North Carolina
Geographic Information Coordinating Council

Minutes
February 11, 2016

PRESENT
Chair: Stan Duncan. Members: Bob Brinson (Vice Chair), Allan Axon, Jon Beck, Kathryn Clifton, John Correllus, Jeff Mulligan (for John Cox), Gary Thompson (for John Dorman), Ryan Draughn, Sarah Wray (for John Farley), John Gillis, Derek Graham, Joanne Halls, Bliss Kite, Sarah Koonts, Dan Madding, Linda Millsaps, Tom Morgan (for Elaine Marshall), Doug Newcomb, Josh Norwood, Kevin Parrish, Anne Payne, Alex Rankin, Hunter Robinson, Allan Sandoval, Richard Taylor, Ron York, and Bobby Creech (for David Baker)
Staff: Tim Johnson, CGIA

ABSENT
Jay Bissett, Marc Burris, Dianne Enright, Chloe Gossage, Matthew Helms, Sharon Rosado, and Joseph Sloop

PROCEEDINGS

A meeting of the Geographic Information Coordinating Council was held in Room 1211 of the State Employees Credit Union in Raleigh, North Carolina. Chair Stan Duncan called the meeting to order.

Chair Announcements
Mr. Duncan welcomed the Council members and visitors. He welcomed Keith Werner, appointed State Chief Information Officer in December, who will give a presentation on the new Department of Information Technology (DIT) today.

Mr. Duncan reported that the Council's 2015 Annual Report was submitted to the Governor's Office and the General Assembly last month and distributed to Council members. Staff also prepared a summary brochure, distributed to members today. He welcomed comments on the format and content of the brochure.

Mr. Duncan announced that Kathryn Clifton is now a GIS Analyst for Davidson County and has been re-elected as Chair of the Local Government Committee.

Mr. Duncan recognized Gary Thompson and Joe Sewash for their involvement in national geospatial organizations. Mr. Thompson, NC Geodetic Survey in the Department of Public Safety, represents North Carolina on the National Geospatial Advisory Committee and advises on issues important to the state. Mr. Sewash, CGIA in the Department of Information Technology, serves on the Board of

Directors of the National States Geographic Information Council and advises on issues including address data.

Approval of Minutes

The minutes of the November 19, 2015 meeting were approved for adoption with no changes.

Presentation

The New NC Department of IT: Update to Geographic Information Coordinating Council (Keith Werner)
(See "GICC–DIT Transition Update" PPT file - http://www.ncgicc.org/GICCMeetings.aspx)

Mr. Duncan introduced Keith Werner, State Chief Information Officer. Prior to his current appointment, Werner was named to lead the Statewide IT Division as Deputy State CIO. Earlier in 2015, Mr. Werner was appointed as the Chief Information Officer for Natural and Economic Resources, which includes the Department of Environmental Quality (DEQ), the Department of Natural and Cultural Resources, and the Department of Commerce. He had been CIO at DEQ since April 2013. Mr. Werner has over 20 years' experience as a business leader and manager with a diversified background in information technology and product development. Keith received a management degree from the University of North Texas.

Mr. Werner explained that he met with Mr. Duncan and John Correllus (Director of the Government Data Analytics Center or GDAC) recently and it was clear that Mr. Duncan is passionate about the Council. Mr. Werner thanked him for his leadership of the Council, continuing now in his retirement.

As an introduction, Mr. Werner pointed out that CGIA is now part of GDAC in the new Department of Information Technology. He recognized that beyond State agencies, the Council has representatives from local government, federal government, private organizations, and higher education and agreed with Mr. Duncan that GIS touches the lives of citizens in many ways.

Mr. Werner emphasized that we as service providers need to do a better job enriching the lives of our citizens through technology, making interacting with government easy and efficient. The need for a new Department of Information Technology at the state level was to fix a piecemeal approach to information technology that was inefficient and costly. The emphasis is now on an enterprise approach to IT. Removing IT silos is a priority. Session Law 2015-241 created the new department (DIT) with new authority in procurement, project management, architecture and security.

The scope of DIT includes budgeting for agency IT, transfers to DIT, rates and chargebacks, cost savings, rules, and statutory changes. Twelve agencies, including most of those state agencies represented on the Council, are transitioning their information technology to DIT. Restructuring of enterprise IT functions includes personnel management, project management, procurement, hardware configuration, software acquisition, data center operations, network operations, and security. GIS will eventually be a part of this as well. DIT will work with state agencies to develop plans for the transition beginning this fiscal year. Early adopters will inform transitions overall. Specific plans by agency will be developed. This is a thoughtful, thorough, complicated, iterative process.

In staying the course on IT consolidation, although IT leadership changed late last year (from Chris Estes to Mr. Werner) there is no change in direction toward IT modernization and a unified statewide enterprise. From the beginning, Governor McCrory has recognized the importance of IT and the need for restructuring of the state's IT systems.

Strategy to implementation includes a DIT transition team, functional transition, change management, and appreciation for the dedication of IT professionals. Benefits to state agencies include efficient collaborative solutions, greater opportunity for advancement, and competitive, consistent pay throughout agencies.

Mr. Werner described guiding principles for DIT transition: don't break the business, collaborate, be transparent, and make sure it is done right. An important goal is to keep IT professionals close to the business functions and applications they support, not to put IT professionals all in one place or to cut positions. The DIT Transition Office supports cross-agency collaboration and agency-specific plans. Communications will be important to avoid surprises. With no specific implementation date, DIT is committed to thorough planning, not cutting corners, and achieving successful transition.

Revisiting the mission and vision of DIT, Mr. Werner confirmed that the six pillars of DIT transformation are to balance innovation and risk, transform statewide IT, inspire people, collaborate across the enterprise, deliver customer service, and reform the business. He added that DIT is working hard to get IT procurement right, improving processes. He also emphasized rate rationalization as another priority of reform.

Regarding progress, program scope and functional work group alignment are in progress. The Program Management Office is established with staffing under way. Cross-agency working teams are being established. A high level transition roadmap and communications plan is in development. Finance teams kicked off in mid-December. This quarter, DIT will finalize and communicate program governance, approve a program charter, set-up inaugural transition oversight meeting, and develop a plan to phase in a financial model.

In response to a question about the role of "open data" and "open standards" in statewide architecture, Mr. Werner called on Mr. Correllus to comment. He explained that the state is working to develop a data management strategy that would include that piece.

In closing, Mr. Werner invited the Council to follow DIT on social media and thanked the group for the opportunity to present. Mr. Duncan responded that he looks forward to working together and seeing how GIS and the work of this Council can mesh with the DIT programs and he thanked Mr. Werner for taking time to present today.

Technical Presentation

ForWarn: Detecting Forest Disturbance From Satellite in Near-Real-Time (Bill Christie)
(See "nc_giscc_021116" PPT file - http://www.ncgicc.org/GICCMeetings.aspx)

Mr. Duncan introduced Bill Christie, a Biological Scientist who joined the Eastern Forest Environmental Threat Assessment Center in August 2010. He has over 30 years of GIS and remote sensing experience as applied to natural resources and conservation issues. He has implemented GIS technology and created geospatial applications for the USDA Forest Service, the States of Tennessee and Alabama, the Nature Conservancy and the US Army Corps of Engineers. Bill received undergraduate degrees in Forestry and Geography and obtained his Masters in Geography from the University of South Carolina.

Mr. Christie explained that *ForWarn* relates primarily to forest resources. From government management of large land areas to landowner woodlots, the concepts of forest health and disturbance are the same. He works at the Southern Research Station in Asheville where a team developed a web mapping application for communicating potential forest disturbance in near-real-time. *ForWarn* is a national-scale, satellite-based system for recognizing and tracking forest disturbances that may be related to weather events, drought, insects, clear-cutting, mining, or other events. The system generates new potential disturbance maps every eight days, even in winter, and detects all types of forest changes. The ground resolution of the source data, collected by the NASA Moderate Resolution Imaging Spectroradiometer (MODIS) satellite, is 231 meters (758 feet). The temporal frequency is the greatest advantage.

ForWarn is a successful collaboration of four federal agencies (US Forest Service, NASA Stennis Space Center, USGS EROS Data Center and Oak Ridge National Laboratory) as well as the National Environmental Modeling and Analysis Center at UNC Asheville.

The award winning system, in operation since 2010, has featured a public forest change "Assessment Viewer" on the web since 2012 that displays the three most recent national disturbance maps. Potential disturbance is identified by comparing current "greenness" with historically observed greenness that would be expected for healthy, undisturbed vegetation growth at that location and time of year. Greenness is based on the widely used Normalized Difference Vegetation Index (NDVI). *ForWarn* detects disturbances in all vegetation including crops and rangeland forage. Index values may indicate vegetation recovery over time as well. Products are available for various time period comparisons.

Mr. Christie displayed a series of maps with colors based on percent change in NDVI values. Examples included strip mines in Kentucky, tornado tracks in Alabama, hail in the Asheville area, caterpillar defoliation in South Carolina, forest fire in Minnesota, and drought in Texas. He explained that the *ForWarn* team uses *LandSAT* satellite imagery (30-meter resolution) to check and verify areas of apparent disturbance. The system is picking up drought, flood, and extremes of hot and cold. The views may be masked to reveal just forests, but the team is finding other land cover types such as farmland are appropriate for analysis.

The website for the Forest Change Assessment Viewer is http://forwarn.forestthreats.org/fcav for interactive mapping and guidance for using the tool. Mr. Christie explained some of the limitations (cloud cover, 24-day period moving every 8 days, delays in detecting new disturbances, timing of seasons, limitations of the low resolution and other factors). Despite limitations, *ForWarn* continues to evolve toward earlier detection and more reliable assessments.

Mr. Christie encouraged Council members to use the tool and welcomed questions to himself and/or Bill Hargrove, the Principal Investigator. He closed by emphasizing that *ForWarn* is a strategic resource to indicate change and support efficiency in the tactical work that needs to take place in the field, on the ground.

Mr. Duncan thanked Mr. Christie, noted much interest around the table, and invited questions. In response to a question from Dan Madding about the "forest mask" Mr. Christie explained that *ForWarn* uses the National Land Cover Data as a basis for defining areas to mask out by land use/land cover category. Less masking is common lately. For forest assessment, he advised looking at assessments of grassy areas and shrubs because they have shallower roots and are

likely to show disturbance before the trees. Joanne Halls asked if *ForWarn* has considered the Google Earth Engine for cloud-based data mining. Mr. Christie is learning more about it. Current *ForWarn* capabilities are well supported by NASA, Oak Ridge National Laboratories, and the University System. Mr. Duncan added that the assessment viewer could be valuable in property tax work in rural areas as well.

Technical Presentation

Preserving Our Geospatial Representations of North Carolina (Sarah Koonts and Camille Tyndall Watson)
(See "20160210_gicc_update_Final" PPT file - http://www.ncgicc.org/GICCMeetings.aspx)

Mr. Duncan introduced Sarah Koonts and Camille Tyndall Watson of the State Archives of North Carolina in the Department of Natural and Cultural Resources. Sarah Koonts has served as the Director of the Division of Archives and Records since 2012 and has worked at the State Archives for nearly 23 years in a variety of capacities, including reference, local records analysis, and collections management. Sarah received a B.A. in history from Simpson College in Indianola, Iowa and an M.A. in Public History from North Carolina State University. Camille Tyndall Watson is the Digital Archivist at the State Archives of North Carolina. Previously she worked as the Assistant Archivist at the North Carolina Railroad Company. She has also worked with the Southern Folklife Collection at UNC-Chapel Hill, the National Museum of the American Indian Media Archives, and the Forest History Society archives. Also in attendance was Kelly Eubank, Head of the Digital Services Section, who has been involved in digital archiving for years.

Ms. Koonts stated the mission of the Division of Archives and Records which is to preserve, protect and make accessible to the public historical and evidential materials relating to North Carolina. The Division serves the public in documenting government, documenting history and protecting individual rights and liberties of the citizens.

In brief, for the public, for government and for educators, the Division:

- Collects, preserves, and makes available for public use historical and evidential materials relating to North Carolina.
- Manages public records created by state and local agencies, private materials, and organizational records donated by individuals and organizations. This includes private materials such as photographs and films.
- Creates guidelines and rules for the orderly retention and disposition of public records.
- Provides reference services for records in our permanent collection in-person and online.

The founding mandates for the Division are the Public Records Act and the Archives and History Act. These include authority for records retention and regulation of the destruction of public records. Ms. Koonts emphasized that, like geospatial data and the GICC, modern archives rely on good collaborative relationships. Collaborative work on the front end is required for preserving all sorts of records, including geospatial.

Examples of preserved materials are now on display at the NC Museum of History in "Treasures of North Carolina," including a series of historic maps. The full exhibit helps communicate how government records are transitioning into the modern era. The interactive exhibit of historic maps and GIS maps provide good examples of preservation, continuity and public access. Ms. Koonts added that State Archives spreads that word that North Carolina is preserving geospatial data.

Ms. Tyndall Watson continued by acknowledging the Council and CGIA for the active ongoing digital preservation of geospatial data. She explained that the Division of State Archives has been partnering with the Council and CGIA since 2007, when collaboration began with a series of Library of Congress-funded grants to study the preservation of GIS data. The multi-year effort involved GIS and Archives staff from four partner states. Over four years the stakeholders—including the GICC and local, state, and municipal governments from NC—developed preservation standards, workflows, and guidance, as well as provided outreach on a national level to professional organizations from both the GIS and archival communities.

In NC specifically, State Archives partnered with the CGIA to examine how to transfer, preserve, and provide access to superseded GIS data. These examinations included technical concerns, such as file format, metadata requirements, how the data would be packaged and stored, and long term preservation techniques, as well as concerns of access and business planning. During the course of the grant, the team recognized that in order to continue moving forward, there would need to be a mechanism to provide sustainable funding for preservation efforts.

The GeoMAPP project proved to be a very fruitful collaboration. Local and state agency retention schedules now address the management of GIS data as part of the schedule, and a mechanism for the transfer of superseded GIS data was developed. As counties and state agencies load GIS data into NC OneMap, the superseded data is transferred to the Archives over the network by the NC OneMap database manager on an annual or semi-annual basis as defined by the NC OneMap Retention Schedule.

The team also tested and implemented software tools to ensure that data originating from CGIA is the same data that arrives at the State Archives. This ensures the authenticity and integrity of the data that we are preserving. The records that are produced and managed by the CGIA are created "preservation ready," meaning that they arrive in a way that ensures their further use; using software tools ensures that they remain preservation ready when they reach the archives.

DNCR now also has a seat on the GICC Council to advise and provide guidance on issues relating to the retention of current GIS data and the preservation of superseded data. Also, sustainable funding to continue to preserve GIS data has come from two primary sources: the Archives and Records Management Fee, and funds included in orthoimagery acquisition and processing funded by the NC 911 Board.

Moving from grant projects to production, since the GeoMAPP project ended in 2011, the Division of State Archives has retained superseded GIS data on a regular basis for preservation. Ms. Tyndall Watson explained that all records have a life cycle, regardless of format. Records are created, used in support of the functions of the agency, and then either destroyed or transferred to the State Archives for permanent retention. Retention schedules are documents that provide guidance for local and state agencies on what materials should be kept, and for how long. These schedules are documents that are a collaboration between a member of the Government Records Analysis Unit at the archives and the local or state agency, and are meant to meet the needs of the agency, while also helping them follow public records law in the management of their records. They can be updated over time to reflect changes in general statute, federal law, or other citations, as well as changes to how business is done within the agency.

Ms. Tyndall Watson displayed the signature page of a retention schedule and described the basics of a schedule, including descriptive titles and disposition instructions. The latter include when records may be disposed of, or when they should be transferred to the State Records Center or State Archives. Local schedules are similar to state schedules.

GIS data follows a similar life cycle as any other record, and is included in local and state agency schedules. However, GIS, being made of complex electronic documents, is a little more complicated. In order to ensure that historical GIS data will be preserved well into the future, key relationships must be established before the State Archives can begin to inventory and appraise data for retention. That data then must be prepared, ingested, and preserved by the Archives. For public access, planning is required to ensure a sustainable GIS preservation system.

For electronic records the Digital Services Section works closely with Government Services to develop documents to provide guidance and assistance to state agencies and local governments. To date, the growing Digital Repository houses 70 TB of data, including GIS data. Electronic records are inherently fragile, and come with their own special set of challenges. Physical media, such as flash drives, hard drives, or disks, should be stored in appropriate environmental conditions, and the media should be handled with care. The data contained within media is also fragile. It is important to maintain the integrity of the bit stream through security, checksums, periodic sampling, and other validation. "Bit rot" and the advantages of newer media also make periodic refreshing and reformatting or material necessary, and should be planned for. During any transfer or reformatting it is essential to ensure the integrity of the bit stream in order to maintain trustworthy electronic records.

GIS data presents all of the challenges of any other electronic record, plus GIS is made up of very large collections of data that include complex structures, metadata, and additional associated technologies. The required format for transfer is "shapefile" rather than a software-specific database format. Shapefiles are more stable and include all the required layers so that the data can be reused independent of the software system. Fortunately, CGIA receives and cleans data before it is superseded and transferred to the Archives.

CGIA transfers superseded data from NC OneMap annually or semi-annually. The data is packaged as a folder using a tool that creates baseline hashes for the included files prior to transfer. The package is then transferred to us at the Archives over the network. On receipt, files are validated against the hashes to ensure that all of the data has arrived unchanged. Larger files like orthoimagery, which are transferred less regularly, are too large to be transferred via the network, and are transferred using hard drives.

State Archives is now an integral part of the GIS community. In addition to Sarah Koonts' seat on the Council, Kelly Eubank sits on the SMAC, and Camille Tyndall Watson is a member of the geospatial metadata committee. This results in guidance from a preservation perspective, as well as learning about the needs of the GIS community. To date, State Archives has collected over 20 TB of data from CGIA. Many of these datasets can be accessed through the North Carolina Digital Collections on "ContentDM."

Due to space and staff limitations, new datasets are not currently being added into ContentDM, but State Archives is in discussions about returning to this activity in the near future. ContentDM contains 124 datasets, enables access to GIS data as complex objects, and adds a process step to

existing metadata, in order to document the transfer of data to the archives. Downloadable data are in shapefile format, zipped.

Ms. Tyndall Watson stated that State Archives wants to be sure to meet the needs of the GIS community in NC, and is open to discussion about how to do that. She posed some questions to start discussion:

- What archived datasets would you like to see online?
- What types of superseded or historic data are you keeping or using in your practices?
- What information, tools or help needed to preserve data or better utilize superseded data?
- How do you currently search for GIS data?
- What information (e.g. metadata) helps you locate and decide which data to download?

Ms. Koonts added that appraisal of geospatial data—what should be archived and when—is an ongoing process. State Archives tries to be flexible in finding solutions for particular records. For example, county tax records are captured by periodic snapshots, not with every change in the records. Geospatial data custodians need to inform State Archives about appraisal of specific datasets.

Mr. Duncan commented on the value of snapshots of land records annually going back many years. He added land records are very informative for court cases involving property and could be more so if survey records were tagged or linked to property boundaries. Ms. Koonts commented that a seamless transfer of custody of a record to State Archives can preserve the authenticity of the record. The historic record of government can serve legal purposes.

In response to a question from Linda Millsaps, Ms. Koonts explained that State Archives has a generic sense of who is accessing archived records, but not detailed statistics.

Gary Thompson commented on the value of historic maps in re-establishing county and state boundaries. Bob Brinson added that law enforcement cameras are producing great quantities of digital data and highlighting issues of authenticity, data storage, and control and management of content such as selection of portions of videos at key moments. Ms. Koonts has weighed in on state and local issues. Appraisal is complicated and related to triggers for litigation or investigation. State Archives needs to be involved in enterprise data management.

In response to a question from Tom Morgan, Ms. Koonts explained that State Archives subscribes to ContentDM for digital collections at a cost to State Archives (not a consumer subscription). Also, Ms. Koonts noted a need for more thinking about the best ways to access historic data involving State Archives and NC OneMap. As ever, metadata is an essential element for archiving. In response to a question from Mr. Correllus, she confirmed that State Archives classifies all data by type including confidential records that are protected like any confidential government records. Again, descriptions are essential. Kelly Eubanks added that the documentation recommendations from the GeoMAPP project were a foundation for the well-described geospatial datasets that are coming to State Archives from NC OneMap. Tim Johnson expressed appreciation for the partnership with State Archives going back ten years.

Statewide Orthoimagery Program Update

Tim Johnson provided a brief update on the Statewide Orthoimagery Program. The Program reached a milestone with completion of the four-year cycle of updates with delivery of 2015 orthoimagery for the Southern Piedmont and Mountains. The statewide collection, funded by the NC 911 Board, amounts to some 60,000 tiles (5,000 by 5,000 feet) and more than 16 terabytes of data. Imagery was distributed to 30 Public Safety Answering Points (PSAPs) in 24 counties in a series of delivery meetings in January within the region. The meeting in Carthage included representatives from Fort Bragg. Imagery was released on NC OneMap on February 1, as well. Mr. Johnson credited the work of the imagery project team, including the Department of Public Safety, Department of Transportation, Department of Secretary of State, and CGIA, for data quality control and timely release. A lot of time and effort goes into visual quality control using the VOICE tool. Mr. Johnson recognized Cherokee, Haywood, Henderson, Gaston, and Richmond Counties as "gold star" counties for reviewing between 80 and 100 percent of the tiles in their respective counties. Local review is an essential part of quality control.

Mr. Johnson explained one quality issue, the first of its kind in the four-year cycle. In portions of Montgomery, Moore, Richmond and Scotland Counties a technical problem in acquisition caused some blurriness such that some tiles did not meet state specifications. Although the project delivered 100 percent usable imagery in those areas, including parts of Fort Bragg and Camp Mackall, the affected locations will be re-flown in 2016 at the expense of the contractor, and new 2016 products will be delivered for those locations. Those areas will still be included as planned in the Eastern Piedmont phase for 2017 acquisition.

Mr. Johnson pointed out that imagery contractors achieved between 87 and 90 percent acceptance for the initial delivery of tiles over the four-year cycle. Quality control returned 10-13 percent of tiles to the contractors for issue resolution in preparation for final product delivery.

The next four-year cycle is well underway. The Coastal Orthoimagery 2016 project has four contractors covering 27 counties: Atlas Geographic Data of Wilmington, Spatial Data Consultants of High Point, Sanborn Map Company of Colorado, and Surdex Corporation of Missouri. Agreements are in place with the military bases and ranges. Acquisition is in very good shape this early in the flight season. Completion to date includes the northeastern counties and much of the mid-coast area including most of the flight lines over military installations.

Mr. Correllus commented that the orthoimagery program is a huge success. He inquired about the cost savings over the four-year cycle. Richard Taylor pointed to the Council's Annual Report 2015 ("Based on project experience 2012-2015, the four-year statewide approach will cost approximately $14.1 million, saving as much as $82 million for statewide acquisition." Annual Report, page 6). Mr. Taylor added that in addition to saving money in local government, the statewide project achieves more coordination among counties and agencies. North Carolina's approach to statewide data helps avoid tragic outcomes like the story from Georgia Mr. Taylor shared in a previous meeting where an emergency call from a motorist in distress located in one jurisdiction was received in the adjacent jurisdiction. The call did not generate a timely response because street and address information from the neighboring jurisdiction was not available in the emergency communications center. The NC imagery program is now extending the county-based imagery products to a minimum of seven additional miles into neighboring jurisdictions. The project team also obtained copies of imagery from GIS coordinators in neighboring states

Tennessee, Georgia, and South Carolina to extend the visual reference beyond the state border and complete the 7-mile extension for border counties.

Mr. Taylor added that the imagery program has increased cooperation among counties and municipalities in sharing GIS data. Mr. Taylor reiterated that statewide orthoimagery is one of the crown jewels of the 911 Board because it touches so many agencies and people and we cannot know how many lives it affects. He explained that as we move toward Next Generation 911, we will be routing emergency calls based on geospatial location—latitude/longitude—not on a civic address. Without GIS data, Next Generation 911 will not be possible. NC 911 Board is using technical services from CGIA and Joe Sewash specifically. Mr. Taylor expressed gratitude to Tim Johnson, CGIA, and the collaborating agencies. He is glad that another statewide four-year cycle is underway.

Mr. Madding pointed out that, beyond savings from efficient statewide acquisition and processing, the orthoimagery program does something more important than save money. The "haves and the have-not" counties and PSAPs get equal treatment and equal products with equal frequency. He recognized that in the past some counties found it difficult to afford imagery projects of the same quality and frequency. Mr. Morgan shared that he learned from Graham County (population 8,861 in 2010) that having new 2015 orthoimagery is enabling the tax department to do their own property re-appraisal, saving an estimated $250,000 in contracting fees. Mr. Draughn echoed the benefits and recalled difficulty before 2010 in justifying county orthoimagery projects to county commissioners.

Mr. Duncan pointed out that cross-jurisdictional data came up in a recent meeting at the NC Association of County Commissioners about Census geospatial data. Efforts on priority geospatial datasets are coalescing to equalize data across the state, data are more accurate, and the private sector is benefiting, too.

NC OneMap Update

David Giordano, NC OneMap Database Administrator, reported that the Natural Heritage Program in the Department of Environmental Quality and NCDOT GIS provided regular quarterly updates to datasets discoverable and accessible through the NC OneMap Geospatial Portal. Regarding two of the most popular datasets (1) the 2015 imagery is now available for download from NC OneMap and is available in the web services "Orthoimagery_2015" and "Orthoimagery_Latest" (cached), and (2) the data update process for statewide parcels is fully functional. Scripts run on weekends to automate the data update process from the latest updates in the NC Parcel Transformer. Other scripts automatically create parcel downloads (by county) and update statewide web services. Also, in what has become a routine, NC OneMap transferred 3.2 gigabytes of data to State Archives last quarter.

Mr. Duncan asked Council members to keep in mind the question: are there datasets that are not available via NC OneMap that would be of benefit to add?

GICC Member Announcements

Mr. Duncan did not request committee reports today as the agenda was structured to make time for the three presentations. Instead, he invited Council member announcements.

Hunter Robinson announced that he will retire from the State Auditor's Office on April 30. He "wanted to tell everyone what a great experience this has been for me and I really enjoyed it" and wished the Council the best. Mr. Duncan expressed his appreciation and thanked Mr. Robinson for his five years of service.

Mr. Newcomb announced that the Open Source Geospatial Foundation's North American conference for open GIS at the Raleigh Convention Center, May 2-5, 2016 has a record number of presentation submissions (more than 150). Registration is open.

Mr. Johnson urged the Council to watch for an announcement naming the location of the 2017 North Carolina GIS Conference via email in the next few weeks.

Hope Morgan, on behalf of John Dorman (Department of Public Safety, Division of Emergency Management), reported that Phase 4 (of 5) of statewide LiDAR will proceed with acquisition of 20 counties in early 2016. LiDAR will be collected using the new high density method (8 points per meter).

Mr. Duncan added that Henderson County and NC Department of Agriculture & Consumer Services (DuPont Forest) acquired color infrared imagery in conjunction with the 2015 phase of orthoimagery, and he recommended color infrared as an affordable product that can be produced by the orthoimagery contractors from the digital data by request.

Kathryn Clifton (re-elected Local Government Committee Chair) announced that the NC Local Government Information Systems Association appointed Michelle Deese of Catawba County to serve on the Local Government Committee. Ms. Clifton commented on the value of metadata in local government GIS data management. She also pointed out that the Statewide Orthoimagery Program frees local government GIS professionals from administrative tasks (budget requests and justifications, requests for qualifications, etc.), affording more time for developing additional geospatial data (using imagery as a base map).

Mr. Draughn reported that NC League of Municipalities has recommended Steve Averett, City of Greensboro, to the Governor's Office as a nominee to replace Twyla McDermott as the municipal government representative on the Council. Ms. McDermott recently retired from the City of Charlotte.

ADJOURNMENT

There being no other business, the meeting was adjourned at 2:54 PM. The remaining Council meetings for 2016 are scheduled for May 11, August 10, and November 17.

Presentations and reports are on the Council Website: http://www.ncgicc.org/GICCMeetings.aspx. Click on "GICC Meetings" and navigate to February 11, 2016 and the column on the right for presentations and documents presented during the meeting in a downloadable zip file.