

# Statewide Mapping Advisory Committee Meeting

## Minutes

**Wednesday, July 19, 2017; 1:30 PM – 3:30 PM**

**NC Department of Environmental Quality**

**Archdale Building, Ground Floor Hearing Room, 512 N. Salisbury St., Raleigh, NC 27603**

**Welcome/Introductions** – Joseph Sloop, Chair, called the meeting to order and welcomed Kenneth Taylor, Alice Wilson, John Bridgers, Rich Elkins, Cam McNutt, Sarah Wray, Hope Morgan, Jeff Essic, Sean McGuire, Watson Ross, Tim Johnson, Joe Sewash, Darrin Smith, David Giordano, Jeff Brown, and on the phone Camille Tyndall Watson, Marcus Bryant, Silvia Terziotti, and Steve Averett.

## Minutes

The committee approved the April 19, 2017 Minutes as written.

## Framework+ Datasets

Mr. Sloop called on members to report on opportunities, development, maintenance, and issues for Geospatial Framework datasets for North Carolina.

- *ORTHOIMAGERY*

Darrin Smith (CGIA) provided a brief status report on the Statewide Orthoimagery Program funded by the NC 911 Board.

Mr. Smith demonstrated the NC Orthoimagery Program [website](#) and the information organized by 4-year cycle and by phases within the cycles. An overview includes links to technical resources and to imagery access via NC OneMap. An enhancement is a tool to display the extents of the county mosaic files. A tile index is another addition.

The site includes acquisition dates of imagery anywhere in the state as well as project status.

The Eastern Piedmont phase (2017) is in progress and on schedule. The project team is resolving radiometry or color balance between samples of overlapping images from contractors at strategic locations where their study areas meet. Color adjustments will make the imagery more consistent and enable the team to focus on other imagery quality issues during quality control. Delivery orders will be condensed from six to three to support the goal of delivery final products in December instead of January. The online visual quality review tool is in use again.

For the first time, the work flow makes imagery viewable by the project team two months before the imagery is issued for state and local government review. This is an advantage for setting color adjustments earlier in the process. This will enable quality reviewers to focus on geometry and artifacts.

For the next phase, the Northern Piedmont and Mountains (2018), the project team has a

goal of completing all contracting by Thanksgiving to give local governments more time to plan to piggy-back on the imagery acquisition contracts to purchase other imagery-related products as needed.

- *CADASTRAL*

Jeff Brown and John Bridgers (Working Group for Seamless Parcels) reported that 94 counties are updated in the NC Parcel Transformer in 2017. Also, 52 counties are now registered with the Transformer for self-operation. Another 22 counties have readily downloadable parcel data for transforming. The NC Parcels program relies on continuous operation of the cloud application by the Carbon Project, Inc., technical assistance from the Working Group for Seamless Parcels, CGIA, and NC OneMap, with cost share from NCDOT, NCDA&CS and CGIA.

Next steps are to plan for the fall 2017 update, maintain statewide parcels in NC OneMap as web services and downloadable data, provide technical assistance to counties as needed, continue to build stock of “do-it-yourself” counties, continue to improve population of priority data fields, and find a solution for sustainable, full funding to operate and maintain statewide parcels as an enterprise resource. The working group displayed a 2-page description of the project and its annual cost to support efforts to find a funding solution.

In response to Mr. Sloop’s question about how the 2-pager will be used to help sustain the valuable program, Mr. Brown explained that in the short term, it will be used to inform other state agencies of the cost-share arrangement and need for more partners for modest amounts. Mr. McNutt explained that the GeoTeam in the Department of Environmental Quality proposed including an amount to support NC Parcels in a chargeback model involving all divisions. In the longer run, the piece will be used in efforts to find an enterprise source of continued funding for the annual cost, currently estimated as \$75,000 including \$30,000 for operation and maintenance of the application in the cloud and the equivalent of \$45,000 in labor if hours were billable. If all counties were operating the NC Parcels Transformer twice a year, staff time would be reduced but not eliminated considering the quality control required for each county transformation, administration of the tool, and communications to county data managers.

Mr. Johnson observed that NC Parcels is communicated as a complete, current statewide resource and consumers expect 100 counties to be updated twice a year. It needs to be reliable. Mr. Bridgers is working on the final six to facilitate participation. He has contacted two of the county managers to emphasize the value of current parcel information in the event of a hurricane or wildfire. There is not a common reason for delay for the six counties. Timing of tax data updates and changes in GIS or tax office personnel are among the factors.

Alice Wilson commented that discussion of wildfire issues among state and local government users at the Esri User Conference confirmed that parcels are very valuable in emergency response.

- *ELEVATION*

Hope Morgan (Department of Public Safety) reported on North Carolina LiDAR. Phase 4 processing is in progress with a focus on classification of points. She displayed a progress map and a table of percent complete by task. Metadata is complete except for a few items to resolve with US Geological Survey and to insert final dates.

Modification of the spatial data download function is required to accommodate the new tiling scheme for the more data intensive Phases 4 and 5: tiles of 2,500 by 2,500 feet instead of the 5,000 by 5,000-foot tiles used for Phases 1-3. Also, instead of waiting for full phase completion, finalized data will be loaded for download by county as they are completed. Anson County will be the first and is expected in about two weeks.

Collection of LiDAR for Phase 5 is complete. Calibration will begin soon. In a change in work flow while waiting for full funding for Phase 5, NC Emergency Management will provide a fully automated version of the ground to NC DOT as an interim product for projects.

- *HYDROGRAPHY*

Cam McNutt of the NC Department of Environmental Quality (DEQ) gave an overview of the hydrography datasets used in the department to help clarify the context for developing a common representation of hydrography. First, the 1:24,000-scale high-resolution National Hydrography Dataset (NHD) is used by field staff for situational awareness. It is used in map viewers to display at a large scale. Business data are not attached to this dataset. DEQ references the dataset in rules. DEQ is using the dataset as-is and is not maintaining it.

Second, Mr. McNutt described the “1:100,000 Plus Hydrography Classifications” that is used for display of stream classifications, application of rules, and planning purposes. The “Plus” means the 1:100,000-scale hydrography lines were fit to 1:24,000-scale geometry to better represent location, and some missing waterbodies in the original data were added for a more complete dataset. It contains 7,424 names about 4,000 of which are not the same as names in the federal Geographic Names Information System (GNIS) or the NHD. For example, three stream segments may have one name in GNIS and three names in the DEQ stream classifications. The DEQ dataset consists of 12,276 classified segments. DEQ modifies the dataset once or twice a year to integrate reclassifications such as classification of a reservoir as a source of drinking water, also affecting classification of its tributaries.

Third, DEQ maintains the “1:100,000 Plus Hydrography Assessment Units.” There are 13,403 assessment units based on available data. These are used by DEQ for display of Water Quality Assessments (303d list; impaired waters) and for planning and federal reporting. DEQ edits this dataset, with about 100 to 150 new assessment units added every two years, typically from split segments or tributaries from 1:24,000-scale data that need to be assessed. For example, three segments may be divided into 12 assessment units to represent water quality based on field data points.

Fourth, the Headwater Stream Spatial Dataset (HSSD) continues to be under development by DEQ with support from NCDOT. The dataset consists of modeled streams based in part on elevation. It is intended for transportation planning. The modeling works best in rural areas where there are fewer roads that complicate the models. About 40 percent of the state has been modeled, mostly in the Piedmont. The Coastal Plain will probably need a different approach. Mr. McNutt added that planners use the “local resolution” stream data in the mountain areas that were completed by the NC Stream Map project in the previous decade. Mr. McNutt will get information about the expected time frame for building out HSSD for the next SMAC meeting.

DEQ plans to combine the two “1:100,000 Plus” datasets in a common geodatabase for management purposes. DEQ needs to create a retirement system for assessment units as the dataset changes for efficiency. The department is considering hydrography centerlines, for example through reservoirs, for stream connectivity. The HSSD team will continue its work. The department plans to work with the Stream Mapping Advisory Committee on a unified hydrography dataset for North Carolina.

In response to a question from Sean McGuire about representations of streams for floodplain mapping purposes, Hope Morgan explained the processing. Starting with 1:24,000-scale streams, the Floodplain Mapping Program (FMP) modifies and adds stream segments based on stream studies and engineering factors. One of the goals of the effort is to share the data in a process to be determined. The purpose of DEQ streams is to display information about water quality attached to the segments. This is quite different from the purpose of FMP streams which is to determine how much water will flow where in flood conditions. Mr. McNutt acknowledged that DEQ streams, especially in coastal areas, do not represent well what is on the ground. DEQ does not currently have the resources to digitize the coastline every two years. DEQ streams are representations of what 1:24,000-scale lines appeared to be, many years ago. It remains to be determined how FMP geometry, where streams were studied, can be applied to DEQ datasets in ways that support DEQ workflows and business processes. The wording of state law is a factor in the “to” and “from” locations of classified streams. Multiple processes will need to come together.

Ms. Wilson added that local government GIS users would benefit from guidance about which dataset(s) to use for purposes of vegetated stream buffers and concepts of intermittent and perennial streams. Mr. McNutt noted that DEQ does not use intermittent and perennial classifications; consult the NHD for that. Stream buffer rules in the Neuse and Cape Fear river basins point to 1:24,000-scale streams or soil maps published by the Natural Resources Conservation Service.

In response to a question from Mr. Johnson about the Stream Mapping Advisory Committee, Mr. McNutt observed that a unified representation of streams depends on funding but also decisions by decision makers in multiple organizations to commit to developing and maintaining such a dataset. The committee needs to make a recommendation. Resolving datasets in DEQ is a necessary first step in the process.

- *GEODETIC CONTROL*

Hope Morgan reported on behalf of Gary Thompson. The 2022 Reference Frame Working Group is developing recommendations for implementation of the new reference frame. NC Geodetic Survey is working with SC Geodetic Survey to develop common implementation plans. Current work includes obtaining ellipsoidal heights on NAVD88 benchmarks. Gary Thompson presented to the National Geodetic Survey's Geospatial Summit.

**Data required and strongly recommended for Next Generation 9-1-1**

Mr. Sloop emphasized today's attention on the Geospatial Framework datasets that will be most valuable for emergency communications in NextGen9-1-1 in North Carolina. In thinking about this topic from perspectives of SMAC and local government, Mr. Sloop concluded it would be appropriate for SMAC to develop an opinion on leveraging geospatial datasets in support of NextGen9-1-1. After this meeting, he will distribute a draft for review and comment. He stressed the importance of geospatial data for governmental units, transportation, and address points and the opportunity to apply statewide datasets in support of emergency communications. He invited feedback to himself or Tim Johnson. Mr. Sloop will also ask for review by the Local Government Committee (LGC). Mr. Johnson confirmed it is appropriate for SMAC to weigh in on how these datasets can be put together and sustained to meet NexGen9-1-1 requirements. Ms. Wilson added that LGC discussed the topic and members were eager to know what will be required of local GIS units and when.

- *GOVERNMENTAL UNITS*

Regarding county boundaries, Watson Ross reported on behalf of Gary Thompson. The NC-SC Boundary Project is complete. Plats have been recorded in all border counties. GIS data is available from NC Geodetic Survey. Next, work begins on the NC-VA boundary.

Twelve county boundary projects are in progress with the assistance of NC Geodetic Survey. All plats were recorded to finalize the Greene-Lenoir boundary effort. Mr. Ross expect the county boundaries shapefile to be updated soon, and he confirmed he will share that with NCDOT for discovery and access via NCDOT and NC OneMap. Ms. Morgan pointed out the importance of current county boundaries, particularly for floodplain mapping.

Regarding municipal boundaries, Sarah Wray reported on behalf of John Farley. The NCDOT Powell Bill boundaries will be updated late this year and published in February 2018. She noted that digital submittals are not required, so some digitizing is required. Mr. Bridgers reported that the Land Records Management Program continues to work to obtain annexation data from municipalities. Counties are assisting in outreach. The Boundary and Annexation Survey for the Census Bureau is another way for Mr. Bridgers to discover annexations that should be reported to the Secretary of State but sometimes are not. Information reported to the Secretary of State and the Census Bureau should **be** acreage, annexation ordinance number and annexation date. He found that the Powell Bill has a complete set of municipalities, in agreement—with minor exceptions—with the other lists of incorporated places. The Census has additional places listed as "Census

Designated Places” that are not incorporated. The Secretary of State has a database of municipal charters including repealed charters of formerly incorporated places that is useful in researching place names. While the geometry in the Powell Bill dataset is not perfect, Ms. Wray confirmed that the orthoimagery base and parcel data have been valuable in improving geometry in recent years and increasing confidence in the boundaries. In response to a question from Ms. Morgan, Ms. Wray checked and confirmed that boundaries for extraterritorial jurisdictions (ETJ) are not collected along with municipal boundaries for the Powell Bill. The Floodplain Mapping Program uses ETJ boundaries in its stream studies.

- *TRANSPORTATION*

Sarah Wray (NCDOT) reported that reduction of the backlog of projects is in progress. The system for roads and highways is running and affording time to catch up on editing, with priority on the larger, more complex highway projects. The next publication date for roads is August 14 including road characteristics and routes and map services. A new “RoadNC” product for all public roads is updated nightly and is available as a [map service](#). NCDOT will work to make it more discoverable for consumers.

- *ADDRESSES*

Joe Sewash (CGIA) reported the *AddressNC* project is in the planning stage in DIT’s Touchdown project tracking system. First release of address data is targeted for February or March 2018.

The National Address Database has acquired developer support and North Carolina will be forwarding its 2014 address data to US DOT next week and will send periodic updates as they are available from *AddressNC*.

CGIA has worked with Bob Coats, the Governor’s Census Liaison, to identify a LUCA Liaison for the State of North Carolina in statewide address issues. Luis Carrasco, *AddressNC* Project Manager, has been named, subject to Census Bureau approval.

The Federal Geographic Data Committee (FGDC) Address Theme Subcommittee has established a working group for state and local update workflow requirements. State representatives are Joe Sewash of NC and Dan Ross of Minnesota.

### **SMAC Priorities and Work Plan**

Mr. Sloop invited a continuation of the discussion from the last meeting, starting with SMAC goals for the SMAC work plan. He asked members to start fresh, set aside specific tasks, and focus on priorities related to statewide mapping and analysis. He called on Mr. Brown to facilitate a discussion. Mr. Brown asked: If geospatial data quality may be described by data completeness, consistency, currency, good documentation, and reliability for supporting decisions, then what are the priorities for statewide geospatial data, today and tomorrow? For the needed quality of existing or new datasets, what are requirements? How are benefits measurable?

Mr. McNutt offered that a single representation of hydrography, no matter how flawed in its consistency with on-the-ground conditions to begin with, would be a valuable starting point. It

would be a single source for attaching business data for many different purposes. It would be a base from which to start editing geometry in a systematic way to better represent what is on the ground. Maintenance is essential and a lot of work. He sees more interest in DEQ for high quality hydrography data, especially as data are more prominent in public facing applications. Regulation, planning, and other applications would benefit. Uses of such a dataset would need some constraints and qualifiers, dependent on where in the state it is and other factors. Currency and lineage are important factors. Getting users to focus on a single hydrography dataset for mapping and analysis is a challenge. Mr. McNutt emphasized the need is clear. A plan from 2004 is still relevant.

Mr. Sloop confirmed the value of a common hydrography dataset from the local government perspective. Mr. McNutt sees more executive support as consumers “zoom” in to maps and realize the water is not where the map indicates. Rules constrain what can be regulated, especially if a stream is not on a map. Urban storm water networks and permitting complicate the picture, requiring much work by local governments that is not integrated into state datasets. Ms. Terziotti confirmed the priority for improved stream maps, pointing out the accuracy of other datasets including LiDAR and orthoimagery and the need for consistency between datasets. She sees a lot of interest and sources and people willing to pitch in. Unfortunately, USGS has no NHD funding available for states.

Considering the Geospatial Framework datasets in North Carolina, members observed that hydrography needs the most improvement. Ms. Morgan emphasized the importance of clarifying business needs and identifying the keeper of the unified data. Business requirements from 2004 could be updated with new requirements. A current constraint on defining business requirements in DEQ is the impasse on updates to the state’s water quality rules. For example, the rules still point to the GICC as a body to approve a new representation of a stream.

Members began discussion of other data needed priority attention this year. Ms. Wilson described local government interest in pedestrian trails and bicycle transportation and noted the lack of a comprehensive statewide dataset. Ms. Wray offered to break out transportation modes in reporting to SMAC to inform the committee on rail, bicycle-pedestrians, airports, ferries, etc., to fully assess transportation data. This could be informative to metropolitan and regional planning organizations. Mr. Sloop emphasized the value of statewide street centerlines and address points for applications of network analyst and emergency response purposes and NextGen9-1-1.

Mr. Johnson would like to see SMAC develop a position paper on how North Carolina should provide support to NextGen9-1-1 and offer it through the GICC and ultimately to the NC 911 Board. A coordination opinion of what SMAC thinks should happen would be valuable and timely if submitted by September 30. This could grow out of the opinion piece drafted by Mr. Sloop.

Ms. Terziotti observed that, although land cover is not a Framework dataset, there may be a new opportunity to represent land cover based on LiDAR, orthoimagery and other data, using new tools and perhaps simpler classifications. Mr. McGuire concurred. Mr. Brown pointed out an absence of business requirements for land cover within SMAC to inform a collaborative effort.

Might there be a subgroup to work on requirements and opportunities? Ms. Terziotti will be glad to work on it with other interested members.

### **Geospatial Data Act of 2017**

Mr. Sloop introduced the topic and called on Mr. Sewash and Mr. Johnson to describe the legislation and the current situation. Mr. Sewash explained that the National States Geographic Information Council (NSGIC) has worked with Senator Hatch's office for a number of years to develop the language in [S. 1253](#). Throughout NSGIC's 26-year history it has had strong associations with the Federal Geographic Data Committee (FGDC) and the General Accounting Office (GAO) as well as close relationships with a variety of federal agencies. The NSGIC intention has been to be the states' voice for national policy supporting National Spatial Data Infrastructure (NSDI) initiatives. The work with Senator Hatch's office began in earnest in 2013. There were previous versions of the bill: S. 740 in 2015 and House Resolution 6294 in 2016 intended to be companion first-time bills to get feedback from committees. The Management Association for Private Photogrammetric Surveyors (MAPPS) has been working with other staff in the House on legislation called "Map it Once and Use it Many Times" initiated in 2011.

Concerning the 2015 version of the Geospatial Data Act, MAPPS contacted congressional sponsors and staff to indicate issues with the bill. In 2016, NSGIC facilitated a discussion with MAPPS, legislative liaisons and sponsor staffs to find a way to update the 2015 and 2016 versions to satisfy objections from MAPPS. In the 2017 version, the primary difference is inclusions developed in Section 11 that deals with the definition of geospatial products relative to the Brooks Act and the Federal Land Asset Inventory Reform (FLAIR) Act as they pertain to federal agencies.

Mr. Johnson added that the most significant change is additional language in Section 11 that calls for private firms to do surveying and mapping, and to also provide geospatial data and services. One concern is that the language would keep federal agencies from engaging with a university or state or local government. The view of NSGIC is that the bill is not going in the direction of restricting GIS professionals in the public sector, as stated in a NSGIC release. Also, Section 12 states "Nothing in this Act shall preempt the laws of any State relating to the performance of services of a surveying, mapping, or geospatial nature which, to any extent, are required to be performed or approved by a person licensed, registered, or certified to provide such services under such State law."

Mr. Johnson explained that the overall purpose of the legislation is to strengthen the FGDC and the NSDI and make oversight and coordination more effective. The bill would add accountability for federal agencies in geospatial operations and support collaboration and efficiency to the benefit of national geospatial datasets.

Mr. Sewash continued by describing statements from the Association of American Geographers and the Urban and Regional Information Systems Association on the Geospatial Data Act of 2017 and offered to follow up with links to statements and resources. The main concern is that the language of Section 11 could lead to reinterpretation of the federal Brooks Act as it applies to federal agencies. NSGIC and staff from the Senate sponsors have been working with the Congressional Research Service during the past three weeks to interpret the language. Mr.



Sewash emphasized it was never NSGIC's intent to reopen or modify the Brooks Act applied to federal agencies. State and local governments are not affected unless federal funds are involved. Last week the Coalition of Geospatial Organizations (COGO) met in San Diego to discuss the legislation and is forwarding information to the sponsors. Just today, Mr. Sewash learned that the Congressional Research Service recommended amended language for Section 11 that will be introduced as an amendment to clarify that the Geospatial Data Act does not affect the Brooks Act.

Kenneth Taylor expressed concern about the impact on federal government geologists and GIS practitioners. Federal employees in the US Geological Survey have performed mapping and analysis for 200 years. The National Geological Mapping Act of 1992 defined a cooperative geologic mapping program that included a federal share, a state map, and the training of students to become geologic mappers. Maps were developed at 1:24,000-scale. Dr. Taylor cautioned that geologic mapping—and use of data produced by state geologists—outside of the agency risks losing knowledge about the details, quality, and documentation of the maps. He learned that his fellow state geologists are upset about the Geospatial Data Act of 2017, seeing it as giving an advantage to private firms who will begin doing geologic mapping in states. He is passionate about accurate locations of rocks in the context of dynamic data, particularly locations of streams and property boundaries. He acknowledged the value of statewide LiDAR-based elevation data and statewide orthoimagery. Positions papers from SMAC need to be concerned about privatization of state and local mapping functions and its adverse impact on public agencies and data quality.

In addition to attention to the Geospatial Data Act of 2017, Mr. Sewash suggested careful attention to the NC Board of Examiners for Engineers and Surveyors and the model law that defines what constituents surveying and engineering in North Carolina. The Working Group for Professional Land Surveying and GIS has been working on the issue over the last year. Ms. Morgan observed that the overarching goal is to improve data and get federal agencies to work well together, which is a good goal.

Mr. Sloop welcomed members to contact him with more comments. This will be a topic in the August Council meeting as well.

## **Working Groups**

### *WORKING GROUP FOR ROADS AND TRANSPORTATION*

Sarah Wray reported that NCDOT is exploring a way to piggyback on the NC Parcels Transformer hosted by the Carbon Project, Inc. The first implementation of a transformer in North Carolina was the Carbon Project's transformer for street centerlines. The project was funded by an FGDC grant and managed by the Working Group for Roads and Transportation. It was populated with county centerline data in 2012, but has been idle since. The NC Parcels Transformer, implemented in 2014, is an upgraded and improved version developed to accommodate multiple data themes. A challenge for integrating local roads data is the requirement for data connectivity of road segments to represent a state and local statewide road network. Parcels are updated wholesale, but roads need attention to changes from the previous source dataset.

#### *METADATA COMMITTEE*

Sarah Wray (NCDOT), chair, reported that four members of the committee—Ms. Wray, Mr. Brown, Lynda Wayne, and Dr. Tim Mulrooney—attended the ISO Metadata Summit in Reston, Virginia on May 24. North Carolina did a 20-minute presentation and participated in breakout sessions. Members also participated in a tools workshop on May 23, some remotely. The team was well received and heard good feedback. Federal agencies tend to be working hard to meet their own requirements to satisfy executive orders and have not made progress in a federated approach to geospatial data and metadata. Several federal agencies have their own metadata editing tools. The committee will explore how to take advantage of the concepts and tools demonstrated at the summit.

Next up for the committee is integration of the forthcoming XML schema 19115-3 for ISO metadata, expected in August. Tool providers need to integrate the schema into their tools to enable full implementation of ISO 19115-1 and validation of metadata records.

For training, the committee did an online survey for gathering training requirements from state and local government data managers. Tim Mulrooney and Craig Pederson of North Carolina Central University (NCCU) will update the YouTube channel for metadata training materials and tutorials and schedule training sessions later this summer.

#### *STREAM MAPPING ADVISORY COMMITTEE*

Cam McNutt (NCDEQ) added that the committee needs to catch up with USGS on the latest developments at the federal level. He will notify the committee as soon as the state's water quality rules are approved and released. That will set the stage for the committee to meet and address stream mapping needs in the context of the new rules.

#### *ORTHOPHOTOGRAPHY PLANNING*

Hope Morgan reported on behalf of Gary Thompson. The group met July 17 to be briefed on the status of the Statewide Orthoimagery Program and to discuss other imagery and elevation items. For the National Agriculture Imagery Program leaf-on 2016 imagery has been published and an image service is ready to be added to NC OneMap. David Giordano confirmed it is now discoverable and accessible through the NC OneMap Geospatial Portal. NAIP appears to be moving to a three-year cycle for North Carolina. Regarding LiDAR, the ground data being prepared for NCDOT will be available for application in the ortho-rectification for the 2018 Northern Piedmont and Mountains phase of orthoimagery.

On behalf of the working group, Ms. Morgan requested approval of the charter for the working group as distributed to SMAC for review two weeks ago. The proposed name is the Working Group for Orthoimagery and Elevation and the focus is on those two Framework data themes.

Decision: SMAC approved the Charter for the Working Group for Orthoimagery and Elevation.

Ms. Morgan presented the completed Plan for Maintaining Elevation Products Derived

from LiDAR Data, distributed to SMAC two weeks ago for SMAC information. She added that she learned that Esri's ArcPro software has tools for smoothing contours that have potential to be applied by NC Emergency Management (NCEM) for that piece of the plan.

Also, NCEM has a grant from the Department of Homeland Security to collect oblique imagery at public school sites for the school safety project. Acquisition will be done with unmanned aircraft systems (UAS). On the topic of UAS, NC Geodetic Survey now has more permissions including permission to fly over people in emergency situations only. NCDOT Aviation Division is the point of contact for information.

#### *NC BOARD ON GEOGRAPHIC NAMES*

No report.

#### *2022 REFERENCE FRAME*

Hope Morgan reported for Gary Thompson. The new reference frame names will be "North American Terrestrial Reference Frame (NATR2022)" and North American-Pacific Geopotential Datum of 2022 (NAPGD2022)" realized by "GEOID2022." Gary Thompson recommends a beta site by National Geodetic Survey for a coordinate conversion tool NADCON 5.0.

### **Regular Status Updates**

#### *NATIONAL GEOSPATIAL PROGRAMS OFFICE*

Silvia Terziotti reported that USGS released the Fiscal Year 2018 Broad Agency Announcement (BAA) from the 3DEP program for LiDAR data. There is room for other federal or state agencies to share costs for related products such as hydrography and specific LiDAR processing after LiDAR data are complete.

#### *NC ONEMAP*

David Giordano reported on data updates in the last quarter. NC Department of Natural and Cultural Resources updated biodiversity/wildlife habitat assessment areas, natural areas, natural heritage element occurrences, managed areas, and federal lands. NC Department of Agriculture and Consumer Services updated gas station locations. State Property Office updated state owned lands as well as nonpublic schools from information from the Division of Nonpublic Education.

### **In-Meeting Task Review**

Mr. Sloop confirmed that he will distribute to SMAC members the draft opinion on geospatial data and NextGen9-1-1. Mr. Sewash will provide information on the Geospatial Data Act of 2017.

**Adjourn** --The meeting adjourned at 3:25 PM.

### **2017 SMAC Meeting Dates**

Wednesday, October 18, location to be determined in consultation with the Chair.