

# Statewide Mapping Advisory Committee Meeting Minutes

Wednesday, July 17, 2019; 1:30 PM – 3:30 PM

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

## **Welcome/Introductions**

Hope Morgan (acting Chair), Gary Thompson, Rich Elkins, John Bridgers, Cam McNutt, Tim Johnson, Alice Wilson, Matthew McLamb, Anna Verrill, Dr. Kenneth Taylor, Silvia Terziotti, Ben Shelton, Camille Tyndall-Watson, Scott Davis, Karen Eggers, Jeff Brown, David Giordano, Steve Averett (phone)

## **Minutes**

The committee approved the April 17, 2019 minutes as written.

## **Framework+ Datasets**

With SMAC Chair Paul Badr unable to make the meeting Hope called on members to report on opportunities, development, maintenance, and issues for Geospatial Framework-Plus datasets for North Carolina.

## **Orthoimagery**

Ben reported the 2019 orthoimagery project is currently ongoing. There are 21 counties in this project area. Fifty percent of the area is covered by mountains. Radiometry differences and tonal balances were hashed out with vendors. The quality control period will start at the end of the month. The final counties will be reviewed by September 20. At that point all issues can be addressed at once.

The 911 Board has approved the next 4-year cycle of orthoimagery collection across the state. The new cycle will begin in 2020 with the 27-county area on the NC coast. True orthos will be flown in downtown Wilmington to eliminate building lean.

Part of the 911 Board proposal was to collect the 4th-band statewide. The board approved this expenditure. The data will aid in 911 response efforts, and possible statewide data creation for data such as landcover. Hope suggested the delineation of a pilot area to look at the benefit of the 4th band and perform tests to see what data can be created or analyses performed to determine how it can be of value. Also of value will be to discuss the uses of CIR with others that have already “bought-up” in the project to collect it, such as Wake County.

For the 2020 flights, contractors will be under contract by December 2019. Delivery of the data will be early December 2020.

## **Cadastral**

John introduced Anna Verrill, with CGIA. Anna will be taking over the duties of Jeff Brown. NC DIT has approved the contract extension with the Carbon Project. The spring update is complete with the exception of a few counties (9).

Prior to Hurricane Florence the project team was able to convince several counties to upload their parcel data to the transformer, as a place to keep it stored in the event of a catastrophe and to have it available for others to use for analysis after the hurricane. The team encouraged quarterly updates to the counties. Fall updates will begin in September.

## **Elevation**

Hope reported that all the lidar data is available for use from the Spatial Data Download site at <https://sdd.nc.gov/sdd>, including phases 4 and 5. Flood zones and buildings are also available. Lidar metadata is done in draft form. Large data requests will be filled by sending Hope an external hard drive. Phase 5 alone is 36TB. The whole state is approximately 75TB.

Hope's team is working to create statewide contours. Each county takes approximately 24-36 hours to be created at a one-foot contour interval. About 40 counties have been created so far. The goal is to complete all counties by October. After all contours have been created Hope will work with CGIA to formulate a plan for web service hosting. Another question to discuss will be the possibility of creating a web service for the Digital Elevation Models. A significant amount of QC will need to be performed on the contours as they will need to be sealed by the NC Geodetic Survey (NCGS).

## **Hydrography**

Cam reported that DEQ is working to update tables for the named streams dataset. Data is being moved to a geodatabase. The water quality assessment has just been approved by EPA.

## **Geodetic Control**

Gary reported there will be horizontal and vertical datum changes in 2022. The NCGS has been working with a variety of users to create issue papers to describe the impact. Gary is working with Rich and John to test a procedure to allow counties to continue to use their current PIN numbers in 2022. The state plane coordinate system will also change. This will impact all 50 states. There will be a one parallel system. The ground-to-grid distortion will be less but the coordinates will change dramatically. Gary has worked with the National Geodetic Survey (NGS) to create a formula to take the 2022 state plane coordinates and convert them back to 2011 PIN numbers. It will be accurate to within 1.5 feet. Metadata will be critical to this process. Esri is working with NGS to create transformations.

The NGS has proposed to eliminate US Survey feet, which is the North Carolina legislated unit of measure, as well as that of about 40 other states. Even if North Carolina keeps using the US Survey feet and data coming from federal agencies will be in international feet.

## **Governmental Units**

Regarding county boundaries, Gary reported that NC Geodetic Survey has surveyed county boundary lines between Chatham – Harnett – Wake, Alamance – Guilford, Harnett – Wake, and Harnett – Chatham. NCGS recently submitted reports to these counties for survey line work: Hoke – Robeson, Cabarrus – Rowan, Union – Mecklenburg, and Cumberland – Harnett. The projects in progress are Davie – Yadkin, Mitchell – Yancey, Jackson – Macon, Bladen – Columbus – Brunswick, McDowell – Mitchell, Granville – Franklin, Polk – Rutherford, Chowan – Perquimans, and Harnett – Johnston.

With regards to the state boundary, Governor Cooper sent a letter to the Virginia Governor. Georgia recently pass legislation to create a boundary commission for the boundary with North Carolina. The Georgia Governor vetoed the bill. Georgia wants to move the boundary with North Carolina about one mile into North Carolina.

Jeff asked how long it typically takes for boundaries to be ready for public consumption after they are surveyed. This has implications for NextGen 911, with its need for current boundary data. Hope responded that a [web service](#) has created by NCGS for those lines and control points surveyed. New lines appear in

the service approximately every 3 months. Tim asked if NCDOT is still the keeper of the county boundary data. Gary responded that in the past NCDOT would obtain the boundary data from NCGS, but was unsure if that was still the case.

There was no update on municipal boundaries.

### **Transportation**

John Farley was not in attendance.

### **Addresses**

Anna reported there have been two previous instances of the address dataset, each created with non-recurring funds. The first was in 2009 with an update in 2014. There are now recurring funds to update the data. Data updates will be coordinated with addresses coming out of the NextGen 911 project. Data will be going through QA/QC checks and will be conformed to the NENA standard. Anna will be actively monitoring the data acquisition process as it comes out of the NextGen 911 project, which will run through the end of December 2021.

Hope asked if NextGen needs to be added to future SMAC agendas. Tim responded that there are several people in the room that are interested in it and suggested a presentation at a future SMAC meeting about it as well as keeping the SMAC abreast of it during Anna's regular addressing updates.

### **Working Groups**

Working groups reported on activity in the last quarter.

### **Metadata Committee**

Sarah Wray was not in attendance.

### **Hydrography Working Group**

Cam thanked Jeff for his contribution to the group over the years. Cam is going through historical committee documents to determine if they are still pertinent and need to be brought forward to the Hydrography committee. Cam called on Scott for an update on the hydrography creation process. Scott is working on the geometry of the data now. The data updates will be a big improvement over the first pass of the data creation.

### **Working Group for Orthoimagery and Elevation**

Hope reported that Ben gave an update on the orthoimagery program. Dan Madding discussed the NAIP program. Hope gave updates to Lidar and contour data. Her report was the same as what she gave today. Eric Hunt gave an update on NOAA. Silvia gave an update on the supplemental collection for Lidar.

There are local government representatives leaving the committee. The Local Government Committee (LGC) will bring this up and appoint replacements at their next meeting.

The next meeting of the working group is October 7.

### **NC Board on Geographic Names**

Cam is now the chair of the NCBGN, taking over for Tim. At the last meeting the committee discussed eight names, three of which were objected to. One name was deferred to a future meeting because of its

possible association with another name change request. Cam mentioned there are names between the DWQ database and GNIS that need to be reconciled.

The SMAC agreed with all the recommendations of the NCBGN.

### **Working Group for Land Cover**

Dr. Taylor reported that the committee heard from Nate Herold, a land cover specialist from the NOAA Office for Coastal Management. Nate explained his experience with land cover classification, in particular the cost-effective approach of producing an automated 1-meter classification using high-resolution imagery, and then develop a 10-meter product for larger areas based on the 1-meter product.

In the absence of a state government agency ready to fund a large land cover classification project, the Working Group advises that SMAC look for opportunities related to the NOAA pilot project. If business needs for a state agency or the need for partnering agencies are compelling enough for funding commitments, the Working Group advises consideration of a partnership with the Office for Coastal Management.

### **Working Group for Municipal Boundaries**

John reported the group has come up with a 4-part solution to create a baseline data set. The solution includes:

1. Create a baseline dataset from the best available mapping
2. Improve the source maps created for annexations
3. Modify annexation data flows from counties on behalf of municipalities
4. Update the statewide baseline data

The approach is for DIT-Transportation and CGIA to create a baseline for pilot jurisdictions. The NC Geodetic Survey will work with surveyors to promote more digital submissions. The Land Records Management Program will promote county submissions for annexation and BAS (Boundary and Annexation Survey). Lastly, the committee agreed that state agencies will collaborate on data maintenance and publication via NC OneMap.

The timetable for the rest of this calendar year is to develop, communicate, and promote the project. In 2020 the evaluation of the quality of data flows will be examined, and in 2021 the statutes and rules will be revisited. If needed, proposed changes will also be communicated at that time.

### **Regular Status Updates**

#### **National Geospatial Programs Office**

USGS is working on the state summaries for the 3-D Nation initiative. USGS has been asked to create a 3-D fact sheet for each state. Silvia will be contacting Hope to discuss how Lidar is used in North Carolina.

#### **NC OneMap**

David reported that the current NC OneMap geoportal is going to be replaced with ArcGIS Hub. The existing geoportal runs on ArcGIS Geoportal Server and has been in production for a number of years. Both geoportals will live side-by-side for a period of time. The new geoportal will be released later this summer.

Also, the NC OneMap infrastructure is migrating to Amazon Web Services with help from DIT AWS staff. Hope is looking for a document outlining any North Carolina “rules for the cloud.” Matt responded that CGIA will be able to supply lessons learned and best practices.

### **Other Business**

#### **Access to Utility Data – Public and Private**

Hope reported this is a two-piece effort involving what she is doing from a state perspective and what Jason Clodfelter is doing from a local perspective. Questions to answer: what data is available and what the rules and requirements are there for access; what documentation exists to determine if data can or cannot be made publicly available. What has been indicated to Hope is that it is handled on a case-by-case basis. There are no set rules from utility companies on what they provide, however if it is utility information that is desired, it is privacy-protected by DHS.

[NC Water WARN](#) hopes a request can be made by the GICC stating this data is something that is needed. If so, all the groups involved in Water WARN can then discuss and come up with a policy.

What Jason has found from the local government perspective by a survey he developed is that written policies are rare among local governments that supply water and sewer services. Most governments do not make that data publicly available. Requests are filled on a case-by-case basis.

Hope asked what needs to be done to formalize this. Tim responded that, from the SMAC perspective, just be aware that the GICC is looking at this. He went on to mention that the GICC Chair, Alex Rankin, would like to see a facilitated discussion on this topic at the next GICC meeting. Based on what Council members heard at the May meeting about utility data sharing, he would like to hear what GICC members have to say.

#### **Workplan Review**

David asked the SMAC to provide feedback concerning the draft FY19-20 workplan. Comments should be sent to him by Friday, September 13.

#### **Adjourn**

The meeting adjourned at 3:25 PM.

#### **2019 SMAC Meeting Dates**

Date: October 16

Time: 1:30 PM

Location: Secretary of State’s offices on 4701 Atlantic Avenue