

Statewide Mapping Advisory Committee Meeting Minutes

Wednesday, October 16, 2019; 1:30 PM – 3:30 PM

NC Department of the Secretary of State
4701 Atlantic Avenue, Raleigh, NC 27604

Welcome/Introductions

In attendance were: Paul Badr (chair), John Farley, Rich Elkins, Gary Thompson, Ben Shelton, Matt McLamb, Anna Verrill, Elizabeth Daniel, Dr. Kenneth Taylor, Alice Wilson, John Bridgers, David Giordano, Sean McGuire (phone), Camille Tyndall-Watson (phone), Hope Morgan (phone), Silvia Terziotti (phone), Stephen Dew (phone), Marcus Bryant (phone).

Minutes from the July 17, 2019 meeting were approved.

The 2020 SMAC dates have been established. They are January 29, April 15, July 15, and October 14. Meetings are from 1:30-3:30pm in the Secretary of State's office, 4701 Atlantic Avenue, Raleigh, NC.

Framework+ Datasets

Orthoimagery

Ben Shelton gave an update on the 2019 southern piedmont and mountains project. This project area includes 21 counties in the southwest part of the state. Four contractors are performing the work in the area. This includes true orthoimagery for the Charlotte and Asheville areas. The quality review has been completed by the 911 and GIS communities. Contractors have resubmitted the fixed tiles. The project has received final deliveries of about ½ of the counties. The remainder of the counties will be received in about 2 weeks.

Delivery meetings will be scheduled with the 911 PSAPs during the first or second week of December. At those meetings the NC Orthoimagery Program will give the PSAPs a copy of the imagery deliverables. Image streaming services and downloads should be available from NC OneMap around that same time.

The 27-county 2020 coastal project will include the 4th band (CIR). The project team is still determining what the derivative products will be for the 911 community. The typical 3-band image true-color and a false-color 3-band with CIR may be delivered as separate products so they can be used in all CAD systems and PSAP software, and to keep the file sizes to a minimum. As it stands right now the NC OneMap distribution product will be a 4-band SID. This project is currently in the qualifications-based selection stage. Five vendors have been selected and current work involves getting those vendors under contract by looking at cost proposals and negotiations. Due to efficiencies in the project timeline the goal is to deliver the imagery to the 911 community before Thanksgiving.

The project team is coordinating with the military facilities in the coastal area to allow flyovers for image acquisition. Local governments can begin negotiations with the selected contractors if they would like to perform any "buy-ups" in the project area. The 2020 project includes true-nadir image acquisition for 18 high-rise bridges in the area. John Farley asked that DOT-GIS be kept in the loop with concern to the derivative products, as it might help them with environmental assessments for DOT projects.

Ben is running tests on how best to derive impervious surfaces from the leaf-off CIR product. He is also paying attention to NOAA projects that will derive 1-meter and a down-sampled 10-meter landcover product. John Farley indicated that NCDOT is interested in funding landcover.

Cadastral

John Bridgers reported that the cadastral team is underway with the fall update. Counties are encouraged to update their parcel data quarterly. John shared the most-common fields that are not maintained by the counties. They are site address, parcel use description, present-use value, and last sale date. Some counties could be interested in maintaining these fields but the CAMA software cannot accommodate.

John talked to Kristian Forslin from the NC Railroad. He asked about a push for more frequent updates (more so than quarterly). Kristian's office has discussed purchasing commercial products.

Elevation

Contour and DEM creation status

Hope Morgan provided an update on contours and DEM creation. Phase 5 is complete, and it is all available from the Spatial Download site. While at NCAUG Hope met with Esri president Jack Dangermond. Mr. Dangermond offered to assist in making a dynamic web service of the LiDAR data. There will be an organizing meeting on this topic soon.

Contour creation is almost complete (97 counties) and Hope's team is finishing making matching DEMs for the data. One-foot contours are being created from a 3-foot DEM grid. Contours must be tiled to make the data useable and downloads manageable. The data will be QCed.

Silvia Terziotti added that QL1, 8-points/meter collection for Phase 1 and most of Phase 2 is supposed to be flown this late fall/early winter.

Hydrography

Cam McNutt did not attend the meeting.

Geodetic Control

Gary Thompson reported that 2022 will bring new horizontal and vertical datums. The big change will be the State Plane coordinate system. The datum change horizontally will be about 1 meter; vertically about 1 foot. The biggest numerical change will be in the redefinition of the State Plane coordinate system. The false easting will change from 2 million feet to 1 million meters. The false northing will change from 0 to 200,000 meters. The 2022 Working Group will have a recommendation for the SMAC at the next meeting.

These datum changes will impact all the county land records in the state. Formulas have been created that local land records can use to calculate their PIN numbers. The formulas will be shared with software vendors so the changes can be incorporated into their products. The constant in the formula may change if North Carolina decides to move from US survey foot to international foot. The federal government is mandating that all their products must be international foot. The US survey foot/international foot issue may present more confusion than the 2022 datum change.

Administrative/Governmental Units

County Boundaries

There is an issue with the North Carolina/Georgia boundary. Legislation in Georgia passed recently to create a Georgia/North Carolina boundary commission. The Georgia Governor vetoed it because North Carolina and Tennessee don't have boundary commissions. The Georgia constitution says the boundary with North Carolina is on the 35th parallel. The boundary was surveyed in two sections in 1819. The surveyed sections do not match and are about 4,000 feet south of the 35th parallel. Georgia wants to move their boundary up to the 35th parallel. Courts have ruled in the past the boundary is where it was surveyed not where the description says the boundary is. Gary believes unless Georgia is willing to compromise nothing will transpire.

Regarding NCGS boundary surveying, plats have been recorded for Chatham-Harnett-Wake corner, Alamance-Guilford, Harnett-Wake, and Chatham – Harnett. Reports have been submitted for Hoke-Robeson, Cabarrus-Rowan, Union-Mecklenburg, and Cumberland-Harnett. Gary and his team are currently working on Davie – Yadkin, Jackson – Macon, Bladen – Columbus – Brunswick, McDowell-Mitchell, Granville – Franklin, Polk – Rutherford, Chowan – Perquimans, and Harnett – Johnston.

There is boundary work to be done between North Carolina and Virginia. Governor Cooper wrote a letter to the Virginia Governor. The Virginia Governor does not have the power to create a boundary commission. That will need to happen first before work can begin.

NCGS adds completed county boundaries to a [map service](#) they host. There is also a [web application](#).

Municipal Boundaries

John had no report for the municipal boundaries dataset.

Transportation

John Farley reported that in 2007 NCDOT created the ISRN (Integrated State Road Network), an integrated and seamless dataset for the entire state that was routable and geocodable. NCDOT recently received approval to update and maintain this dataset for use by anyone. Multiple input datasets will be used to keep the ISRN data current, including NG911, OSM, and DOT's own centerline data. DOT will also use aerial imagery and LiDAR data to perform quality control. DOT hopes to have the first iteration of ISRN by the end of 2019 and aims to update the data daily. DOT will publish a log that catalogs the changes to the data.

Addresses

Anna Verrill reported that there has been no update since the last SMAC meeting.

Working Groups

Metadata Committee

No report. Sarah Wray was not in attendance at the meeting.

Hydrography Working Group

No report. Cam McNutt was not in attendance at the meeting.

Orthoimagery and Elevation

Gary reported that the meeting was scheduled conflicted with the GICC M&O meeting and was a Federal holiday as well. It has been rescheduled for this-coming Monday. The committee will work on updating their 4th band/IR white paper. Gary asked John to share any benefits DOT would get out of a 4th band with the group so it can be added to the paper.

Paul mentioned South Carolina is going to fly 6" imagery statewide all in the same year. He asked if there is an interest to have our imagery match South Carolina's? Gary responded that there may be a coordination opportunity to reduce the planes in the air and possibly save money.

NC Board on Geographic Names

David Giordano reported for Cam. The NCBGN will meet November 1st and report back to the SMAC at the January meeting.

Working Group for Land Cover

Dr. Taylor reported that committee members differ on the scale that should be used to collect the data. A committee member brought up a Federal model project to create a landcover product. At the conclusion the data could be used to make determinations about the scale needed. Given federal priorities it is unknown if the model will be completed.

Working Group of Municipal Boundaries

John Bridgers had nothing new to report since the last SMAC meeting which was several counties have been contacted to determine if they would be willing to work with the NCDOT to provide Powell Bill updates. The counties have agreed. The committee will move forward on this.

Regular Status Updates

National Geospatial Programs Office

Silvia gave her report in the Framework Elevation section.

NC OneMap

David Giordano alerted the committee that the new NC OneMap site has the functionality for users to submit questions directly to the NC OneMap team by going to the website (www.nconemap.gov) and clicking on Feedback at the top of the page.

He also reported that the cloud migration continues. Imagery has been uploaded to AWS and is in the process of being converted to MRF format, a cloud-optimized image type.

NextGen 911

Matthew McLamb reported that he and Anna Verrill are working closely with the NextGen 911 and the data contractor, GeoComm. About 15 to 20 agencies have submitted data for evaluation to GeoComm's data hub. Several PSAP's are close to meeting the criteria for the project.

Matthew and Anna have established contact with approximately 50% of the 127 PSAP's in the state. These could be in the form of email exchanges, on-site one-on-one meetings/conference calls, or smaller regional workshops. Multiple on-site visits have been made. By the end of November about 35 agencies will have some form of communication with the NextGen 911 team.

A statewide dataset is being developed as the project progresses. Some agencies have not uploaded their data – address points and street centerlines.

Other Business

FY19-20 Workplan

David reported that no feedback has been received concerning the fiscal year 2019-2020 workplan. The draft will now become final.

The meeting adjourned at 3:05pm.