North Carolina
Geographic Information Coordinating Council

Minutes
May 8, 2013

PRESENT
Chair, Dr. Lee Mandell. Members: Bob Brinson, David Baker, Marc Burris, James Caldwell, John Cox, John Dorman (for Kieran Shanahan), Ryan Draughn, Stan Duncan, Dianne Enright, Chris Estes, John Gillis, Derek Graham, Sarah Koonts, Dan Madding, Tom Morgan (for Elaine Marshall), Anne Payne, Art Pope, Sarah Porper, Alex Rankin, Linda Rimer, Hunter Robinson, Sharon Rosado, Allan Sandoval, Joseph Sloop (for Rebecca Troutman), Julie Stamper, Richard Taylor, Micky Verma, Keith Werner, Sarah Wray (for John Farley) and Ron York

Staff: Tim Johnson, CGIA

PROCEEDINGS

A meeting of the Geographic Information Coordinating Council was held in the Board Room of the Department of Public Instruction in Raleigh, North Carolina. Chair Dr. Lee Mandell called the meeting to order. Dr. Mandell noted that the meeting will be recorded to facilitate the preparation of the minutes and asked that everyone speak into the microphones.

The minutes of the February 13, 2013 meeting were approved with no changes.

Chair Announcements

Dr. Mandell introduced new members of the GICC – Art Pope, Office of State Budget and Management, represented by Sarah Porper; Chris Estes, State Chief Information Officer; David Baker, Director of Property Tax Section, Department of Revenue, representing Secretary Lyons Gray; and Keith Werner, Chief Information Officer for Department of Environment and Natural Resources, representing Secretary John Skvarla.

In addition several members were reappointed - John Cox, representing Secretary Bill Daughtridge, Department of Administration; Allan Sandoval, representing Secretary Sharon Decker, Department of Commerce; Dianne Enright, representing Secretary Aldona Wos, Department of Health and Human Services; John Dorman, representing Secretary Kieran Shanahan, Department of Public Safety (confirmation pending); and John Farley, representing Secretary Tony Tata, Department of Transportation. Sarah Wray is sitting in for John Farley. Dr. Mandell stated that Joseph Sloop, Forsyth County, will be sitting in for Rebecca Troutman for the Association of County Commissioners.

Status and Discussion of Priorities Before the Council

NC OneMap Implementation
(see NCOM update PPT file at GICC website - http://ncgicc.net/Meetings/tabid/138/Default.aspx)

David Giordano, NC OneMap Database Administrator, displayed a list of data updates to NC OneMap, mostly regular quarterly updates from DENR and NCDOT. One noteworthy release is the federal lands ownership dataset.

The server environment for NC OneMap is now at the Western Data Center (WDC) and is in production. FTP for shape files, and imagery downloads are running from the WDC, along with all websites that CGIA maintains, including NC OneMap. The exception is the Geospatial Portal, which is still served from the Eastern Data Center.

The project team has created a one-stop shop for services called "services.nconemap.com." All of the raster and vector services available through the Geospatial Portal will be accessible though this new link, which will make it easier and faster for users to link to these services.

He provided an update on the 2012 imagery, which has been fully processed. The "time-enabled" service, which supports viewing of 2012, 2010 and earlier imagery, is 99.9% complete, only awaiting the final Geospatial Portal enhancements. The project team is working with Esri to implement the Geospatial Portal enhancements at which time the 2012 imagery will be available for download. As reported at the February meeting, the 2012 imagery was delivered to the counties in early February.

Dr. Mandell reminded the members that the reason for completing software and server upgrades at the WDC is to provide redundancy and to ensure that NC OneMap is always available, especially in periods of emergency when users need access to data. This will achieve a long standing goal of the GICC to ensure backup and redundancy for NC OneMap.

Update: Orthoimagery Program
(see Orthoimagery PPT file at GICC website - http://ncgicc.net/Meetings/tabid/138/Default.aspx)

Tim Johnson provided an update on the 2012, 2013 and 2014 orthoimagery projects.

Coastal Orthoimagery Project 2012
The project team completed delivery of the 2012 imagery to the Public Safety Answering Point (PSAP) centers in the 25 counties in the Coastal region. Acquisition of the imagery occurred in early 2012, followed by processing and quality control. The 60-day post-distribution review by the PSAPs has been completed, with no problems reported in any of the 25 counties. He credited the early review by the county PSAP and GIS staff and the contractors for the lack of problems.

The project team followed up on specific requests for data updates, specifically requests by some counties for higher resolution county mosaics. As Mr. Giordano reported, the 2012 imagery are now being loaded into NC OneMap, a single source repository from which the imagery will be available for download and as a service for government and the private sector. The Image Service allows a direct link from a user's software application to the imagery without

downloading and storing the imagery on a local server. Mr. Johnson showed a screen shot from the NC OneMap Geospatial Portal demonstrating how users can display imagery from different time frames (2010 and 2012).

The final steps for the 2012 project, to be completed in the May-July period, will be to:

- Compile online survey results from 25 counties to identify lessons learned and improvements that can be applied in future years.
- Initiate final data archival closeout for the portion of the 2010 imagery that covers the 25 counties.
- Develop final vendor reports to document the procedures and identify lessons learned from the contractor perspective. The project team will then prepare and issue a final project report to the NC 911 Board.
- Initiate project closeout, probably in July although the contract officially ends on August 31.

Eastern Piedmont Orthoimagery Project 2013

The next phase of the four-year project cycle is the Eastern Piedmont region, covering 25 counties in the center of the state, including Fort Bragg and Seymour Johnson Air Force Base. Thanks to good weather, acquisition of imagery for the 25 counties in the Eastern Piedmont region was completed on March 17. For some locations in the project area with tall buildings, extra lines were flown to minimize building lean that would obscure roads and other infrastructure. The contractors have begun processing the raw imagery to create orthoimagery.

The project team is enhancing the Virtual Online Inspection, Checking, and Editing (VOICE) application that supported quality control review for the Coastal project. On April 30, the team met with Fort Bragg to clarify the QC process, delivery schedule, imagery review roles and responsibilities, and restrictions on sharing the data over the base. The imagery over Fort Bragg, covering 255 square miles, will only be available to Fort Bragg and the 911 communication centers in six adjacent counties. The Seymour Johnson Air Force Base agreed this week to allow release of the imagery for public use.

The next steps for the Eastern Piedmont project are to initiate outreach to the PSAP coordinators and to follow up with Fort Bragg on QC logistics and delivery plans. In June and July, the team and contractors will:

- Continue VOICE system design and public release beta testing.
- Participate in Property Mappers Association workshops to publicize the project.
- Continue orthorectification and final imagery development.

August 12 is the target data for initial delivery of the data to the Center for Geographic Information and Analysis (CGIA) followed by QC review using VOICE. The schedule calls for delivery of four counties per week with final delivery on October 18. QC should be complete by the end of the calendar year with distribution of the imagery to begin in January and the 60-day post-distribution review to follow.

Mr. Johnson commended the team for its hard work, recognizing the NC Geodetic Survey in the Department of Public Safety, the Department of the Secretary of State, the Photogrammetry Unit in the Department of Transportation and the staff at CGIA. Balancing the overlapping 2012 and 2013 projects to ensure everything stayed on schedule and budget was challenging.

Northern Piedmont and Mountains Orthoimagery Project 2014

In 2010, the GICC approved the "Business Plan for Orthoimagery in North Carolina" that established a four-year update cycle for the statewide orthoimagery program, building on the 2010 statewide project. The NC 911 Board adopted the business plan and agreed to fund the program, subject to approval on an annual basis.

This spring, the project team submitted a proposal to the NC 911 Board covering the third phase of the four-phase program. The NC 911 Board unanimously approved funding for Phase 3 at its meeting on April 26. Mr. Johnson reported one change from the original plan. The project team reviewed details of the Northern Piedmont and Mountains region and realized that the Greensboro-Winston-Salem metro area would not be wholly covered since Randolph County was scheduled to be part of Phase 4 in 2015. To maximize the opportunity for federal funding through National Geospatial-Intelligence Agency (NGA) and US Geological Survey, the team, with support of the NC 911 Board, made the decision to move Randolph County to Phase 3. Just this week, NGA confirmed a $40,000 cost share contribution for the Eastern Piedmont 2013 project so the project team is hopeful that a similar cost share can be obtained for the Northern Piedmont and Mountains phase.

The Phase 3 study area includes the northern mountains, which presents special challenges photogrammetrically due to high elevation and changing elevations. The overall area of Phase 3 is smaller than the first two phases but 40% of the area is in the more complex mountain terrain. As a result the project cost will be somewhat higher.

The first step is to finalize a contract between the NC 911 Board and CGIA, after which CGIA will finalize contracts with the state government partners. In July, detailed project planning and the Qualifications-Based Selection (QBS) process for selecting contractors will begin. The goal will be to award contracts in the late fall and begin flying to collect the imagery in early 2014.

Mr. Johnson commended Darrin Smith, the CGIA Project Manager, who has done an outstanding job of simultaneously juggling the demands of three projects, along with the other members of the project team.

Dr. Mandell recognized and thanked the NC 911 Board and Richard Taylor for their vision and their financial support of the program. He emphasized that this program is a great example of intergovernmental cooperation. He recognized the challenge to the project team in managing three projects simultaneously and remarked on how smoothly and professionally the program is implemented. He also noted that the GICC deserves credit for its vision and support. He described the orthoimagery program as a wonderful model, one that provides great benefit to government, the private sector and the citizens of North Carolina. He expressed hope that the GICC will be able to apply the model to other datasets.

Presentation: "GIS Anywhere and Everywhere"

(see GUC PPT file at GICC website - http://ncgicc.net/Meetings/tabid/138/Default.aspx)

Dr. Mandell introduced Sean Hawley and Todd Cannon with Greenville Utilities. Mr. Hawley said that Greenville Utilities (GUC) is an independent agency owned by the citizens of Greenville, operating under a charter issued by the North Carolina General Assembly in 1905. GUC supplies

four utilities – water, wastewater, gas and electric – and services about 71% of Pitt County and portions of adjacent counties. GUC services 127,000 customers.

GUC adopted GIS technology in 1996. The goal was to utilize GIS to efficiently distribute data to staff and to more effectively make decisions about their assets. The GIS team recognized that the initial implementation was a glorified map-making operation to reproduce map books for field personnel. Staff had "Toughbook" laptop computers in the trucks but with complex software and less than accurate data that was often difficult to access. Mr. Hawley noted that field personnel could not be expected to be GIS professionals.

The GIS team recognized that field personnel all had smart phones and that administrative staff were bringing tablets to work. The team realized they didn't need to invent anything really special but simply to provide information in a manner that 1) the employee is willing to train himself to use; and 2) that he is excited about using, recognizing that an employee who is intimidated by the laptop computer is not intimidated by the smart phone/tablet.

Mr. Cannon said the goal was to provide self-service GIS, ensuring that all data are available to every employee. The first step was to reorganize and publish the data in logical categories since each utility was an expert in its own area and then map a service to each individual feature. The data layer names needed to be easily understood and not in GIS jargon – transformers don't need a fancy name. The organization of the data on the back end is not important to the field personnel and administrative staff.

The next challenge was to address how to take advantage of the proliferation of mobile devices. The GIS Team began working on a mobile device management solution to achieve the vision of a mobile self-service GIS. To make it work, they needed an application store to deliver tools to the mobile devices – after all, the employees were used to downloading and using applications on their personal devices in their non-work life.

The adage that "there is an App for that" does not hold true in the GIS world. The applications (apps) needed to be simple, requiring almost no training. The GIS Team implemented a process for building their own apps, using Scrum, an Agile development methodology that minimizes planning and documentation but focuses on results. A development team, working with product owners, would develop a workable, functional, basic app in four weeks. The result was growing excitement by the users.

The GUC Enterprise Application Store, now accessible to employees, includes a collection of GUC utility related Apps, an Asset Viewer and a Markup application. Mr. Cannon displayed a screen shot of the Asset Viewer, a self-service map/GIS query tool for use on a tablet and smart phone. The very simple tool has a map or text screen and three buttons. Based on the assumption was that most people had used Google Maps and various phone applications and could navigate these tools, the team did not offer training – users figure it out.

The main goal or concept is self-service. The Viewer includes a Map Drawer, no different in concept than what staff had been doing for years, but instead of pulling out a paper map or opening a paper map atlas, the employee is opening a digital map. The names of maps in the map drawer, for example in the electric category, are ones the field personnel understand – primary overhead, fuses, fiber, etc. The employee builds the map that is needed. The application supports address and text

searches. With good metadata, all the power of GIS is available, and the employee merely touches the screen to view a data layer or type an address.

The GIS team recognized another old way that field personnel were using hard copy maps – marking them up and then sending copies to vendors or other staff to share information or develop work orders. The Mark-up App takes advantage of the ability to use touch screen to draw. In a simple interface, the user can draw and write text and then email the map as a PDF file. The GIS team replicated a system that staff had been using for years, but one that eliminates paper maps and takes advantages of a mobile device that can be used in the field. About 95% of the functionality will work on smart phones.

Use of GIS at GUC has skyrocketed. GIS use has always been measured by ArcGIS Server statistics. Previously the average requests per month ranged from 10,000-15,000. With the introduction of the Apps, requests increased to a minimum of 180,000 per month or more than 400 requests per employee and have now leveled out at about 260,000 requests per month. With only 430 employees, the number of mobile devices has increased to more than 200.

Mr. Hawley said an initial concern was the life cycle of a tablet, in what can be a rough work environment. For the cost of a $5,000 laptop computer, GUC can purchase 10 tablets and only three have had to be replaced in two or three years.

Mr. Hawley emphasized that even though the team uses the Scrum Agile development process, there is an overall vision. Ongoing work is focused on customer information, finance and business and building an asset management system using Oracle. As in all organizations, there is competition for resources – power poles versus computers. The mobile, self-service approach is designed to enhance productivity, complete field work and update asset changes. GUC is also investigating the use of Cloud technology.

John Gillis observed that a major goal is obviously to improve efficiency and cost effectiveness and asked if any metrics are in use to measure efficiencies. Mr. Hawley said they do not currently have metrics. Step one was get GIS into the hands of the work force, which has been accomplished. He believes that the implementation of the asset management system and an inspection application will allow metrics to show efficiencies.

Given the concern about the sensitivity of utility data, Anne Payne asked about security issues. Mr. Hawley said the system is internal. Applications are only published to devices controlled by the GUC device management system. The Enterprise Application Store is only accessible by GUC staff.

Dr. Mandell asked if any part of the system will eventually be opened to the public. Mr. Hawley said the concern about sharing data is less about security than data accuracy and the possibility of others using the data to make decisions, for example about where to dig in the vicinity of a gas main.

Alex Rankin asked whether a civil engineering / surveying firm that might need access to information about utilities could get access to the system. GUC does work with firms now and is working with the city and the county on a digital submission process. Mr. Rankin noted that the information would be useful for economic development purposes. Mr. Hawley said that engineers use the tools to distribute geographic information on a case by case basis and are discussing more formal ways to distribute data to contractors and consulting firms but nothing has been implemented as yet.

Dr. Mandell praised the approach of quickly getting information in the hands of users.

Mr. Gillis asked about collaboration with other utilities and whether GUC is receiving requests for help in implementing these solutions. Mr. Hawley said not yet. However, GUC has received some awards and he anticipates some magazine articles so questions may be forthcoming.

Dr. Rimer asked how they made the case for investing money without the metrics. Mr. Cannon said that it was easy to demonstrate time savings in training for using the applications. Previously, significant time was devoted to training. Regarding the equipment, the case was also easy to make as a laptop computer costs $5,000 versus $500 for a tablet. The cost of the devices and the Verizon service over a four-year period was less the cost of the laptop computers. Dr. Rimer asked about the average age of the staff. The answer is 55 but their experience in using their personal devices made the transition easy.

Dr. Mandell thanked Mr. Hawley and Mr. Cannon for a very informative presentation.

Committee Reports

Statewide Mapping Advisory Committee (SMAC). Ryan Draughn, SMAC chair, said the SMAC met on April 10. The SMAC welcomed a new representative from DENR, Dr. Kenneth Taylor, State Geologist and chief of the NC Geological Survey. The SMAC received a report from the *ad-hoc* Metadata Committee. The committee is working on a North Carolina metadata standard using the Esri tool and XML schema that will be based on the new ISO metadata standard. He anticipates the committee will be able to report on progress soon. Metadata is important for all data producers but much of the most valuable data is developed by local government and the new standard will likely include a local government profile that will make it easier for local governments to produce metadata. The committee is also working on best practices for safeguarding backup catalog data.

NC Board on Geographic Names (NC BGN). NC BGN is waiting on input from the Wake County Board of Commissioners on a pending request to rename a lake in Wake County. A second item was an objectionable name issue in Union County. This led to the introduction of House Bill 636 directing the GICC work with the US Board on Geographic Names to recommend a name change. The objectionable name was actually changed many years ago, approved by the US Board on Geographic Names and is in the federal Geographic Names Information System. In light of this issue, the SMAC plans to revise its procedures to be more proactive in reporting name changes to the stakeholders in North Carolina.

Working Group for Orthophotography Planning (WGOP). Jeff Brown, staff to the WGOP, reported on behalf of Gary Thompson, WGOP chair, who was unable to attend the meeting. The WGOP met on April 8 and received an update from Mr. Johnson and Darrin Smith of CGIA on the orthoimagery program. The group continues to provide advice to the orthoimagery project team. He reminded the members that the WGOP developed the Business Plan for Orthoimagery and is pleased with the progress of the four-year update cycle.

Mr. Brown shared an update on the National Geodetic Survey's (NGS) transformation software for North American Datum (NAD) 1983 (2011). NGS is producing technical models to support more precision in GPS and surveying, expected to be finalized in mid-July. Mr. Thompson is leading a

team that is drafting updates to the "Statewide Global Positioning System (GPS) Data Collection and Documentation Standards" that the GICC last amended in 2006. [Note: The original GPS standard for North Carolina was approved by the GICC in 1994 and amended in 1999 and 2006 to reflect changes in the technology.] A new section on using GPS with orthoimagery to map physical features will be added. Once the draft is ready, it will be reviewed by the Standards Committee.

The WGOP discussed uses of oblique imagery. Digital sensors for orthoimagery take imagery straight down for the most accurate distances on the ground for base mapping. Aerial photographs that are taken at an angle are called oblique imagery. These are often taken at multiple angles, enabling users to see the sides of buildings. Some local governments have purchased oblique imagery.

CGIA received a request from the Durham Emergency Communications Center for the GICC to support oblique imagery as a geospatial data product. CGIA referred the request to the WGOP for discussion of potential users and functions within local government where the data would be most useful. The WGOP concluded that the next step should be development of a standard. This would drive the requirements and specifications for a product that would meet the needs. The SMAC discussed the issue further at its April meeting. The SMAC agreed to put development of an oblique imagery standard in its queue. The next steps would be to: (1) identify a person to lead the development of the standard; (2) identify and communicate with potential stakeholders to serve with the leader; and (3) establish a timeframe for developing the standard.

ACTION #1 The Statewide Mapping Advisory Committee will coordinate development of a standard for oblique imagery as a geospatial data resource for North Carolina.

There was an update on the status of National Agriculture Imagery Program (NAIP) 2012 imagery in North Carolina. The 2012 NAIP imagery is complete for the state. Dan Madding's office in the NC Department of Agriculture and Consumer Services has produced Web Map Services for summer 2012 leaf-on, 1-meter resolution imagery in both true color and color infrared formats. The statewide imagery is discoverable and accessible via the NC OneMap Geospatial Portal. Mr. Madding has distributed compressed imagery files to some 40 counties and offers distribution on request. Mr. Brown noted that NAIP is another good imagery resource in North Carolina.

Mr. Brown reported that Mr. Thompson serves on the National Geospatial Advisory Committee (NGAC). The NGAC is working on guidance documents for federal agencies and is recommending federal partnerships to support acquisition of new elevation data. Topics for a June meeting include data privacy issues.

Dr. Mandell emphasized the importance of non-proprietary standards and commended the work of the SMAC and its committees on developing standards.

Working Group for Seamless Parcels (WGSP).

(see EPA PPT file at GICC website - http://ncgicc.net/Meetings/tabid/138/Default.aspx)

Tom Morgan, co-chair of the WGSP, asked Mr. Brown, project manager, to report on progress. Mr. Brown reminded the members that the EPA grant was awarded to ITS/CGIA to integrate county cadastral (parcel) data, one of the priority framework data layers. The grant partners include the State of North Carolina and the Eastern Band of Cherokee Indians (EBCI). The data will be shared

through the EPA Exchange Network and with North Carolina users. Part of the effort will involve evaluating the results and seeking opportunities to expand the project.

In the Statewide IT Procurement process, a Request for Proposals for a contractor was issued on February 4 and proposals from vendors were received on March 7. The evaluation team submitted a recommendation on April 24. Vendor selection and contract award is expected to be completed this month.

The project goals are to make it simple for county parcel data producers to transform their data to the state standard so that data can be shared with the EPA Exchange Network as well as North Carolina data consumers; to make it practical to add producers and maintain the system; and to meet the GICC goal to create a statewide parcel dataset.

The project team and vendor will begin detailed planning and design work in May and June. Application development work will begin in June supported by county data producers, EBCI and state data consumers. The project's county partners are critical for providing data to populate the system and evaluate it. Time is of the essence as the project team needs to show progress to EPA by late summer.

Dr. Mandell expressed his pleasure that the project is finally kicking off after a long and difficult process. Mr. Morgan thanked EPA for being supportive for so long. Without their funding, support and patience the project would not be underway. Dr. Rimer said she would pass on his thanks.

Working Group for Standards. Tom Morgan, chair of the Standards Committee, said the committee has not met since the last GICC meeting but noted that the earlier reports described progress on the GPS standard and the metadata standard. The committee plans to begin work on the land use standard, with the help of Mr. Madding. Mr. Morgan has also begun work on the Cadastral Standard in anticipation of receiving the schema from the WGSP parcels project.

Local Government Committee (LGC). Julie Stamper, chair of the LGC reported that the LGC proposes to add the NC Chapter of the American Planning Association (APA-NC) as an organizational member of the LGC. The effort was initiated by Alice Wilson, GIS Coordinator for the City of New Bern and a member of APA-NC. Planners are major users of GIS data and can make important contributions to the LGC. The APA-NC submitted a formal petition to the LGC to become a member and the request was unanimously approved by the LGC. Ms. Stamper referred to the draft revised LGC bylaws, in the members' packet.

DECISION #1 A motion was made and approved to adopt the revised LGC bylaws, adding APA-NC as an organizational member.

State Government GIS Users Committee (SGUC). Dianne Enright, SGUC vice-chair, said the SGUC Executive Committee (EC) met March 8 and discussed the use of ArcGIS Online for Organizations and its value to state GIS users. The cost is much less than ArcGIS server but it does have limited functionality. It is a new technology and SGUC users are testing it and sharing information among the members. NCDOT is currently using it and working with Esri on issues. The members have discovered that a great way to work with imagery is to cache the imagery, create a service and delete the cache. The Wildlife Resources Commission and Division of Emergency Management are also creating ArcGIS Online sites.

The SGUC EC also discussed the parcel data effort. The Division of Emergency Management acquires county parcel data annually to support flood plain mapping and is working with NCDOT and the Department of Agriculture and Consumer Services to share the data as each department needs the data. The SGUC looks forward to progress on the Integrated Cadastral Data Exchange project and more opportunities for collaboration.

The SGUC EC also discussed data maintenance for datasets on NC OneMap and the NC.Gov site. The map application on the NC.Gov site includes a number of data layers, some of which are out-of-date. The SGUC EC is assessing how to update these and which agencies will take responsibility, for both the NC.Gov application and for discovery on NC OneMap. The Homeland Security Infrastructure Program had previously updated some of these datasets but will not do so again. .

The SGUC reviewed its work plan. One goal is to encourage funding of the Esri Enterprise License Agreement by a statewide funding source rather than (proportionally) by individual agencies. The SGUC is also coordinating with the NCDOT Photogrammetry Unit to develop a flight planning process for emergency events such as hurricanes that can meet all agency needs and avoid duplication of imagery acquisition.

The SGUC general meeting was held on March 14 and featured a report on the orthoimagery project, presentations on what's new in ArcGIS and for desktop and server, an exciting presentation on a Conservation Planning tool, geocoding tips and best practices by the State Center for Health Statistics, and a market-based conservation initiative presentation.

The general SGUC meetings now feature a lightning round called "Services, Services, Services," during which state agencies share web map services that they have discovered.

***Federal Interagency Committee (FIC*).** Linda Rimer, chair of the FIC, reminded the members that the GICC asked that the FIC to develop a plan and set of recommendations for updating the federal land ownership dataset for North Carolina. The FIC subcommittee that developed the report included Tom Colson, US Park Service, Mark Endries, US Fish and Wildlife Service, and Susan Pulsipher, contractor to the US Army at Fort Bragg. David Giordano and Tom Tribble with CGIA supported the subcommittee's work.

The preliminary report was completed last year. The challenge was to find a custodian to maintain the dataset. Dr. Rimer is disappointed that a federal agency is unable to take on this task although she understands the reasons why this was not possible. But in the spirit of collaboration, CGIA and the NC Natural Heritage Program have developed procedures to update and maintain the dataset. The new federal lands ownership dataset has now been released to the NC OneMap Geospatial Portal for discovery, access and download. It will be updated quarterly. The FIC EC will review the revised draft final report after which it will be submitted to the GICC. She thanked Jeff Brown and Tom Tribble, CGIA, and John Finnegan, NC Natural Heritage Program, for their hard work in finalizing the dataset and their suggested revisions to the report.

***Technical Advisory Committee (TAC)*.** Dianne Enright reported for Colleen Shape, chair of the TAC. The TAC has not met since the last GICC meeting, but will meet later this month.

Management and Operations Committee (M&O). Dr. Mandell said that the M&O Committee is an overview committee and deals with many of the issues that have been reported. There are two issues that have not been covered. Even though it is 2013, it is not too early to be thinking about the 2020 census. The M&O Committee plans to convene a working group so that the state is well prepared to collaborate with the Census Bureau, especially in the area of GIS and geospatial data. The results of the census are so important that we want to be sure that we get the census right.

The second item is to follow up on Mr. Draughn's report on geographic names. The GICC has a process in place to change offensive names and to handle routine requests for name changes. The process has been in place for years and involves close collaboration with the US Board on Geographic Names. He acknowledged the process can be improved but also recognized the limitations of the authority of the GICC and the NC Board on Geographic Names as well as resource limitations. The M&O and the SMAC will review the process and implement improvements, especially in terms of outreach and information on the adoption of new names.

NC OneMap Governance Committee. Dr. Mandell reminded the members that the committee provides direction and oversight for the implementation and management of NC OneMap. The state portal, NC.Gov, uses data from NC OneMap. The committee will work with the portal managers on data accuracy, disclaimers and attribution and will assess opportunities for maintaining some of the datasets. For many years, the focus of NC OneMap has been on professional users in government and the private sector with less attention to the general public. The Governance Committee will consider appropriate ways to make NC OneMap more useful to the general public.

He reminded the members that the GICC approved a set of accountability measures for NC OneMap. Three of those measures relate to survey results. A recent survey assessed the use of NC OneMap by professionals in the private sector. The descriptions of the accountability measures have been modified to accommodate separate private and public sector results. The plan is to present these separately although currently there are no measures of public use of NC OneMap. The substance of the accountability measures has not been changed; only the presentation plan was changed. The sections affected are 2.3a, 2.3b and 3.2.

GICC Member Announcements

Hunter Robinson, Chief Information Officer for the State Auditor, said that some years ago he had a discussion with Dianne Enright about how an auditor can use GIS data to support auditing. He reviewed ArcGIS and other Esri tools. He still does not have any GIS resources. He is seeking assistance in considering how the Auditor's Office can best use GIS. He asked for more information about the recently announced Center for Innovation.

Micky Verma (sitting in for Chris Estes) said ITS and DENR are working on the effort. The center will be set up in the DENR building and will allow the state to evaluate new IT solutions and technologies and assess how they can be integrated into the current environment in different agencies. There will be the opportunity to test solutions and see how well they work. The official opening is still a few weeks away so the concept is still maturing. He described the effort as groundbreaking for the state and one that will help the state move forward.

Mr. Robinson suggested that it will provide an opportunity for collaboration between government and the private sector and Mr. Verma agreed. Mr. Robinson expressed hope that he can explore

opportunities for using GIS to support the Auditor's Office through this facility. He thinks that others may need help in developing new applications. He described going through a leveling process to get data integrity for his work and did not achieve data integrity above 40%. If data integrity cannot be achieved at a reasonable level, then the data is nearly worthless. In regard to GIS, he cited the difficulty of achieving data integrity for street addresses. He acknowledges that his challenge is daunting and the applications may be complex but the net conceptual value may be very worthwhile.

Tom Morgan reported on the value of collaboration. The Secretary of State and the NC Property Mappers Association are conducting a series of eight seminars across the state. The target audience is property mappers, registers of deeds, tax officials, planners, and surveyors, indeed anyone dealing with land records. The collaborators this year include Hope Morgan, Floodplain Mapping Program, Gary Thompson, NC Geodetic Survey, and Jeff Brown and Darrin Smith, CGIA along with John Bridgers and Mr. Morgan from the Land Records Management Section of the Secretary of State's office. The seminars introduce how the state is supporting local government and industry in the area of land records. He opined that these state agencies are providing great value and the attendance at the eight-hour seminars, which range between 40 and 70 people, reflect this. The seminars are free to government employees and $25 for private sector attendees.

Marc Burris, State Board of Elections, said his agency only recently started using GIS to support redistricting. For the 2010 redistricting, by integrating GIS, the process was completed in months when it used to take years using paper maps and pens. He reassured Mr. Robinson that you can start from the ground up and offered to provide assistance. He also thanked Mr. Draughn for his help in working with local governments. Without the local government baseline data, the process would have been impossible.

John Gillis remarked that he discovered a book in the local library about "big data." He acknowledged that those in the data world are likely aware of this term but his impression is that the ability to collect massive quantities of data, even if it is not precise, and conduct statistical analysis provides meaningful information for decision making. By using your smart phone, data winds up in a massive database that someone will analyze.

James Caldwell reported that Joe McKinney, a former Council member and previously the Executive Director of the Land of Sky Regional council, is now the Executive Director of the National Association for Development Organizations, headquartered in Washington, DC.

ADJOURNMENT

There being no other business, the meeting was adjourned. The next meeting will be August 14, 2013 from 1:00-3:00 pm at the Department of Public Instruction Board Room, Room 755, 301 N. Wilmington Street, Raleigh.

Presentations and reports are on the Council Website: http://ncgicc.net/Meetings/tabid/138/Default.aspx). Click on "GICC Meetings." Presentations and documents presented during the meeting are available in a zip file for easy download.