

# NC Statewide Mapping Advisory Committee Meeting Minutes

Wednesday, January 11, 2012; 1:30 PM – 3:30 PM

Office of the Secretary of State

4701 Atlantic Ave., Suite 116, Raleigh, NC

Conference Call Number: 919-212-5735

Web Conference: <https://its.ncgovconnect.com/ncom>

Attending: Anne Payne, Tom Morgan, Kelly Eubank, Alice Wilson, Chris Tilley, Silvia Terziotti, Hope Morgan, David Giordano, Tim Johnson, Keith Johnston, Jeff Essic, Mike Mull, Sean McGuire, Jeff Brown and on the phone, Stephen Dew

**Welcome/Introductions** – Anne Payne, Chair

- *Approval of October 12, 2011 Minutes* -- approved

**NC Geographic Information Coordinating Council**

- *Council Update* – Tim Johnson

The GICC meeting in November included a 7-part presentation on uses of GIS related to Hurricane Irene. It was very well received. Action items that emerged from the meeting:

- Distribute “Transportation for the Nation” to the GICC and committees.
- Share the Geospatial Maturity Assessment results
- Edit and shorten the PPT on Irene (is this online?)
- Seek participation on the Working Group for Orthoimagery Planning from the Association of Assessing Officers.

During the meeting, the GICC:

- Approved bylaws for the NC OneMap Governance Committee and approved revised bylaws for the GICC to accommodate the new committee.
- Adopted NC OneMap accountability measures
- Adopted revisions to the water and sewer data content standard

Also, GICC Chair Dr. Lee Mandell presented the GICC’s annual report to the Joint Legislative Oversight Committee on Information Technology on January 5. He emphasized the uses of geospatial data and the role of NC OneMap and accomplishments of the GICC. Tim noted that there are several legislators with IT backgrounds on the committee and there were many good questions. It was a positive experience.

- *State Government Committee* – Hope Morgan/Sean McGuire

Sean reported that the SGUC Executive Committee met in late October. SGUC is looking to coordinate with TAC on technical architecture issues. The General Meeting in November included a presentation on the GIS Professional (GISP) program to update members on current requirements and opportunities. Esri presented ArcGIS 10.1 and

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ArcGIS online. Hope Morgan presented an iPad application for emergency management. SGUC members also participated in GIS Day in Raleigh. Upcoming meetings are 1/26 (Executive Committee) and Feb. 16 (General Meeting).

- *Local Government Committee* – Alice Wilson/James Armstrong  
Alice reported that the LGC met on December 7. Items included interest in the working group on Census data. Tobin Bradley of Mecklenburg County is on the Technical Advisory Committee, and he expressed support for the direction of the application development of a new viewer for NC OneMap. Alex updated the LGC on the grant project for street centerlines. LGC is also participating on the Working Group for Orthophotography Planning. Chris Koltyk emphasized that orthophoto quality review by counties could be more complete and done earlier in the process.

LGC also had discussions about National Elevation Data and parcels. LGC is very interested in the seamless parcels effort, and especially appreciates the work of Tom Morgan as leader of the working group. On the topic of evaluation of grant proposals, the December 7 meeting included encouragement for a process (that would avoid endorsement of grant proposals that cannot be practically carried out). At the meeting, Jeff Brown led a discussion about metadata—opportunities, constraints, and trends. Alice noted that metadata creation can be time consuming upfront, but maintenance of metadata would be easy for many datasets. The conversation included a distinction between metadata for published data and documentation of project or operational data. The group recognized that Esri products are changing with implications for metadata management and that implementation of the ISO metadata standard and related tools are on the horizon. Alice added that time will always be an issue for data producers and that training opportunities, perhaps from CGIA, would be appreciated.

LGC is working on communications, including an article about the “LGC at Work” submitted to the newsletter of the Property Mappers Association. LGC is looking at content and submissions to Carolina URISA, the NC League of Municipalities, and the NC Association of County Commissioners.

At the next meeting, the LGC is looking forward to learning more about Next Generation 911.

- *Federal Interagency Committee* – Silvia Terziotti  
The FIC has not met since the last SMAC meeting. Regarding the federal land ownership layer, the FIC Executive Committee expects a report from Tom Colson (who is leading the working group) when the committee meets near the end of January.

Silvia added that the FIC is gathering information about federal agency interest in color

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infrared imagery from the Coastal 2012 project.

## Work Groups

- *NC Board on Geographic Names* – Dr. Tyrel Moore

Anne reported that the Board will meet soon. There has been no Board action since the last SMAC meeting.

- *Roads and Transportation* – Chris Tilley/Alex Rickard

Chris reported that the Working Group for Roads and Transportation (WGRT) has its contractor on board (Carbon Project) to develop a translator to enable upload and integration of street centerlines into a standardized statewide layer. The group met on November 17 and set the following tasks for the contractor:

- Develop a master schema for a statewide road layer, utilizing the NC Community Street Centerline Data Exchange Standard. Data will be stored in a cloud service (in GML).
- Develop a web transformer (CarbonCloud Transformer)
- Develop tools to compare new uploaded data to previously uploaded data.

Alex has volunteered for data to be housed at Eastern Carolina COG. The contract with the Carbon Group has been signed. The FGDC CAP grant may need to be extended beyond the current end date of April 30, 2012.

- *Railroads*

A subcommittee of WGRT with added subject experts has been working on a new statewide rail layer. The group includes Chris, Tom Morgan, John Farley, Kristian Forslin, Ric Cruz, David Foster, Dylan Liverman, Sarah Wray and Janet Lowe.

Chris explained that the NC DOT Rail Division agreed to take ownership of the rail data in October. On November 15<sup>th</sup>, the subcommittee met to talk about the rail data model. The digital rail layer needs some line editing along with a set of standard attributes. Ric Cruz described a phased approach to releasing data. The group discussed the FGDC transportation standard. Ric Cruz and David Foster will draft a document describing a rail data model. John Farley will distribute the document to stakeholders for review and comment.

The group also discussed data access. John Farley stated that the data could be provided through the NCDOT web distribution page. Chris noted that access through NC OneMap is a goal as well. Quarterly updates of the dataset are anticipated. Chris added that he is exploring ArcMap training options for the Rail Division.

Contract work on the rail layer is temporarily on hold while NCDOT resolves

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some funding issues.

- *Seamless Parcels* – Tom Morgan/Pam Carver  
Tom Morgan reported on the status of the EPA seamless parcel grant. Jeff Harrison of the Carbon Project has rewritten the statement of work to accommodate an ArcGIS approach. Tom explained that the Carbon Project is uniquely qualified to do the project. Tom drafted a sole source justification for the Carbon Project doing the application development. Tom added that Nancy von Meyer could be the content manager for the project. She is a national expert on parcels. Tom and John Farley have offered to manage the technical aspects of the project, but an administrative home needs to be identified. Tom explained that ownership of this pilot project by ITS would imply that CGIA would handle contractor invoices. The project will not utilize State servers, which could mean that the project may be listed with the State but not part of Enterprise Project Management (not confirmed). EPA, the grantor, would need to approve the changes and substitutions. Tom anticipates contacting EPA with the Carbon Project documents in hand. Tim added that DENR would need to agree to transfer the project to ITS.
  
- *Orthophotography Planning* – Gary Thompson  
The Working Group met on January 9.
  - Tim Johnson and Darrin Smith gave the group an update on the Coastal 2012 orthoimagery project. As in 2010-2011, the Working Group is serving as a technical advisory group for the project.
  - Gary reported that the NAD 1983 2011 adjustment is delayed until April.
  - Gary is the NC representative on the National Geospatial Advisory Committee and will have documents to share later this month.
  - The proposed LightSquared 4G project appears to be delayed by a provision in the Department of Defense budget bill.
  - The group reviewed the new NC LIDAR standard presented by Tom Morgan and recommended that SMAC recommend endorsement by the GICC.
  - Geodetic Survey has taken ownership of the statewide county boundaries dataset. Geodetic Survey updated the DOT version and it is now available. Gary asked the group to send any official county boundary updates to Dennis Lee in Geodetic Survey. The statewide file will be updated as modifications become available. Gary will send out a notice to stakeholders when data are updated. Geodetic Survey is working on metadata by boundary. David Giordano and Gary agreed that users will be able to discover the county boundaries through the Geospatial Portal one way (served by Geodetic Survey) or another (served by NC OneMap). Hope Morgan requested that the dataset name make clear that it is the official set of county boundaries (there are variations available now).

Tom Morgan pointed out that county boundaries are related to other geospatial data

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layers. Many county boundaries are defined by rivers and streams. Could updated county boundary surveys be applied to “blue line” (1:24,000 scale classified) streams? This is a question that needs discussion with the Division of Water Quality with attention to water quality rules and regulation. Other county boundaries are defined as ridge lines, some of which have been surveyed recently. In any case, county boundary changes become official in NC by approval by the Council of State and a proclamation by the Governor.

Gary found that county boundaries need to go through the Boundary and Annexation Survey (BAS) process (with Tom Morgan’s help) before that get integrated in federal datasets including those managed by USGS. County boundary adjustments can be conveyed through a county BAS submittal.

- *Standards Working Group* – Tom Morgan  
Standards group met in early December. Doug Nebert of USGS gave an online presentation about FGDC standards and the current approach. FGDC is adopting other federal IT standards and looking to take advantage of new software and formats.

Looking ahead, Kelly Eubank will give a presentation on data sensitivity and data sharing. She will review the FGDC decision tree. Hope Morgan asked about security issues, particularly related to the Department of Homeland Security (DHS). Strict rules apply to data handled by DHS. Much like the Bureau of the Census with address lists, DHS cannot send data back to Hope that she shared with DHS to begin with. She urged the standards working group to consider the DHS security angle, too. Tom added that he would like to be sure that we have access to the data we need and lock down only what we definitely need to restrict.

The group plans to work on guidelines for a developing a new or revised standard. After guidelines are clarified, the group will review of current standards and begin work on consideration of adoption of additional FGDC standards.

## Regular Status Updates

- *National Geospatial Programs Office*  
Silvia Terziotti will meet with USGS Liaisons next week. NGPO is consolidating liaison responsibilities. “Communities of Use” are coming into play that are more focused on science areas of USGS. This implies steering away from geospatial framework data. Silvia will have more information after the meeting. USGS will not replace the retired Steve Strader with a new hire. Instead, SC liaison Gary Merrill will cover NC and SC. CGIA and Anne will be included in a meeting with Gary Merrill. Silvia invited questions and issues from SMAC members.

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- *Floodplain Mapping Program* – Hope Morgan  
The program is currently working on map maintenance in 16 counties in FY10 and 15 counties in FY11. Scoping is underway for another 12 counties. Paper flood insurance rate maps are in phase-out. Only 8 more counties in NC will be done traditionally. In the new digital approach, there will be map in PNG format and an online application for generating DFIRMs in areas of user interest. NC is the pilot state for the digital effort. An online application will enable a user to request DFIRM and panel number, check a parcel, pan around a map and print “mini-maps” based on the DFIRM layers. The digital depiction will be the legal version, not the paper maps.
- *NC OneMap* – David Giordano  
NC OneMap database now has gas station locations from NC Department of Agriculture and Consumer Services. Hope noted that this will be useful in emergency operations. The Wildlife Resources provided an update of statewide game lands.

A map viewer or “Data Explorer” is under development by CGIA. The TAC will review the next iteration on 1/20, followed by a review by the NC OneMap Governance Committee on 1/23. The NC OneMap team will make modifications based on the reviews and present the viewer to the GICC on February 8. David confirmed that the old viewer will be retired.

- *GeoMAPP* – Kelly Eubank  
The GeoMAPP project was completed at the end of December. Kelly explained that the four-year grant involving Utah, KY, and MT, both archives and GIS, was a success in many ways. The GeoMAPP team will present to GICC in February. The project also involved 18 states as informational partners and product reviewers.

Several products include best practices for archiving geospatial data. The project generated useful findings about emerging trends in packaging geospatial data, storage technologies, and business planning for geoarchiving. Project documents will be online by the end of this week (<http://www.geomapp.net>).

From here, the NC GeoMAPP team is moving to production. The team is reviewing and editing a retention schedule for NC OneMap datasets. Local schedules have been drafted. The intention is to continue to participate in GICC structure. There is also work to do to implement business case documents. The team is beginning talks about sustainable funding. For example, are there ways to build some preservation costs into projects? Costs may be quite small per TB.

At State Archives, there are 40 geospatial datasets available online using ContentDM software. State Archives has PDF versions of files to explore as well as html versions of

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metadata to help users decide what to download.

Anne advised that the GeoMAPP team work to get the word out on what is available. Kelly agreed and pointed out a newsletter and social media that are available. She noted that the Society of American Archivists recognizes outstanding documents, and GeoMAPP plans to submit one or more for consideration of national recognition.

- *Coastal Orthoimagery 2012*– Tim Johnson

Tim presented a set of slides that explained the status of the 2012 project. The project team includes NC DOT Photogrammetry, Geodetic Survey, Land Records Management, CGIA and private contractors. Tim noted that the Public Safety Answering Points (PSAPs) and local GIS coordinators will be included early in the quality review process this time.

10 orthoimagery vendors responded to the Request for Qualifications. The project team qualified seven teams of which it selected four to acquire and process orthoimagery: Atlas Geographic Data will handle northeast. Area 2 will be covered by Surdex (including Dare County bombing range). Area 3 is covered by Photo Science. The southeast is covered by Spatial Data Consultants (including significant military areas). There are some NC companies being used as subcontractors as well.

Tim explained that the team is working on military approvals to fly over installations and ranges and publish the imagery on NC OneMap. As with the 2010 imagery, there may be some restrictions, to be determined.

CGIA has an agreement in place with Geodetic Survey and is developing an agreement with NCDOT for quality assurance and quality control assistance. Tim showed a timetable and explained the next steps: contracts with service providers need signatures, military approvals are needed, there will be a kick-off meeting with contractors as soon as practical, and flights will occur in February and March.

The project team will communicate with PSAPs and local governments to discuss a review process. The review plan includes online access to imagery. Photo Science will host initial images for review, and there will be a tool for reviewer comments. Time spent when the imagery becomes available will pay off for locals. The review window will probably be 30 days. The results will be better than waiting until product release. Anne asked about the list of problems that can be commented on. She noted that the review criteria were fairly narrow for the 2010 imagery. Adhering to the criteria meant that there were not many issues to submit. Clarity of the criteria and examples will help the process.

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Silvia – will federal agencies have an opportunity to review imagery early in the process? She noted that if federal agencies were to review imagery over federal lands, then that would reduce the number of tiles for local review in some counties. Tim will consider an approach. Counties could involve federal groups if they wish (if access to the images works out). This would involve identifying federal parcels and associated tiles.

Will local governments be able to “buy-up” additional products? Tim explained that, for 2012 project, the 911 Board is not paying the contractors a 10 percent premium to carry the fourth band through processing. However, once contracts are signed, a notice will go to local governments informing them of the opportunity to negotiate with the contractor in their respective regions for additional products such as color infrared imagery.

For the 2013 project (eastern Piedmont) there will be a new Request for Qualifications to consider color infrared imagery and/or higher resolution imagery (e.g., 3-inch ground resolution in selected areas). Hope pointed out that the 3-inch resolution is a much bigger issue than processing a fourth band in the imagery. Higher resolution imagery involves more flight lines at lower altitude, more data to process, and significantly higher cost. Anne explained that some local governments are attracted to lower altitude flights because they support the creation of 2-foot contours. Another data opportunity relates to collection of LiDAR along with imagery. Tim explained that if the demand is known early on, there might be provisions in the contracts for 2013. For products identified, there will be work required to define costs, how it would work, who pays the increment, and how the increment is paid.

## Standards Review

- *Technical Specifications for LiDAR Base Mapping* – Tom Morgan  
The SMAC had opportunities to review draft and final submissions of Technical Specifications for LiDAR Base Mapping from Tom Morgan. Tom asked for and received SMAC approval. Tom requested a recommendation that the GICC adopt the LiDAR standard. SMAC approved the following:

SMAC recommends that the GICC (1) endorse the North Carolina Technical Specifications for LiDAR Base Mapping, dated January 3, 2012, and (2) recommend adoption of the standard by the Secretary of State.

Tom noted that Durham County is using the draft standard. Virginia and Mississippi requested and received a copy as well.

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## **New Business**

Anne pointed out that the SMAC work plan (circulated to the committee) was revised to reflect current status of tasks. Anne will review status after today's meeting and update the document as needed.

## **Action Item and Meeting Task Review**

No additional items.

## **Adjourn**

The meeting adjourned at 3:00 PM

### **2012 SMAC Dates**

Wednesday, April 11; 1:30pm – 3:30pm  
Wednesday, July 11; 1:30pm – 3:30pm  
Wednesday, October 10; 1:30pm – 3:30pm