

North Carolina Geographic Information Coordinating Council

Minutes August 11, 2010

PRESENT

Chair, Dr. Lee Mandell. Members: Bob Brinson, Michael Brown (for Kenneth Lay), Moses Carey, John Correllus, John Dorman (for Reuben Young), Ryan Draughn, Hugh Devine, John Farley, Jerry Fralick, John Gillis, Bill Gilmore, Bliss Kite, Kelly Laughton, Ben Matthews (for Derek Graham), Herb McKim, Joe McKinney, Tom Morgan (for Elaine Marshall), Anne Payne, Sarah Porper, Stephen Puckett, Linda Rimer, Colleen Sharpe, Julie Stamper, Melodee Stokes, Richard Taylor, Mary Penny Thompson, Rebecca Troutman, Saundra Williams and Ron York

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 May 12, 2010 meeting were approved with no changes.

Dr. Mandell announced that Joe McKinney, the GICC representative for the Association of Regional Council Executive Directors, has resigned after many years service on the GICC. Mr. McKinney was recognized with a certificate of appreciation. Dr. Mandell announced that Kelly Laughton is stepping down as chair of the Technical Advisory Committee (TAC) due to work commitments. Ms. Laughton was recognized with a certificate of appreciation. Dr. Mandell announced that Senator Basnight reappointed Ms. Laughton, John Gillis, and Richard Taylor as Senate appointments to the GICC. Dr. Mandell welcomed Dr. Linda Rimer, who was appointed by the Governor as the federal representative to the GICC. Dr. Rimer serves as the liaison for the US Environmental Protection Agency, Region 4, to North and South Carolina. Per the legislation establishing the GICC, Dr. Rimer will also assume the role of chair of the Federal Interagency Committee (FIC). Dr. Rimer expressed her pleasure in joining the Council. Dr. Mandell announced that Colleen Sharpe, GIS Manager for the City of Raleigh, accepted his appointment to serve as chair of the TAC.

Dr. Mandell welcomed a guest, Chris Ogier, who serves on the Georgia GIS Coordinating Committee as the chair of the Strategic Planning and Policy Subcommittee. Dr. Mandell invited Mr. Ogier to share some information about recent coordination efforts in Georgia. Mr. Ogier

thanked the GICC for the opportunity to speak. He expressed his interest in reaching out to the State of NC for assistance. He noted that until now GIS coordination efforts in Georgia has largely been a grassroots effort led by 10-15 volunteers. As a result of lobbying efforts by this group, the Georgia legislature established the Georgia Geospatial Advisory Council (GAC), similar to the GICC in NC. Mr. Ogier recognized that North Carolina has a very mature geospatial advisory committee in the GICC and expressed interest in establishing cooperation with NC. He noted that the demographics of the two states are similar and that the states share a common border. He suggested that perhaps the two states could appoint liaisons to each other to enhance collaboration. He noted that the GAC plans to build on their momentum and approach the Georgia legislature next year to seek permanent funding for the GAC. He asked that formal collaboration be established between the two coordinating bodies and expressed his appreciation in advance for any help the GICC can provide.

Dr. Rimer asked about the composition of the Georgia council. Mr. Ogier responded that it is very similar to the GICC, with representatives from the major state government organizations as well as local governments. There are about 35 members including representatives of private organizations such as the Management Association for Private Photogrammetric Surveyors, which he represents. The goal is to establish a more coordinated effort following the example of North Carolina. He expects that the GAC will reach out in a similar manner to South Carolina, Alabama and Florida. Dr. Rimer encouraged the GAC also reach out to the EPA, whose Region 4 headquarters is in Atlanta. Geospatial data is at the heart of much of what EPA does. Mr. Ogier reported that they were already in conversations with staff at EPA Region 4.

Dr. Mandell thanked Mr. Ogier for his remarks and noted that the GICC is always looking for opportunities to improve coordination within North Carolina and across the nation.

Status and Discussion of Priorities Before the Council

Priority #1: Adoption of Revised GICC Bylaws

Dr. Mandell noted that the Management & Operations Committee (M&O) has proposed changes to the GICC bylaws and asked for comments on the changes, which were distributed to GICC members before the meeting.

Mr. Carey asked if the actual street address of the GICC needed to be included. He wondered if the street address could be omitted, noting that changes to the bylaws require a 2/3-majority vote and state agencies move from time to time. Dr. Mandell said that the bylaws serve as the primary source of relevant information about the GICC and knowing the location of the organization is relevant. He further noted that Article XI, Section 5 allows for stylistic and technical corrections with the approval of the M&O and does not require full approval of the Council and that the location of the Council's offices falls under the category of that type of information.

Mary Penny Thompson noted that under Article V, Council Membership, the Department of Environment and Natural Resources is the only state department not referred to as a 'Department.' Dr. Mandell noted that the language follows what is listed in the statute. Ms. Thompson also noted that Article V also refers to 'designees' of the appointed members and asked if there was an established process or a set of guidance documents for determining who can serve as a 'designee.' Dr. Mandell indicated that once the bylaws are adopted the Council can establish polices for

appointing designees. Dr. Mandell acknowledged the importance of this point and noted that he had previously served on the council as a permanent designee. He suggested that anyone listed in the statute or appointed by the Governor or the legislature, when sending a designee, should assure that the designee consider their participation as an important aspect of their job. Dr. Mandell also noted that a new section has been added requiring the Council Secretary to conduct orientation sessions for new Council members. He emphasized the importance of conducting formal orientation sessions so that new members are informed about the initiatives and on-going activities of the Council.

John Farley asked for clarification on the wording in Article X, Section 4, which reads "When appropriate, M&O decisions shall be ratified by the full council at its next meeting." He noted that the phrase 'when appropriate' seems somewhat vague. Dr. Mandell acknowledged that it is difficult to define precisely which decisions meet this threshold. He suggested that it is unworkable for every decision the M&O makes to be ratified by the Council given that the M&O makes a lot of very small decisions. Dr. Mandell suggested that decisions that rise to the level of changing policy or something that is clearly substantial should be validated by the Council. He noted that many of the day-to-day operational decisions by the M&O do not require the attention of the Council. This is one of the difficulties of a high level body that only meets quarterly. The Council cannot complete all of the work that needs to be done, which is why there is a committee structure and special working groups to accomplish specialized tasks in the intervening months between Council meetings. Dr. Mandell noted that the M&O is comprised of chairs of the standing committees and that Council membership is well represented by the M&O members, who should be able to recognize which decisions need to be brought before the Council.

John Correllus suggested changing the language to be more specific, perhaps referencing decisions that impact geospatial policies. Dr. Mandell suggested changing the sentence to read "When Management & Operations Committee decision would impact GICC policies, they shall be ratified by the full Council at its next meeting." This change was accepted.

John Dorman referred to the earlier discussion about Article XI, Section 5, second sentence, related to stylistic and technical corrections and suggested that all changes to the bylaws be reported to the Council so that the Council membership is informed about any changes. Lee suggested that the sentence be revised to read "For accuracy and clarification purposes, stylistic and technical corrections may be made as necessary with the approval of the Management and Operations Committee and reported to the full Council." This change was accepted.

• Decision #1. The GICC approved a motion to adopt the proposed revisions to the GICC bylaws with the changes noted above.

Dr. Mandell said that the revised bylaws will be posted to the GICC web site.

Priority #2: NC OneMap Implementation

Tim Johnson reported that since the last Council meeting, the migration of NC OneMap infrastructure to servers at the Office of Information Technology Services (ITS) Eastern Data Center has been completed. Dr. Mandell called for a round of applause. The transfer is complete and operational. The migration includes 1) the migration of all servers including the web server, the ftp server, and the database server; and 2) all the data and software including the transfer of

the database software from SQL Server 2000 to SQL Server 2008. In additional, staff completed work on the map service administration tool that provides map services from the partners to NC OneMap and installed an automated map service checker that checks to see if connections are still live and prompts staff to take action if the services are not live. Staff is building a test environment to test new capabilities related to the map service checker application. As the M&O Committee continues work to define new NC OneMap requirements, staff will be prepared to implement those requirements at the appropriate time with the appropriate technology. Data releases have been on hold during the migration process, but staff is ready to open the flood gates and post the recent data releases.

Priority #3: Surveyor's Model Law Working Group

Herb McKim reported that he and Mr. Johnson, on behalf of the Surveyor's Model Law Working Group, met with the NC Board of Examiners for Engineers and Surveyors (NCBELS). The history is that the Working Group has been seeking clarification on how the statute and regulations apply to GIS data collection by local governments and regional councils of government. The GICC and NCBELS sent letters to the Attorney General's Office seeking advisory opinions on whether local governments could collect data for another jurisdiction without the oversight of a licensed surveyor. The advisory opinion in response to the letter from the GICC was presented at the last Council meeting. The ruling is that any state or local government jurisdiction is considered part of one unit and therefore any employee of government is exempt from the law that requires a licensed surveyor to collect GIS data as long as the jurisdiction is doing the data collection as part of their official business. Employees of one jurisdiction can collect data for another jurisdiction because government is one unit.

Since the last Council meeting, NCBELS reviewed the advisory opinion that it received from the Attorney General's Office. The advisory opinion stated that employees of councils of government are also exempt from the law as long as the regional council of government is authorized by resolution of their member governments.

Mr. Johnson and Andrew Ritter, Executive Director for NCBELS, prepared an announcement to clarify the issues related to geographic data collection by local governments. The announcement has been posted to the GICC web site and NCBELS plans to post it to their web site. Dr. Mandell congratulated the Working Group for their multi-year effort and noted that the outcome was exactly what the Council and the GIS community was hoping for.

Mr. McKim noted that the ruling covers government employees but does not apply to the private sector. He reported that NCBELS has established a GIS test for surveyors and GIS professionals to accommodate private sector GIS professionals who may collect GIS data as part of their job. Dr. Mandell said that Ryan Draughn had sent an announcement about the advisory opinion to the NC League of Municipalities list serv and that Chris Koltyk, a member of the Council's Local Government Committee (LGC), has posted the announcement to the NC Local Government Information Systems Association list serv. Julie Stamper reported that the LGC has posted the announcement to the NC GIS, the NC Property Mappers Association and the Carolina URISA list servs.

Dr. Mandell asked if the Working Group needed to continue. The answer is "no" and the Surveyors' Model Law Working Group was disbanded. Dr. Mandell thanked Mr. McKim and the Working Group for their good work.

Priority #4: ESRI GIS Software Enterprise License Agreement

Mr. Fralick reported that the enterprise license agreement (ELA) for ESRI's GIS software was signed on July 12. He thanked the members of the Council for their contributions to this effort. The agreement covers five years through June 30, 2015 primarily covering the executive branch agencies of state government. In addition, it includes a master purchase agreement that covers local government agencies and provides a vehicle for local governments to purchase ESRI licenses. The information will be posted soon on the OITS web site.

Mr. Correllus asked whether an expansion budget item to cover the costs for state agencies could be run through the Office of the State Chief Information Officer. Mr. Fralick expressed some skepticism that an expansion budget request could be accomplished this year but agreed that he can look into it. Mr. Correllus said that the former agreement was a real bargain for state agencies and the costs in the new agreement are reasonable. He noted that this is probably one of the smaller enterprise license agreements in terms of costs and that a single request representing all the state agencies might be viewed favorably. Mr. Correllus indicated that otherwise each department would likely submit separate requests to the Office of State Budget and Management and that a collaborative approach would best serve the interests of state government. Mr. Fralick replied that the first step is to prepare some talking points and identify the costs involved and suggested that the issue could be discussed at the next meeting of the M&O Committee. Dr. Mandell acknowledged that given the current revenue projections it may be difficult to get an expansion budget item in the next biannual budget but that it is important to prepare and refine the arguments. He suggested that if it is not feasible for the first year of the biannual budget it might be feasible for the second year. Mr. Correllus suggested that maybe part of it could be funded, following the model of the first year of the ELA in which half of the costs are covered through the IT Fund.

Mr. Farley asked if rates for professional services are included in the agreement. Mr. Correllus confirmed that the professional services rates are included and are quite high but that they are not the only option and can be negotiated separately from ELA.

<u>Presentation:</u> The NC Department of Transportation's Spatial Data Viewer (see PPT at GICC website - http://ncgicc.net/Meetings/tabid/138/Default.aspx)

Mr. Farley presented an overview of GIS activities at DOT, focusing on a core project, the newly developed Spatial Data Viewer. By way of background on the scale of what the GIS unit supports, Mr. Farley reported that DOT is one of the largest state departments with over 14,000 employees and an annual operating budget of almost \$4B. DOT builds, manages and maintains transportation infrastructure including highways, rail, aviation, ferries, bicycle and pedestrian facilities and public transit. This includes over 80,000 miles of centerline roads, second only to Texas. The NC model is the opposite from most states, in which counties are responsible for road construction and maintenance. This means a significant amount of infrastructure to track and maintain.

Supporting all of this from a geospatial perspective is a business model, based on a hybrid approach. This includes centralized GIS services and coordination with a focus on the enterprise but with embedded GIS resources in the individual business units. The process is overseen by a GIS Steering Committee, made up of very senior staff that are engaged and knowledgeable about the technology. The goal is to expand this model to include more business units and to increase embedded GIS support.

The GIS Unit has 29 staff organized in three major sections – Spatial Data Management; Applications Development and Analysis; and GIS Technology. Two ongoing priority one projects – the Spatial Data Viewer and the Multi-User Geodatabase - currently consumes about 40 percent of the GIS Unit's resources. Other projects in the queue await prioritization by the Steering Committee. Operations and Maintenance consumes a similar portion of the resources. Activities include maintenance of the linear referencing system and the road inventory. Another key responsibility is support of the Highway Performance Monitoring System Report, which is submitted annually to the federal government and helps determine how much money is allocated to North Carolina by the federal government.

The Spatial Data Viewer (SDV) is a web application based on ESRI's ArcGIS Explorer tool. Underneath is a host of servers providing a multitude of web services. The SDV now includes a ribbon bar based on the new Microsoft suite of products. The ribbon bar provides a more intuitive interface and is more context sensitive to the application. The ribbon bar changes as options become available or unavailable. One of the guiding principles of the SDV is that it be simple and intuitive to use. It will be the primary vehicle to get spatial information out to the enterprise. It must support a range of viewers from those who have barely used computers to those who use ArcInfo, but with a focus on the lower end users.

The SDV includes an ArcGIS Server stack, a series of servers that supports the service of data to the viewer. Other clients can use these same map servers to support other applications, including MicroStation software. DOT is a major consumer of MicroStation. Other clients use ArcView and ArcInfo. The Server stack can publish the same information for all these users and with better performance, regardless of where the user is located across the state. Clients that are doing mobile data collection can also use the same web services. The Chief Operating Officer has directed the GIS Unit to publish these web services to the public and other government agencies.

DOT needs accurate and timely access to geospatial information as many of its mission activities are dependent on good geospatial data. Currently there are many ad hoc processes for disseminating and viewing geographic information. Many clients acquire data through file transfer protocol (ftp), by 'sneaker' net or by downloading data from the public web site. In addition, DOT needs a platform for rolling out simple, custom spatial applications or functions en masse. It can be expensive to roll out applications and the goal is to do it faster and cheaper and easier.

The SDV will meet many of these needs. As the primary deployment tool, the SDV will 1) provide much easier access by NCDOT staff to spatial information and analysis; 2) provide a more central and consistent source for data; 3) provide shorter delivery time for requested functionality and customization; 4) establish a spatial web deployment infrastructure that is scalable and extensible; and 5) save money by reducing the number of licensed spatial application products required.

The implementation of the project lifecycle will be an iterative process. Pilot One of the SDV was initiated on August 10. Two additional pilots, covering additional functionality and a resource center, a web site designed to support the SDV, are scheduled for October and December. The tool will go live in February 2011. The initial live deployment will support 250 users and then every quarter after that an additional 250 users will be added. The system is currently designed to handle 1,500 users. The first deployment will include 34 data sets, based on the priorities determined by the working group. As the SDV is used, it is anticipated that there will be demand for additional data sets and functionality, which the Steering Committee will address at the appropriate time.

Stephen Puckett asked about the definition of a user. Mr. Farley responded that currently an end user indicates a DOT employee. That is not to say that the SDV cannot be deployed to the public. The Chief Information Officer has already stated that a viewer will eventually be made available to the public although it will not be identical to the SDV.

Mr. Dorman noted that the Department of Crime Control and Public Safety is always interested in conditions about the roads from an emergency management perspective and asked when information about the Traveler Information Management System will be available. Mr. Farley said that he did not know. It will depend on the priorities established by the Steering Committee. Another factor may be the time required to add a new function. If the projected time is short, then it could be moved up the priority list.

Dr. Mandell asked how this effort relates to NC OneMap. Mr. Farley responded that the services and the infrastructure could be served up through NC OneMap. Dr. Mandell acknowledged that one of the challenges is that every agency that uses GIS has its own priorities and statutory requirements and cannot be bound by the limitations of NC OneMap as it exists today. He suggested that improvements in infrastructure and functionality of GIS that occur in individual agencies can then be leveraged to improve NC OneMap. The Council is still in the early stages of the NC OneMap technology refresh and he encouraged all the agencies at the table to consider how activities can contribute to the redesign and improvement of NC OneMap. Any assistance or information that agencies can provide that contributes to the process would be welcome, particularly in the area of serving data.

Dr. Mandell expressed the opinion that there is a problem with the public having multiple ways of getting data. The benefit or value of NC OneMap is that it will probably be the only place where one can get the broadest collection of truly integrated statewide data. DOT is going to be focused on transportation data; the Department of Agriculture on agriculture data; and so on. The general public will want a statewide perspective and having one source with that unique perspective based on the user's needs rather than the agencies' needs is what we should be striving for. This will require cooperation among the agencies that are collecting data that can be made available to the public. Mr. Farley replied that DOT would prefer to serve data that is useful to the public through NC OneMap. This will offload the burden on DOT for publishing that information in terms of resources, maintenance, marketing and so on. In that way DOT can focus on providing services internal to DOT. It also directs people to that one-stop shop. It just makes sense to do that. Any data that DOT serves up publicly will be available.

Mr. Correllus suggested that NC OneMap consider the use of base map cache services to better enable NC OneMap to be the trusted service for data and maps. Mr. Farley thanked Mr. Correllus and Department of Commerce staff that developed the Economic Development Intelligence System

(EDIS) for their assistance in the design of the SDV, especially related to the use of map and cache services. Dr. Mandell commended them for their collaboration.

Mr. Puckett asked how much NC OneMap is being used by business and industrial clients. Mr. Correllus indicated that CGIA manages NC OneMap but noted that Department of Commerce uses data from NC OneMap as well as from other sources. He noted that the EDIS gets about 12,000 unique viewers from across the world. He also stated that NC OneMap shows up not only in the EDIS applications but as the base map data in many other applications. It is the basic data or infrastructure that enables Commerce to concentrate on what the agency needs to do, that is creating applications on top of the base data.

Mr. Johnson deferred to David Giordano, CGIA Database Administrator, regarding the statistics on the use of NC OneMap. Mr. Giordano did not have the statistics at hand but noted that the ftp data download site generated the most visits, followed by the NC OneMap viewer and the NC StreetMap tool.

<u>2010 Statewide Orthophotography Project, NC 911 Board</u> (see PPT at GICC website - http://ncgicc.net/Meetings/tabid/138/Default.aspx)

Mr. Johnson updated the members on the status of the Statewide Orthophotography Project. He reminded the members that the project was funded by the NC 911 Board at a level of \$12.3M in response to a grant submitted by the City of Durham to acquire orthoimagery for all 100 counties in 2010. The expectation is to make the imagery available in the spring of 2011. Data collection is being managed by the Geospatial & Technology Management Office in the Department of Crime Control and Public Safety (CCPS), which oversees the many contractors that collected the imagery and are doing quality control. NC Geodetic Survey in DENR is another key cooperator, doing GPS and surveying work. The Working Group for Orthophotography Planning, a subcommittee of the SMAC, has provided invaluable assistance in reviewing the initial delivery of the imagery.

One of the investments that the State will benefit from is the Continuously Operating Reference Stations. These are GPS control stations across the state and this network has been beefed up as a part of this project and will be used in the future. A camera calibration range in Surry County was also established and this resource will also support future work.

The imagery acquisition was completed in the spring. The Working Group for Orthophotography Planning reviewed samples of the imagery to assess and establish a guide for color balancing prior to orthorectification and photo finishing. Mr. Johnson displayed a sample of the imagery, which provides a sense of the quality of the imagery. This quality should be consistent across the state. The status, as of yesterday, is that 100 percent of the imagery has been acquired; aerial triangulation involved the lion's share of the work in the last three months and is 87 percent complete; image processing is 43 percent complete; and visual quality control is 9 percent complete. Horizontal quality control is underway.

Image processing involves a number of steps including preparation of the imagery, rectification of the imagery to the terrain, editing and photo finishing and final visual quality checking. Weekly status reports are available on the NC OneMap web site at: http://www.nconemap.com/NCOrthos/ProjectStatus/tabid/432/Default.aspx.

One of the final steps will be approval by the 911 Board for official release of the data, which will be provided to the counties and their 911 operations. Each county will receive full resolution TIFF files for their county; compressed imagery for their county as well as compressed imagery for all adjacent counties; and a compressed mosaic for their county as well as compressed mosaics for all adjacent counties. Finally the data will be made available through NC OneMap.

Mr. Johnson described the general time table between now and next May when the final release of the data will be completed. Detailed design of hardware and software requirements is being conducted through the State's Enterprise Project Management Office and will include the purchase of portable hard drives and servers. The time frame for this activity is August through September. In October and November the project team will begin to accept final delivery of the data from the contractors and verify the products. During this period the team will finalize the IT solution to beef up NC OneMap and begin loading imagery to the server. Thereafter the team will continue to verify the data, get final approval from the 911 Board and begin distributing the data with the expectation that distribution and loading of the data will be complete in the April-May time frame.

One additional step is an operations and maintenance period of the servers and the system, which will continue through June of 2012. The imagery will be served through map services from NC OneMap, enabling the data to be streamed to desktops or applications similar to what Mr. Farley described earlier. There will be a download capability by which users can download the compressed imagery and the metadata. The amount of data is staggering, involving multiterabytes of data.

Ms. Stamper indicated that local governments are still unclear about what they will receive. Mr. Johnson said that he will ensure that the details of what local governments will receive will be distributed. Ms. Stamper said that she could forward the information.

ACTION #1 Staff will disseminate detailed information about project deliverables to local governments through the LGC, the list servs and the web site.

Mr. Farley asked when the image map services would be available. Jeff Brown, Coordination Program Manager, could not provide an exact time but indicated that the team is targeting the end of May. Mr. Farley asked if the caching and publication would follow soon after that. Mr. Brown said yes.

Ms. Payne sought clarification on whether the uncompressed imagery would be stored on-line. Mr. Johnson said no. Ms. Payne asked if users who are seeking the uncompressed imagery would be directed to the counties. Mr. Johnson said that that decision has not been determined as yet and that the team will consider options that will reduce the burden on counties for distributing the uncompressed imagery.

Dr. Rimer asked why the counties are so anxious to obtain this imagery. What do the counties use it for? Ms. Stamper stated that many counties have gone several years without acquiring new orthophotography and are anxious to receive free data. Mr. Dorman noted that the counties need the data for 911 responses. The responders need to know where the calls are coming from and the imagery, including that for surrounding counties, helps them determine the location of the caller. He added that counties also use the imagery to support tax reevaluation. Ms. Payne replied that

the Wake County photography is almost five years old, which is very old considering recent development, and that everyone wants new photography. There are a variety of users, including the environmental agencies; the development community, the real estate agents, and revenue department among others. All users in Wake County are chomping at the bit to get the data.

Mr. Taylor reiterated the value of the imagery to the E911 call centers. The genesis of the project is to improve the ability of E911 centers to respond to emergency calls. Many calls are from cell phones and thus calls are routed to the cell phone's county of origin. A call may come from Johnston County but it is routed to the Wake County E911 center because Wake County is the cell phone's county of origin. The latitude / longitude of the caller – in Johnston County – does not display on the Wake County E911 center's maps. Without the imagery for surrounding counties, the call center cannot determine the location of the emergency and route the information to the appropriate responders. Mr. Taylor expressed the excitement of the 911 community about this project, noting that not many, if any, states have the capability to access up-to-date photography across the state. He said that the data's value to other agencies for other applications is also very exciting as it adds to the value of the data. The NC 911 Board is more likely to support such a project in the future when the Board can report that you pay for it once but you use it many times.

Committee Reports

All Council committee representatives reported on their group's activities.

Management and Operations Committee (M&O). Dr. Mandell said that the M&O's major task is working on the NC OneMap technology refresh. It is a pre-planning project, which means that there is no money. The goal is to do as much as possible to prepare for the time when funds are available. It is being treated as a formal project and it is going through the State's Enterprise Project Management Office project approval process. The State CIO has graciously loaned the services of an experienced project manager, Linda Lowe from OITS, without whom there would be little progress. Currently the team is considering what NC OneMap looks like today, especially in terms of how much it is being used, who's using it and what it is costing. At the same time, the team is conducting research into how other states and organizations are addressing the same problems. Are there technologies or solutions or strategies that others are using that North Carolina can adopt? Concurrently, the team will release a Request for Information (RFI) to the private sector seeking feedback about how professionals in the GIS field would tackle the challenge of refreshing NC OneMap. What kind of ideas can they suggest and what sort of costs can they project?

One of the goals is to build the foundation for an argument to the General Assembly to fund the refresh of NC OneMap. Dr. Mandell noted that the legislation charged the GICC with this task but, given the budgetary situation, was unable to provide any funds. This effort will enable the GICC to be better prepared to address the General Assembly and answer the questions it may have about the value of NC OneMap. Another avenue of work is a more detailed requirements analysis, to be followed by an assessment of technology alternatives and a calculation of costs in preparation for approaching the General Assembly. Even if this year's effort is unsuccessful, the GICC can set the stage for later success, recognizing the need for a long-term education process about the importance of NC OneMap.

Regarding the RFI, Mr. Johnson reported that OITS procurement is working on it and it is expected to be released soon. Dr. Mandell noted that the requirements analysis is proceeding on a pace to be completed by November in order to prepare for the arrival of the legislature in early 2011. One goal is to get on the agenda of the General Assembly's IT Oversight Committee this fall and make a presentation to them.

Mr. Dorman noted that the key is getting a lot of data and that NC OneMap is the solution for serving the data. He asked whether NC OneMap is sufficiently funded right now to serve the imagery data. The answer to this question is critical to the plans of other state departments in designing their systems to meet their mission responsibilities. Mr. Johnson replied that the NC 911 project includes funds to beef-up the storage and capacity for NC OneMap to serve the imagery. Regarding any new requirements that may surface through the NC OneMap technology project, there are currently no funds to support them. Mr. Dorman noted that this uncertainty about the ability of NC OneMap to support map services means that state agencies and local governments have to know if they can rely on NC OneMap or otherwise plan for their requirements. For example, the Floodplain Mapping Program and the Highway Patrol in Crime Control and Public Safety both need to be able to view the imagery so CCPS needs to make plans in the event that the imagery is not reliably served by NC OneMap.

Mr. Johnson noted that funding through the grant is available to serve the new imagery. It is only the additional, undefined new requirements for which funding are not available. Mr. Correllus expressed concern about the bandwidth of the map service. Mr. Farley noted that the strategic plan for the SDV calls for DOT to host the imagery. If the web service from NC OneMap comes early next year, then DOT need not duplicate it but DOT needs to have some assurance that the service will be available. It makes sense to support the service once and let everyone use that service but if not DOT may need to make other arrangements. Dr. Mandell noted that DOT would actually save money by not having to host the imagery. Unless there is a statewide comprehensive view, then there is the risk of duplicating expenditures through multiple agencies serving imagery.

Mr. Farley said that this specific data set is a perfect example of the need for one map service and that now is the time to obtain savings and efficiencies by ensuring that this data is served once for the use of everyone. Ms. Troutman suggested that one of the committees develop recommendations for how to deal with this issue. She noted that Wake County may have the resources to serve the imagery to their users but Cherokee County may not. She expressed concern about the different capacities across the counties. Colleen Sharpe suggested that his issue is an integral part of the NC OneMap technology refresh project and can be handled by the Technical Advisory Committee. Mr. Farley noted that every county that does not want to host the data can point to this one service.

Dr. Mandell clarified the distinction between public serving of the data and the use of the data for E911. The primary purpose of the project was to acquire the data for E911, which is a closed system. Therefore the data has to be delivered to all 100 counties to meet the project requirements. Once the data are available, then it becomes available for many other uses. The challenge now is to come up with very creative and cost effective solutions for making the data available to other government agencies and the public. Mr. Farley expressed some confusion about the difference. Dr. Mandell said that if there was not the project requirement to provide the data to all 100 E911 centers, then a single map service might be the solution. Ms. Sharpe said

that the E911 centers almost have to have the data locally. Mr. Farley agreed that local delivery of the data is required but simply noted that there are real dollars to be saved right now. Otherwise DOT and Commerce and CCPS and NC OneMap will all be hosting the data. He indicated a willingness to recommend to DOT management that the agency put a little money into it. With an investment of money, the State can host a map service that anyone can access to view the data. It may require a few more servers to meet the demand but that cost is small compared to duplicating the capacity in multiple locations. Dr. Mandell suggested that the item be added to the TAC agenda.

Mr. Dorman indicated that the costs need to be identified. He noted that there is a recurring cost and the NC OneMap may fail if it starts charging for data. The quandary is that if individual agencies front the money out of their budgets then the NC OneMap service is not free to them. He recommended that we determine the 5-year costs. Dr. Mandell said that determining real costs will be one of the outcomes of the NC OneMap technology refresh project. Presenting the General Assembly with a life cycle cost is critical. Mr. Johnson reiterated that the NC 911 grant provided the initial funds to establish the service and provide the data through 2012.

Mr. Fralick noted that as State CIO, the state cannot duplicate hosting these services. He said that he could not and would not try to explain that to the Governor. Coordination of this service is necessary. An assessment of infrastructure is currently underway and eventually an assessment of applications must be included. The Governor has directed that the executive agencies examine funding alternatives in light of the projected budget deficit for next year. One possible solution is to consider bonds for IT infrastructure, which is a strategy that the state uses for other infrastructure needs such as transportation. A bond for specific IT infrastructure needs is a possibility. So even if the expansion budget option is unlikely, there may be other options and the NC OneMap refresh is not dead in the water.

Local Government Committee (LGC). Ms. Stamper reported that the LGC met on June 2. The LGC is thrilled with the clarification regarding the collection of GIS data by local governments and expressed her appreciation to Mr. McKim and the Surveyor's Model Working Group for their efforts. The LGC notified the local government community and COG members through the various list servs.

The LGC submitted recommendations to the M&O for layers that need to be added to the original list of 37 core themes for NC OneMap. The LGC also reviewed and adopted Sosius, a hosted online workspace resource that allows groups to share files, manage documents and communicate in a secure location. The Working Group for Roads and Transportation (WGRT) and the Working Group for Seamless Parcels (WGSP) are also using this tool and she recommended that other committees consider using it.

James Armstrong, LGC representative to the SMAC, is leading a subcommittee that is reviewing the Geographic Data Content Standard for Water Distribution and Sanitary Sewer Systems, adopted by the GICC in 1997.

Federal Interagency Committee (FIC). Dr. Rimer reported that in the absence of a chair, the FIC has not met since April. The FIC Executive Committee is scheduled to meet on August 24 and will set meeting dates for the remainder of the fiscal year. She anticipates a longer report at the November Council meeting.

Statewide Mapping Advisory Committee (SMAC). Anne Payne reported that the Committee met on July 14. The SMAC bylaws call for a vice-chair and Gary Thompson has agreed to serve in that capacity. The SMAC received the Council update from Mr. Johnson and reports from the SGUC, the LGC, and the FIC. She invited subcommittee chairs to report on the activities of the various subcommittees.

Working Group for Orthophotography Planning. Gary Thompson, NC Geodetic Survey, said that Mr. Johnson covered the statewide imagery project and noted that the subcommittee has been very active and busy in supporting the project. The subcommittee completed the issue paper on converting from NAD 27 to NAD 83 and submitted it to the SMAC. The SMAC suggested some minor revisions, which are now being incorporated. The subcommittee expects to complete it in a couple of weeks. The subcommittee is now focusing on the business plan for statewide orthoimagery. The plan has been divided into seven sections and subcommittee members have been assigned to draft those sections. Mr. Thompson anticipates that a first draft will be ready in mid-September.

He reminded the members that as part of the statewide imagery project, an aerial imagery calibration range was established in Surry County. USGS contacted Mr. Thompson about this effort as USGS is trying to establish calibration ranges across the country to support federal, state and local projects. USGS has proposed a Memorandum of Agreement so that the range can be used not only to support future projects in North Carolina but future federal projects as well. Ms. Payne said that even though the report was brief, this subcommittee is an extremely hardworking and productive group.

Working Group for Seamless Parcels. Tom Morgan, co-chair of the WGSP, reported that the WGSP is still trying to get the \$500K EPA grant to build a translation tool underway. He said that Julia Harrell will meet with the EPA project coordinator on Friday and hopes that the administrative issues that have delayed the grant will be resolved. So while no money had been expended, the committee has spent considerable time building mock screens of the tool to demonstrate how the translator is expected to work. The working group is also preparing business case scenarios. He noted that the Sosius work space is enabling collaboration and document sharing between the members of both the WGSP and the Working Group for Roads and Transportation.

The WGSP is working on the current standard and is trying to identify the attributes that will best facilitate data sharing. There have been several meetings with Michael Brown of the Department of Revenue to determine what data are available. The property cards and tax mapping systems for each county represent a valuable data trove. A survey has been submitted to the tax assessors and to date 51 responses have been received, an outstanding response. The tax assessors are very interested in the outcome of this effort as they have responsibilities to submit reports to the Department of Revenue. The date required for these reports are not easy to compile. The WGSP has pointed out to the tax assessors that if the data can be stored in a consistent manner in their GIS, they will have a mechanism to complete the required forms much more quickly.

<u>Working Group for Roads and Transportation</u>. Janet Lowe, DOT and co-chair of the WGRT, said that her report would duplicate much of what Mr. Morgan reported because the WGRT and WGSP have been working so closely together. She reported that Alex Rickard, co-chair of the WGRT, has completed all the paperwork with FGDC on the grant that was awarded and that work has begun.

The WGSP and WGRT solicited a number of volunteers to participate on an integrated project team. The team met weekly for the past couple of months to develop business rules and users stories for the translation software. The team is prepared to submit this information to the developers, a private contractor that will be engaged through the EPA grant. That is on hold until the EPA grant paperwork is finalized. The July meeting of the WGRT was cancelled because of the delay on the WGSP grant but expects to meet in August. Mr. Rickard will attend the National States Geographic Information Council meeting in September to collaborate with the other FGDC grant recipients.

Ms. Payne noted that the bright side to these activities is that WGSP and WGRT are working together to leverage two sources of federal money – the EPA grant and the FGDC grant - to develop a translator for statewide parcels and roads that can potentially be used to translate other data sets into statewide data sets.

North Carolina Board on Geographic Names (NCBGN). Ms. Payne reported that the US Board on Geographic Names (USBGN) upheld the NCBGN's recommendation that Moody Lake in Charlotte not be renamed to Whitehall Lake. The NCBGN has four renaming requests pending in Wake, Iredell, Brunswick and Cabarrus Counties.

Regarding other SMAC activities, Ms. Payne reported that a SMAC subcommittee completed its review of the draft FGDC Thoroughfare, Landmark, and Postal Address Standard, which is the long name for the addressing standard, and the SMAC submitted the comments to the FGDC on June 15. Final review at the federal level should be complete by the end of the calendar year. The SMAC will then examine the standard and decide whether to consider and recommend it to the Council as a state standard.

Adding to Ms. Stamper's report, Ms. Payne reiterated that a SMAC subcommittee led by James Armstrong is working on an update of the utility standard adopted by the GICC in 1997. The committee has made considerable progress, including an update to geodatabase from a coverage-based schema type, adding attributes, domains and simple topology rules. The subcommittee will complete and present their recommendations to the SMAC at the October meeting. The purpose of this standard is to help local governments when they are develop a water / sewer utility mapping database, especially if they did not previously have that data.

The SMAC is actually developing a standards document on how to manage standards. The document will outline a process for the creation, assessment, update and adoption of standards to provide for an orderly approach to the development of standards and the adoption of those created by others. The document should be ready for review and approval by the SMAC at its October meeting.

The SMAC is developing a work plan for the current year, following the format used to document last year's activities and accomplishments. The SMAC will review and approve it at the October meeting. Ms. Payne expressed her appreciation to Jeff Brown for his help.

State Government GIS Users Committee (SGUC). Mr. John Correllus said that the SGUC Executive Committee met in May and the focus of the discussion was the ELA. He expressed hope that they not have to talk about that topic in the future. With the ELA in place, ESRI attended the SGUC general meeting to describe new products that were released this summer.

The SGUC Executive Committee will schedule a meeting in September to discuss a work plan, similar to what Ms. Payne described. He expressed appreciation to Mr. Johnson and Jeff Brown for their assistance in this process.

Technical Advisory Committee (TAC). Ms. Sharpe said that since she only recently replaced Ms. Laughton as the TAC chair that she is still getting her feet wet. The TAC met shortly after the last Council meeting and drafted some questions related to the NC OneMap requirements.

Council Member Announcements and News

There were no member announcements.

ADJOURNMENT

There being no other business, the meeting was adjourned. The next meeting will be November 10, 2010 from 1:00-3:00 pm at the Department of Public Instruction Board Room, Room 755, 301 N. Wilmington Street, Raleigh.

PowerPoint presentations and reports are on the Council Web site: www.ncgicc.org Click on "Meetings." Presentations and documents presented during the meeting are available in a Zip file for easy download.