1 ft. contours created from the 3 ft. DEMs. Available in Esri file geodatabase and OGC GeoPackage formats (no shapefiles due to file size limitations). The projection is NAD 1983 (2011) NC State Plane, US Feet. Warning: these files can be VERY large.  Note: There are no 1-foot contours for Craven, Montgomery, and Randolph counties at this time. 2-foot contours generated from the 10-ft. DEMs are being used instead.
Raster Contour Lines - Web Services	Smoothed raster contours generated on-the-fly from the 3 ft. DEM web service. Contour intervals are 100, 20, 4, 2, and 1 feet. This service can be useful providing terrain context to underlying data on your map.  Note: The raster contour lines themselves do not contain elevation labels, however elevation heights can be determined by adding the web service to your GIS and "identifying" on the map (you may have to add the field "Raw Service Pixel Value", which contains the elevation, to the popup first).

## **Other Business**

### FY24-25 Work Plan

The committee reviewed the draft work plan for the current fiscal year. Item 3.2 (metadata assistance in GPS guidelines document) is complete. Item 4.3 will be revised to reflect the need to update the metadata committee's charter, at the direction of Eric Wilson. The end date will be changed to 6/2025. There is a possibility of assistance from NC Central University through a grant from the National Science Foundation. Item 4.4 will be modified - research has been completed.

There is a working group with DEQ forming to look at methodologies to update wetlands data. SMAC Chair Paul Badr suggested to add a task on the work plan and receive regular updates.

## **Meeting Action Item Review**

## **Adjourn**



**In-Person Attendance:**

<b>Name</b>	<b>Association</b>
Paul Badr, Chair	GPI Geospatial Inc.
Tim Johnson	CGIA Director, NC GIO
Nathan Bland	NC Sec. of State
Gary Thompson	NC Emergency Management
Colleen Kiley	CGIA
Dr. Ken Taylor	NC Geological Survey
Alice Wilson	City of New Bern
Eric Wilson	NC Dept. of Transportation
Cam McNutt	NC Dept. of Environmental Quality
Matt McLamb	CGIA
Richard Greene	NC Dept. of Transportation, Photogrammetry Unit

**Remote Attendance:**

<b>Name</b>	<b>Association</b>
Ben Shelton	CGIA
Kitty Kolb	US Geological Survey
Ashley Yandle	NC Dept. of Natural and Cultural Resources
Jo Baker	US Geological Survey
Zsolt Nagy	AECOM
Steve Averett	City of Greensboro
Sean McGuire	NC Dept. of Environmental Quality
Darrin Smith	CGIA
Katie Doherty	Rutherford County GIS
Elizabeth Daniel	CGIA
Christian Vose	NC Dept. of Agriculture and Consumer Services
Shelby Bourquein	US Geological Survey
Joe Battinelli	Cabarrus County GIS