

GIT GOVERNANCE

State Models and Best Practices

North Carolina

Prepared for
Wisconsin Geographic Information Office
Wisconsin State Cartographer's Office

Prepared by
L. Shanley
Land Information & Computer Graphics Facility
University of Wisconsin-Madison

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The **Wisconsin Geographic Information Office (GIO)** has the responsibility to coordinate Wisconsin's geospatial information activities, to implement standards to facilitate interoperability of information related to homeland security, to make recommendations on awarding grants to fund geospatial data, and to create information sharing agreements with state, local and tribal governments.

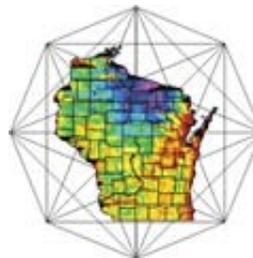
The **Wisconsin State Cartographer's Office (SCO)** is a unit within the Department of Geography at the University of Wisconsin-Madison. With an outreach mission, the SCO gathers, maintains and disseminates information about mapping and geo-spatial data in the state.

The **Land Information & Computer Graphics Facility (LICGF)** of the University of Wisconsin-Madison provides research, training, and outreach in the use of land and geographic information systems while focusing on land records modernization, land and natural resource management applications, and the use of information for land-use decision-making.

The **US Geological Survey (USGS)** has realigned its spatial programs into a National Geospatial Program Office (NGPO), bringing The National Map, Geospatial One-Stop, and the Federal Geographic Data Committee into a single program office. With the creation of the NGPO, the essential components of delivering the National Spatial Data Infrastructure (NSDI) and capitalizing on the power of place will be managed as a unified portfolio that benefits the entire geospatial community.

This state GIT governance profile was compiled as part of *GIT Governance: State Models and Best Practices*, a summary report in support of a proposal for a geographic information council for the State of Wisconsin (April 2007), and was prepared by L. Shanley, Land Information & Computer Graphics Facility, University of Wisconsin-Madison, and National Consortium for Rural Geospatial Innovations (RGIS), with assistance from Zsolt Nagy, Manager, North Carolina Center for Geographic Information & Analysis, and with additional assistance from D. David Moyer, and Stephen J. Ventura, Director, Land Information & Computer Graphics Facility, University of Wisconsin-Madison. This report was funded by a "50 States Initiative" grant award through the Federal Geographic Data Committee's (FGDC) 2006 National Spatial Data Infrastructure (NSDI) Cooperative Agreement Program (CAP). This CAP grant – Agreement Number 06HQAG0109 – was administered through the Wisconsin Geographic Information Office (GIO), in cooperation with the Wisconsin State Cartographer's Office (SCO).

Wisconsin Department of Administration
Wisconsin Geographic Information Office
101 East Wilson Street, 8th Floor
Madison, WI 53707-7844
Website: http://www.doa.state.wi.us/section_detail.asp?linkcatid=568
Email: david.mockert@wisconsin.gov
Phone: (608) 261-5042



Project Team

David Mockert	Principal, State GIO, WI Geographic Information Office
Lea Shanley	Research Analyst & Project Coordination, LICGF, UW-Madison
Steve Ventura	Project Consultant, LICGF, UW-Madison

Interview Participants and Co-contributors

Dennis Goreham	Manager, UT Automated Geographic Reference Center
Gary Irish	Program Manager, AZ Land Resource Information System
Christian Jacques	Director, MA Office of Geographic and Environmental Information
Shelby Johnson	State GIO, Arkansas Geographic Information Office
William Johnson	Manager, NY GIS & Critical Infrastructure Coordination
Jim Knudson	Director, PA State Geospatial Technologies
Zsolt Nagy	Manager, NC Center for Geographic Information & Analysis
Anthony Spicci	GIS Supervisor, RSD, MO Department of Conservation
Gene Trobia	State Cartographer, AZ Geographic Information Council

Collaborating Organizations and Key Contacts

Ted Koch	State Cartographer, Wisconsin State Cartographer's Office (SCO)
Dick Vraga	Wisconsin Geography Liaison, U.S. Geological Survey (USGS)
Jason Grueneberg	President, Wisconsin Land Information Association (WLIA)
Damon Anderson	President, Wisconsin Land Information Officers Network (LION)

Table of Contents

North Carolina GIT Governance.....	1
Geospatial Coordination Structures and Procedures.....	1
Director, North Carolina Center for Geographic Information and Analysis	2
Center for Geographic Information and Analysis	2
North Carolina Geographic Information Coordinating Council	4
North Carolina Geodetic Survey.....	12
U.S. Geological Survey National Geospatial Programs Office.....	12
North Carolina Land Records Management Program.....	13
Funding and Support.....	16
Challenges and Opportunities	17
Appendices.....	
A. Session Law 2001-359, Senate Bill 895 – North Carolina Geographic Information Coordinating Council	20
B. North Carolina GICC Executive Orders Nos. 142, 125, 15	26
C. North Carolina Geographic Information Coordinating Council By-Laws, Adopted May 14, 2002	35
D. North Carolina Memorandum of Agreement for Data Sharing	40
List of Figures	
Figure 1. North Carolina GIS Coordination Organizational Structure, 2006.	15

North Carolina GIT Governance

GEOSPATIAL COORDINATION STRUCTURES AND PROCEDURES

North Carolina has been a national leader in GIS implementation and coordination for over twenty-five years. Created within the North Carolina Department of Administration's Office of State Planning, and later moved to the Department of Natural Resources and Community Development, the Land Resources Information Service (LRIS) provided GIS services to a variety of clients within the state, and maintained a statewide GIS database, from the late-1970s through the 1980s.¹ In 1991, the Land Resources Information Service, renamed the Center for Geographic Information and Analysis (CGIA), was moved into the Governor's Office of State Planning under Governor's Executive Order No. 147 (July 30, 1991). This executive order also promulgated a formal statewide GIS coordination initiative; it established and authorized the North Carolina Geographic Information Coordinating Council (GICC), and affirmed CGIA's responsibility for "coordination of geographic information," including geospatial data clearinghouse activities.² Subsequent Executive Orders in the 1990s expanded the GICC's membership and extended its expiration date (Executive Order No. 16 (1993); Executive Order No. 124 (1997); Executive Order No. 142 (1999); Executive Order No. 166 (1999); see Appendix G).³

¹ Warnecke et al., 2003. NSGIC State Profiles: North Carolina, pp. 120-121. NSGIC Website: <http://www.nsgic.org>, accessed September 1, 2007.

² NCCGIA Website, Coordination: <http://www.cgia.state.nc.us/Default.aspx?tabid=66>, accessed March 18, 2007.

³ NGICC Website, About the GICC: <http://www.ncgicc.net/AbouttheGICC/tabid/174/Default.aspx>, accessed March 18, 2007.

With the impending expiration of Executive Order No. 166, Senator Eric Reeves, then Chairman of the Committee on Information Technology, introduced Senate Bill 895 in the 2001-2002 Session of the General Assembly to establish the Geographic Information Coordinating Council through legislation. In August 2001, the North Carolina General Assembly officially authorized the GICC and defined the CGIA's duties, which was incorporated in the North Carolina General Statutes as Article 76, § 143-725 through 143-727 (see Appendix G). Importantly, this legislation has no sunset date. The purpose of the statewide geographic information coordination effort in North Carolina, as defined by statute, is to "further cooperation among State, federal, tribal, and local government agencies; academic institutions; and the private sector in order to improve the quality, access, cost-effectiveness and utility of North Carolina's geographic information and promote geographic information as a strategic resource for the State."

Today, the CGIA is a division within the Department of Environment and Natural Resources (see Figure 1). It serves as the GIS coordinating agency for North Carolina, administers the state's geospatial data clearinghouse, and provides administrative and technical support to GICC. GICC, which functions as the primary GIS coordinating council, is located within the Office of the Governor for organizational, budgetary, and administrative purposes. GICC reports annually to the Governor, to the Legislature, to the Joint Legislative Commission on Governmental Operations, and to the State Chief Information Officer (See Figure 1).

Director, North Carolina Center for Geographic Information and Analysis

Per G.S. Article 76, § 143-725 through 143-727, the Director of the North Carolina Center for Geographic Information and Analysis (CGIA) serves as Secretary of GICC and provides staff resources as required. The CGIA Coordination Program Manager supports the Director on staffing the GICC and its committees, and in the implementation of actions and initiatives, such as the NC OneMap program.

Center for Geographic Information and Analysis

Currently organized as a division within the Department of Environmental and Natural Resources, the North Carolina Center for Geographic Information and Analysis (CGIA) serves as the primary GIS coordination agency in state government. It is comprised of a Services

Program and Coordination Program. CGIA's mission is "to enhance, facilitate, and promote the efficient, cost-effective development and use of geographic information in North Carolina. This is achieved through the creation, maintenance, and distribution of a statewide database of geographic information; the provision of geographic information systems services to organizations and individuals with interests in the state; and the coordination of activities related to geographic information and technology."⁴

Under Article 76 § 143-725(b) of the North Carolina General Statutes, CGIA is responsible for "staff[ing] the Geographic Information and Coordinating Council and its committees," for "manag[ing] and distribut[ing] digital geographic information about North Carolina maintained by numerous State and local government agencies," for "operat[ing] a statewide data clearinghouse," and for "provid[ing] Internet access to State geographic information."⁵ In 1999, to meet these statutory obligations, CGIA created and managed the *North Carolina Corporate Geographic Database* (NCCGDB), which was "an organized collection of strategic geographic datasets supported by [a variety of agencies and organizations] as a statewide information resource intended for widespread accessibility."⁶ CGIA also administered the *North Carolina Geographic Data Clearinghouse* (NCGDC),⁷ a web browser interface that enabled users to search for available metadata and geospatial datasets from NCCGDB and from across multiple local, state, and regional agencies.⁸ However, the terms NCCGDB and NCGDC were retired recently; these activities are now being implemented as part of the broader initiative of the *NC OneMap* program, a new "comprehensive and integrated statewide data resource available by Internet and under the guidance [and direction] of GICC."⁹

⁴ NCGICC Website, Coordination: <http://www.cgia.state.nc.us/Default.aspx?tabid=66>, accessed March 18, 2007.

⁵ NCGICC Website, Session Bill 895 (2001), <http://www.ncleg.net/Sessions/2001/Bills/Senate/HTML/S895v6.html>, accessed September 1, 2006.

⁶ NCCGIA Website, What is the NC Corporate Geographic Database? <http://www.cgia.state.nc.us/cgdb/whatiscgdb.html>, accessed September 1, 2006.

⁷ NCGIA Website, NCGDC: <http://www.cgia.state.nc.us/ncgdc/>, accessed September 1, 2006.

⁸ NCCGIA Website, Data: <http://www.cgia.state.nc.us/cgia/index.html>, accessed September 1, 2006. Other organizations and agencies that offer central data repositories in North Carolina include the NC Geological Survey, the State Data Center, State Demographics, NC Geodetic Survey, and the State Library.

⁹ NCGIA Website, NC OneMap Program Directives: <http://www.cgia.state.nc.us/Coordination/SupportingtheGICC/NCOneMapProgramDirectives/tabid/68/Default.aspx>, accessed March 18, 2007.

In addition to the statutorily mandated activities, the CGIA Services Program offers a variety of geographic information services and technical assistance to a diversity of clients, including state agencies, counties, municipalities, federal agencies, nonprofit organizations, educational institutions and private businesses, on a cost-recovery basis.¹⁰ Training is offered in metadata and as part of project-related activities. To support the data sharing activities listed above, CGIA has developed a template Memorandum of Understanding (MOU),¹¹ or Community Geospatial Data-Sharing Agreement, in order to facilitate geospatial data sharing between local government and the state, for those instances where needed (see Appendix G).

CGIA maintains a central office in Raleigh, NC and a Field Office in Asheville, NC. A primary focus of the Asheville Field Office is to serve as a local government extension for the Coordination Program in western North Carolina. CGIA has twenty-seven (27) positions altogether. About 3-4 FTEs serve the Coordination Program to support the GICC and in non-operational aspects of coordination initiatives, while the remaining 22-23 FTEs are Services Program employees, working on projects and applications, a remote sensing specialist, system and database administration staff, and office staff. There are five (5) FTEs in the Asheville Field Office.

North Carolina Geographic Information Coordinating Council

The North Carolina Geographic Information Coordinating Council (GICC) serves both as the primary GIS coordination council for the state and as the official point of contact for the Federal Geographic Data Committee. Under enabling legislation Article 76, § 143-125 through 143-727 of the General Statutes, the GICC has the authority “to create and implement a Strategic Plan; to resolve policy and technical issues; to coordinate, direct and oversee the State's utilization of geographic information, GIS systems, and other related technologies; and to advise the Governor, Legislature, and State Chief Information Officer as to needed direction,

¹⁰ NCCGIA Website, CGIA Services: <http://www.cgia.state.nc.us/Services/tabid/56/Default.aspx>, accessed March 18, 2007.

¹¹ NCGIA Website, North Carolina Community Geospatial Data—Sharing Agreements: <http://www.cgia.state.nc.us/gicc/cdsa/index.html>, accessed September 1, 2006.

responsibilities, and funding regarding geographic information.” The stated objectives of the GICC, as stated in the 2002 By-Laws, are:

- “To coordinate the collection, documentation, management, use and dissemination of geographic information statewide;
- To identify, make known, and recommend actions to meet geographic information needs statewide;
- To foster communication and cooperation in matters related to geographic information among federal, state and local government agencies, universities and private entities in North Carolina;
- To promote fiscal strategies that result in cost-savings and added value of geographic information through innovative and cooperative intergovernmental agreements; and,
- To formulate and recommend standards for data architecture, quality, accuracy, resolution, and maintenance.

The GICC’s activities and initiatives are supported and staffed by the North Carolina Center for Geographic Information and Analysis (CGIA).

Under Executive Order No. 16 (1993), the Geographic Information Coordinating Council was comprised originally of the Deputy State Controller for the Information Resource Management, as a non-voting, ex-officio member, and seventeen (17) voting members, including ten (10) state agency department heads and representatives from the State Government User Committee, the Affiliated User Group Committee, one (1) county government, one (1) municipal government, one (1) federal government, one (1) lead regional organization, and one (1) non-governmental organization. In 1997, Executive Order No. 124 added the Secretary of Crime Control and Public Safety and the Secretary of Health and Human Services to the roster. In 1999, Executive Order No. 142 added the Presidents of the North Carolina Community College System and the University of North Carolina System, bringing the total to twenty-one (21) members. This executive order also allowed flexibility for the Governor to add additional members as appropriate.

As of the writing of this report, North Carolina General Statutes Article 76, § 143-126 specifies that the GICC may consist of up to thirty-five (35) members, or their designees, plus the State Chief Information Officer (CIO), who serves as a non-voting, ex-officio member. GICC members are appointed by the General Assembly (6 members), including three (3) appointed by the President Pro Tempore of the Senate and three (3) appointed by the Speaker of the House of Representatives; appointed by the Governor (7 to 10 members); or, specified by statute by virtue of their position (19 members). The six (6) members appointed to the GICC by the General Assembly serve one-year terms. Those appointed by the Governor serve three-year terms. Having members appointed by the Governor and General Assembly puts them on equal footing with members who are Secretaries of state agencies.

The GICC's members (7 to 10) appointed by the Governor include:

- The head of an at-large State agency not otherwise represented by this statute;
- An employee of a county government, nominated by the North Carolina Association of County Commissioners;
- An employee of a municipal government, nominated by the North Carolina League of Municipalities;
- An employee of the federal government who is stationed in North Carolina;
- A representative from the Lead Regional Organizations;
- A member of the general public; and
- Other individuals whom the Governor deems appropriate to enhance the efforts of geographic information coordination.

The GICC members (19) who serve by virtue of their position as specified by statute, include:

- The Secretary of State;
- The Commissioner of Agriculture;
- The Superintendent of Public Instruction;
- The Secretary of the Department of Environment and Natural Resources;

- The Secretary of the Department of Transportation;
- The Secretary of the Department of Administration;
- The Secretary of the Department of Commerce;
- The Secretary of the Department of Crime Control and Public Safety;
- The Secretary of the Department of Health and Human Services;
- The Secretary of the Department of Revenue;
- The President of the North Carolina Community Colleges System;
- The President of The University of North Carolina System;
- The Chair of the Public Utilities Commission;
- The State Budget Officer;
- The Executive Director of the North Carolina League of Municipalities;
- The Executive Director of the North Carolina Association of County Commissioners;
- One representative from the State Government GIS User Committee; and
- One representative elected annually from the Local Government Committee.

In summary, the GICC is comprised of representatives from:

- *At least* thirteen (13) state agencies and committees;
- *At least* five (5) local government agencies, committees, and organizations;
- One (1) federal agency;
- One (1) public utility commission;
- One (1) regional coordinating organization;
- Two (2) college-level academic systems; and,
- One (1) from the general public.

This does not include the six (6) members appointed by the General Assembly and any additional members appointed by the Governor. Both the Governor and the General Assembly solicit suggestions for potential candidates for GICC appointment, but neither is required to select their appointees from this list. Because of the flexibility in appointments, the composition of the Council membership may vary from year to year.

Members are not required to have an in-depth technical knowledge of GIS, but rather an interest and appreciation of how GIS might be relevant to their organization's activities and to statewide needs. As noted above, members come from a wide variety of GIS users and user groups. They represent a mix of cabinet-level policy and budgetary decision-makers, mid-level managers, and elected officials. Importantly, county and municipal government participation in GICC has been critical to the success of statewide GIS coordination efforts.

The Chair of the GICC is appointed by the Governor; and a Vice Chair, in turn, is appointed by the Chair of GICC from the membership. Both serve for a one-year period. The Director of the CGIA serves as the Secretary of the GICC and provides staff support as needed.

The GICC meets quarterly and currently operates under a set of by-laws adopted in 2002.¹² In between quarterly meetings, the Chair and the Management and Operations Committee, a standing committee of the GICC, addresses GICC business matters requiring attention. The GICC is required to report to the Governor and to the Joint Legislative Commission on Governmental Operations on an annual basis.

Standing Committees. Six standing committees are authorized by N. C. Gen. Stat. § 143-726 under the GICC (see Figure 1).¹³ Each of which must adopt by-laws, subject to the GICC's approval, to govern its proceedings. The Chair of the GICC appoints the standing committee chairs from among the GICC members, but membership in most of the standing committees is open to the general GIS community upon invitation. The standing committees are enumerated below:

- **State Government GIS User Committee (SGUC).** This committee is comprised of representatives from State government departments. The SGUC “monitor[s], evaluate[s], and make[s] recommendations to the Geographic Information Coordinating Council (GICC) on the needs, direction, priorities,

¹² NC GICC Website, By-Laws, May 14, 2002: <http://www.ncgicc.net/Portals/3/documents/gicc-bylaws.pdf>, accessed March 18, 2007.

¹³ NC GICC Website, Committees, <http://www.ncgicc.net/Default.aspx?tabid=137>, accessed March 18, 2007.

standards, funding and responsibilities for GIS projects and initiatives in state government.”¹⁴

- **Local Government Committee (LGC).** This committee is comprised of representatives from the major organizations and professional associations that serve or represent local government geographic information users, and from the North Carolina League of Municipalities, the North Carolina Association of County Commissioners, and lead regional organizations. Currently, there are seven (7) members.

The Local Government Committee serves as a policy action and leadership focus group; its purpose is threefold: “1) To establish a forum for organizations that represent local government GIS users and data producers in the state to share knowledge and ideas about GIS policies, data, technology, applications, and related information; 2) To inform local government users of geographic information about the status of GIS activities in the state, GIS efforts in state government, and the actions of the Council; and 3) To advise the Council on issues, problems, and opportunities relating to GIS within local governments in North Carolina.”¹⁵ LGC also maintains an “Alert Network” email list-serve to support communication between the Council and local governments.

A special advisory team (A-Team) assists LGC on specific issues facing the Council related to geospatial data. For example, the team may review and provide feedback on proposed standards and policies or on survey instruments before they are launched. The advisory team is comprised of ten to twelve members representing county and city government who volunteer their time to address specific topics.

¹⁴ NC GICC Website, Committees: <http://www.ncgicc.net/Default.aspx?tabid=137>, accessed March 18, 2007.

¹⁵ NC GICC Website, Committees: <http://www.ncgicc.net/Default.aspx?tabid=137>, accessed March 18, 2007.

- **Federal Interagency Committee (FIC).** This committee can be comprised of representatives from federal agencies and tribal governments with offices located within North Carolina. The FIC aids “in the coordination of data activities within North Carolina, especially between Federal agencies and other geographic data users and distributors represented on the Council.” The appointed Federal representative serving pursuant to N. C. Gen. Stat. §143-726 serves as the chair of the FIC.
- **Statewide Mapping Advisory Committee (SMAC).** The SMAC maintains the following objectives: “Consolidate statewide base and image mapping requirements into a single annual report; provide the report to interested parties; Inform the users of geographical information about the status of base and image mapping programs and the availability of map materials from the U.S. Geological Survey (USGS) and other entities; Gain statewide support for financing cooperative programs with the USGS and other entities; Advise the Council on issues, problems, and opportunities relating to base and image mapping programs and information.”¹⁶
- **GIS Technical Advisory Committee (GIS TAC).** The GIS TAC advises “the Council on technical issues, including the statewide technical architecture for GIS” and proposed standards. It also conducts workshops.
- **Management and Operations Committee (MOC).** This committee is comprised of the Chair of the Council, the State Budget Officer, the chairs of the standing committees of the GICC, and other members of the GICC appointed by the Chair. This committee provides advice and support to the GICC “on organizational and programmatic matters concerning policy, management, and operations of geographic information, geographic information systems (GIS) and related technology,”¹⁷ including “the

¹⁶ NC GICC Website, Committees: <http://www.ncgicc.net/Default.aspx?tabid=137>, accessed March 18, 2007.

¹⁷ NC GICC Website, Committees: <http://www.ncgicc.net/Default.aspx?tabid=137>, accessed March 18, 2007.

assignment of responsibility in the areas of data needs assessment, data inventories, data requirement studies, database design, data collection, data maintenance, data archival and other GIS related matters formally requested by the Council.”¹⁸

The GICC may create other standing committees as well as *ad hoc* committees as necessary.

GICC’s statewide GIS coordination and development activities were initially guided by the 1994 "Strategic Plan for Geographic Information Coordination in North Carolina," which outlines nine strategies for enhancing GIS coordination in the state, and identifies three important initiatives, including the Geographic Data Clearinghouse; the Corporate Geographic Database; and the Geographic Information Partnership Program. These initiatives and other elements have been incorporated into the larger NC OneMap Program, which is described below. To support these initiatives, GICC sponsors statewide local and state government data inventories, organizes an annual conference, and publishes educational materials, such as the “GIS for Elected Officials” brochure and accompanying PowerPoint presentation.

In addition to the coordination activities described above, the GICC, in cooperation with the CGIA and the U.S. Geological Survey (USGS), is working on the development and operational structure of NC OneMap, “a comprehensive and integrated statewide data resource available through an Internet web mapping service.”¹⁹ NC OneMap provides framework data and other strategic geospatial data sets²⁰ that users can freely search, discover, view, print, download, use, and redistribute at any time, from any location. It accomplishes this through dynamic and distributed data access. In other words, NC OneMap accesses the most current geospatial datasets, maintained by government agencies and physically distributed on servers across the

¹⁸ NC GICC Website, Committees: <http://www.ncgicc.net/Default.aspx?tabid=137>, accessed March 18, 2007.

¹⁹ NC GICC Website, NC OneMap Directives: <http://www.cgia.state.nc.us/Coordination/SupportingtheGICC/NCOneMapProgramDirectives/tabid/68/Default.aspx>, accessed March 18, 2007.

²⁰ The data included in NC OneMap, at minimum, are the “seven (7) framework data themes, including geodetic control, elevation, orthophotography, surface waters, cadastral, streets and other transportation features, and jurisdictional boundaries,” as well as “other critical and strategic data.” NC OneMap Website, Vision Statement: <http://www.nconemap.com/documents/visiondoc.pdf>, accessed March 18, 2007.

state, and combines them in real-time to provide a “seamless” map to users over the Internet.²¹ As of 2005, sixty-two (62) local communities were participating in NC OneMap, while another forty-eight (48) were in the planning and development stages.²² NC OneMap makes this data accessible all day, every day to a broad range of users, including citizens, government agencies, and emergency operations. NC OneMap also serves as the North Carolina component of *The National Map*. Importantly, the NC OneMap program involves several on-going initiatives that support its stated vision, including the application and use of approved content standards, geospatial content inventory and organizational profiles, best practices, common access policies, cost-sharing, and leveraging of resources through partnerships.

North Carolina Geodetic Survey

The North Carolina Geodetic Survey²³ is located within the Division of Land Resources, Department of Environmental and Natural Resources. The mission of the Geodetic Survey Section of North Carolina is “to apply state-of-the art methods of precise positioning and advanced geodetic techniques to establish and maintain the official survey base of the state of North Carolina and to support mapping, boundary determination, property delineation, infrastructure development, resource evaluation surveys and scientific applications.”²⁴ Notably, the NCGS is a cooperative partner in the North Carolina Floodplain Mapping Program, and was instrumental in the acquisition of LIDAR contour and elevation data for the state.

U.S. Geological Survey National Geospatial Programs Office

The USGS National Geospatial Programs Office (NGPO) plays a significant role in statewide GIS coordination efforts in North Carolina. Two full-time NGPO staff members assist with NC OneMap activities that also support the goals of the National Map Program. Of note, the NGPO

²¹ NC GICC, 2005. 2005 Annual Report to the Governor and the North Carolina General Assembly, June 30, 2005. NC GICC Website, Reports: <http://www.ncgicc.net/Reports/tabid/140/Default.aspx>, accessed March 18, 2007.

²² 2005 NSGIC State Summaries: North Carolina, p 65. NSGIC Website: <http://www.nsgic.org>, accessed July 29, 2006.

²³ North Carolina Geodetic Survey Website: <http://www.ncgs.state.nc.us/>, accessed March 18, 2007.

²⁴ North Carolina Geodetic Survey Website, Mission: <http://www.ncgs.state.nc.us/mission.html>, accessed March 18, 2007.

signed a cost-sharing agreement with the State of North Carolina that enables the distribution of federal pass-through funds to counties and municipalities by the CGIA for the acquisition of digital orthoimagery and implementation of NC OneMap services. This initiative is part of the NC OneMap program and is a gateway to collaboration that involves best practices and collaboration among all government sectors. The NGPO also contributed nearly \$1 million in cost share dollars to the NC Floodplain Mapping Program.²⁵

North Carolina Land Records Management Program

The North Carolina Land Records Management Program²⁶ is located within the Land Records Management Section, Division of Certification and Filing, North Carolina Department of the Secretary of State. The Land Records Management Section “assists local governments in establishing standards for the indexing, and electronic access and storage of vital land records involved in real property transactions.” The LRM Section provides technical assistance to local governments in seven major areas:

- Base mapping;
- Cadastral mapping;
- Parcel identifiers;
- Automation of land records;
- Uniform Indexing of land records;
- Uniform recording and indexing for maps, plats and condominiums; and,
- Security and reproduction of land records.

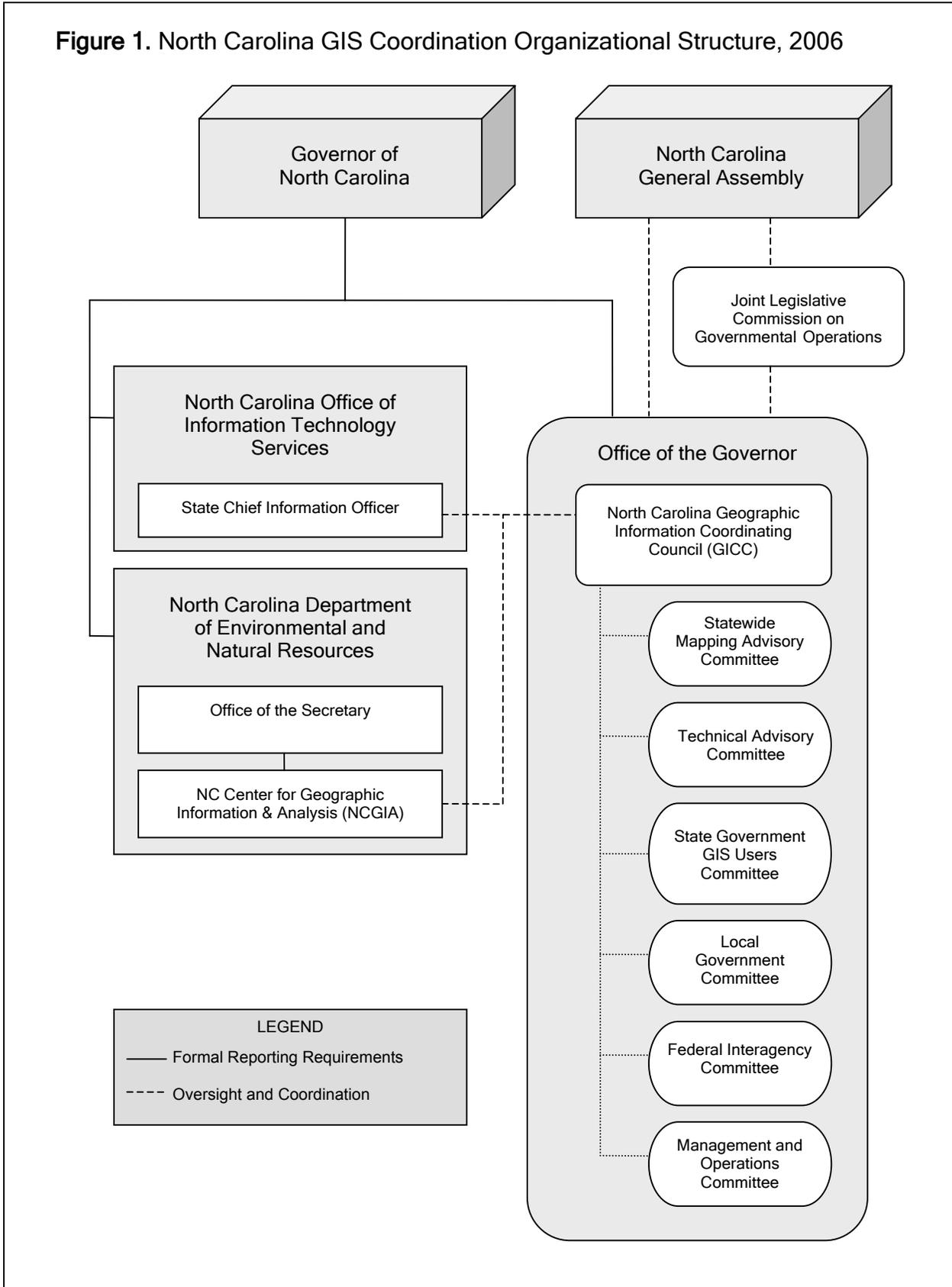
In addition, the Secretary of State maintains copies of maps of territories annexed by municipalities, as well as the certified copies of ordinances, and the results of annexation elections, if conducted.

²⁵ 2005 NSGIC State Summaries: North Carolina, pp. 65-66. NSGIC Website, <http://www.nsgic.org>, accessed September 1, 2006.

²⁶ NC Land Records Management Program, Department of the Secretary of State Website: <http://www.secretary.state.nc.us/land/ThePage.aspx> , accessed September 1, 2006.

Of note, early coordination efforts between the North Carolina Department of the Secretary of State-Land Records Management Section, the North Carolina Center for Geographic Information and Analysis (CGIA), the North Carolina Property Mappers Association, and county governments to evaluate, adopt, and promulgate geospatial metadata specifications and data standards for the state's digital land records mapping program has resulted in consistent statewide cadastral mapping and digital ortho-photography acquisition.

Figure 1. North Carolina GIS Coordination Organizational Structure, 2006



FUNDING AND SUPPORT

The North Carolina Center for Geographic Information and Analysis (CGIA) has not received any sustained and significant continuing general revenue appropriations for its activities and initiatives, but rather has generated funds through federal grants, state partnerships, over the counter sales, contract payments, federal-local cost sharing, and research and educational grants.²⁷ With the NC OneMap Program, CGIA has moved away from the cost recovery model for data distribution and instead provides free data access and distribution over the Internet.²⁸ As noted in the 2004 Annual Report, the cost-recovery model for data distribution “never resulted in substantial resources for the agency (approximately 2% of annual revenues).”²⁹ CGIA’s overall “receipt-based” budget for 2005 was approximately \$1.5 million.³⁰ Of note, a recent action of the General Assembly resulted in the appropriation of NC OneMap funds for one recurring position at CGIA. This is an initial step in meeting the goal for 24-7 access to statewide geospatial resources through NC OneMap.³¹ With the lack of sustained funding for NC OneMap at required levels, CGIA continues to seek grants and develop projects that mutually further the objectives of NC OneMap and the business requirements of clients and partners.

²⁷ NC GICC, 1994. Executive Summary of the Strategic Plan. NC GICC Website: <http://www.cgia.state.nc.us/gicc/spgiccnc.html>, accessed September 1, 2006. See also NC GICC Website, Reports: <http://www.ncgicc.net/Reports/tabid/140/Default.aspx>, accessed March 18, 2007.

²⁸ NC OneMap Data Discovery and Download, NC GICC Website: <http://www.nconemap.com/data.html>, accessed September 1, 2006. See also NC CGIA Website, GIS Data Resources: <http://www.cgia.state.nc.us/Default.aspx?tabid=55>, accessed March 18, 2007.

²⁹ NC GICC, 2004. 2004 Annual Report to the Governor and the North Carolina General Assembly, June 30, 2004. NC GICC Website, Reports: <http://www.ncgicc.net/Reports/tabid/140/Default.aspx>, accessed March 18, 2007.

³⁰ 2005 NSGIC State Summaries: North Carolina, p. 66. NSGIC Website: <http://www.nsgic.org>, accessed September 1, 2006.

³¹ “The NC OneMap program promotes data cost-sharing at the local government level... The cost of flying and producing orthoimagery (aerial photography rectified to the curvature of the earth) has been traditionally borne by local governments and is usually related to property tax administration. For the past few years, the state and federal governments have worked with local governments to provide almost \$800,000 in cost-share dollars to encourage a scheduled regional approach to the collection of this photography, which often is the de facto base map for multiple GIS applications.” NC OneMap Program Directives, NC GICC Website: <http://www.cgia.state.nc.us/Coordination/SupportingtheGICC/NCOneMapProgramDirectives/tabid/68/Default.aspx>, accessed March 23, 2007.

The CGIA's Coordination Program operates on revenues generated as overhead from its Services Program. CGIA dedicates 3 to 5 FTE staff members to the Coordination Program. The program uses a variety of staff at CGIA to meet its goals and objectives, including portions of time from: the CGIA Director; Coordination Program Manager; Asheville Field Office Supervisor; Special Events Coordinator; Database Administrator, and Technology Team staff. Over the last three years, executive staff resources logged to provide basic administrative support to the GICC and its subcommittees is 1.0 FTE; this does not include support for other activities, such as for on-going inventory and clearinghouse management, nor for working with content providers for connecting servers to the NC OneMap viewer. Three (3) FTEs are needed for coordination program activities total, not including the time volunteered by the GICC and subcommittee members. These numbers do not include staff activities that are part of "coordination" projects that are funded from other sources (e.g., FGDC Cooperative Agreements Program, National Digital Information Infrastructure Preservation Program, and National Geospatial Programs Office). CGIA has been successful in development of contracts, securing grant awards, and leveraging resources in fulfilling some coordination initiatives through paying projects.

CHALLENGES AND OPPORTUNITIES

One major barrier to statewide GIS coordination in North Carolina is a lack of adequate, sustainable funding. As noted above, the North Carolina Center for Geographic Information and Analysis (CGIA) operates on a receipts based budget, which limits its ability to meet all the requests and needs expressed by the Geographic Information Coordinating Council (GICC). In addition, it will be a significant challenge to find sustainable funding for the NC OneMap Program, which identifies a \$93.8 million five-year investment (approximately 19 million per year).

Another barrier to coordination efforts is the limited authority of the GICC. In order to implement the NC OneMap as intended, GICC will need to adopt and promote common data models or data model transformations, and content specifications among numerous geospatial data providers at all levels of government. However, GICC does not have the authority to require state agencies or local governments to adopt recommended standards or best practices. As an

example, GICC must persuade department leaders through compelling cases to advocate compliance within their respective state agencies. On the other hand, this need to build consensus and participant buy-in results in a more democratic process overall.

Thirdly, GICC members who are appointed by the General Assembly serve one-year terms whereas those members who are appointed by the Governor serve three-year terms. The one-year term generally is not sufficient for members to become fully engaged participants in GICC's activities. Ideally, all appointees should serve for at least two or three-year terms.

Despite these barriers, North Carolina has been a national leader in statewide GIS coordination for over twenty-five years. Because of their longevity and success, CGIA and GICC have become institutions with statewide and national recognition. In fact, CGIA is somewhat unique in that it dedicates three to four staff members with more than 20 years of experience specifically to coordination activities. Moreover, the GICC is comprised of members from a broad range of GIS data users and producers at all levels, increasing the lines of communication with local government. In addition, the annual reporting requirement of the GICC to the Governor and General Assembly has increased policy-maker engagement in the coordination process by raising their awareness of statewide needs and by informing them of GICC's benchmarks and accomplishments.

Significant on-going cooperative efforts in North Carolina include the NC OneMap Program, as described earlier, the NC Floodplain Mapping Program, the acquisition of orthoimagery through a cooperative agreement with the USGS National Geospatial Programs Office (NGPO), a multi-year partnership with The Library of Congress and North Carolina State University Libraries to address challenges surrounding preservation and long term access to digitally borne geospatial records, and the implementation of high resolution stream mapping in nineteen counties. As noted in the 2005 NSGIC State Summaries, "the continuing collaboration of local governments in local-to-local, regional, statewide and nationwide geospatial initiatives is clearly the most significant ongoing cooperative effort." The NC OneMap Program provides a vision, implementation plan, and budget for statewide, methodical and strategic data development and distribution, but its success would "not be possible without the leadership and participation of

numerous representatives from local government and regional organizations.”³² Notably, North Carolina was presented with the prestigious “Special Achievement in GIS Award” at the 2005 ESRI User’s Conference for its leadership with NC OneMap.

Importantly, involvement in the National States Geographic Information Council (NSGIC) and Federal Geographic Data Committee (FGDC) also has had a significant positive impact on North Carolina’s GIS development and statewide coordination efforts. North Carolina has been a long-standing member and active participant in NSGIC, and has benefited from the knowledge, projects, and advice it gets through these collaborative networks. Indeed, many of North Carolina’s GIS initiatives were enabled through discussion and collaboration with NSGIC and FGDC.

³² 2005 NSGIC State Summaries: North Carolina, p. 65-66. NSGIC Website, <http://www.nsgic.org>, accessed September 1, 2006.

Appendices

A. SESSION LAW 2001-359, SENATE BILL 895 – NORTH CAROLINA GEOGRAPHIC INFORMATION COORDINATING COUNCIL

North Carolina Legislature Website:

<http://www.ncleg.net/Sessions/2001/Bills/Senate/HTML/S895v6.html>

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2001

SESSION LAW 2001-359
SENATE BILL 895

AN ACT TO ESTABLISH THE NORTH CAROLINA GEOGRAPHIC INFORMATION
COORDINATING COUNCIL.

The General Assembly of North Carolina enacts:

SECTION 1. Chapter 143 of the General Statutes is amended by adding a new Article to read:

Article 76.

North Carolina Geographic Information Coordinating Council.

§ 143-725. Council established; role of the Center for Geographic Information and Analysis.

(a) Council Established. – The North Carolina Geographic Information Coordinating Council ("Council") is established to develop policies regarding the utilization of geographic information, GIS systems, and other related technologies. The Council shall be responsible for the following:

- (1) Strategic planning.
- (2) Resolution of policy and technology issues.
- (3) Coordination, direction, and oversight of State, local, and private GIS efforts.
- (4) Advising the Governor, the General Assembly, and the Information Resource Management Commission (IRMC) as to needed directions, responsibilities, and funding regarding geographic information.

The purpose of this statewide geographic information coordination effort shall be to further cooperation among State, federal, and local government agencies; academic institutions; and the private sector to improve the quality, access, cost-effectiveness, and utility of North Carolina's geographic information and to promote geographic information as a strategic resource in the State. The Council shall be located in the Office of the Governor for organizational, budgetary, and administrative purposes.

(b) Role of CGIA. – The Center for Geographic Information and Analysis (CGIA) shall staff the Geographic Information and Coordinating Council and its committees. CGIA shall manage and distribute digital geographic information about North Carolina maintained by numerous State and local government agencies. It shall operate a statewide data clearinghouse and provide Internet access to State geographic information.

§ 143-726. Council membership; organization.

(a) Members. – The Council shall consist of up to 35 members, or their designees, as set forth in this section. An appointing authority may reappoint a Council member for successive terms.

(b) Governor's Appointments. – The Governor shall appoint the following members:

- (1) The head of an at-large State agency not represented in subsection (d) of this section.
- (2) An employee of a county government, nominated by the North Carolina Association of County Commissioners.
- (3) An employee of a municipal government, nominated by the North Carolina League of Municipalities.
- (4) An employee of the federal government who is stationed in North Carolina.
- (5) A representative from the Lead Regional Organizations.
- (6) A member of the general public.
- (7) Other individuals whom the Governor deems appropriate to enhance the efforts of geographic information coordination.

Members appointed by the Governor shall serve three-year terms. The Governor shall appoint an individual from the membership of the Council to serve as Chair of the Council. The member appointed shall serve as Chair for a term of one year.

(c) General Assembly Appointments. – The President Pro Tempore of the Senate and the Speaker of the House of Representatives shall each appoint three members to the Council. These members shall serve one-year terms.

(d) Other Members. – Other Council members shall include:

- (1) The Secretary of State.
- (2) The Commissioner of Agriculture.
- (3) The Superintendent of Public Instruction.
- (4) The Secretary of the Department of Environment and Natural Resources.
- (5) The Secretary of the Department of Transportation.
- (6) The Secretary of the Department of Administration.
- (7) The Secretary of the Department of Commerce.
- (8) The Secretary of the Department of Crime Control and Public Safety.

- (9) The Secretary of the Department of Health and Human Services.
- (10) The Secretary of the Department of Revenue.
- (11) The President of the North Carolina Community Colleges System.
- (12) The President of The University of North Carolina System.
- (13) The Chair of the Public Utilities Commission.
- (14) The State Budget Officer.
- (15) The Executive Director of the North Carolina League of Municipalities.
- (16) The Executive Director of the North Carolina Association of County Commissioners.
- (17) One representative from the State Government GIS User Committee.
- (18) One representative elected annually from the Local Government Committee established pursuant to subdivision (h)(2) of this section.
- (19) The State Chief Information Officer who shall serve as a nonvoting member.

Council members serving ex officio pursuant to this subsection shall serve terms coinciding with their respective offices. Members serving by virtue of their appointment by a standing committee of the Council shall serve for the duration of their appointment by the standing committee.

- (e) Meetings. – The Council shall meet at least quarterly on the call of the Chair. The Management and Operations Committee shall conduct the Council's business between quarterly meetings.
- (f) Administration. – The Director of the CGIA shall be secretary of the Council and provide staff support as it requires.
- (g) Reports. – The Council shall report at least annually to the Governor and to the Joint Legislative Commission on Governmental Operations.
- (h) Committees. – The Council may establish work groups, as needed, and shall oversee the standing committees created in this subsection. Each standing committee shall adopt bylaws, subject to the Council's approval, to govern its proceedings. Except as otherwise provided, the Chair of the Council shall appoint the standing committee chairs from

representatives listed in subsections (b), (c), or (d) of this section. The standing committees are as follows:

- (1) State Government GIS User Committee. – Membership shall consist of representatives from all interested State government departments. The Chair of the Council shall appoint the committee chair from one of the State agencies represented in subsection (d) of this section.
- (2) Local Government Committee. – Membership shall consist of representatives from organizations and professional associations that currently serve or represent local government GIS users, the North Carolina League of Municipalities, the North Carolina Association of County Commissioners, and Lead Regional Organizations. The committee shall elect one of its members to the Council.
- (3) Federal Interagency Committee. – Membership shall consist of representatives from all interested federal agencies and Tribal governments with an office located in North Carolina. The appointed federal representative serving pursuant to subdivision (b)(4) of this section shall serve as the Chair of the Federal Interagency Committee.
- (4) Statewide Mapping Advisory Committee. – This committee shall consolidate statewide mapping requirements and attempt to gain statewide support for financing cooperative programs. The committee shall also advise the Council on issues, problems, and opportunities relating to federal, State, and local government geospatial data programs.
- (5) GIS Technical Advisory Committee. – This committee shall develop the statewide technical architecture for GIS and anticipate and respond to GIS technical opportunities and issues affecting State, county, and local governments in North Carolina.
- (6) Management and Operations Committee. – This committee shall consider management and operational matters related to GIS and other matters that are formally requested by the Council. The committee membership shall consist of the Chair of the Council, the State Budget Officer, the chair of each

of the standing committees of the Council, and other members of the Council appointed by the Chair.

§ 143-727. Compensation and expenses of Council members; travel reimbursements.

Members of the Council shall serve without compensation but may receive travel and subsistence as follows:

- (1) Council members who are officials or employees of a State agency or unit of local government, in accordance with G.S. 138-6.
- (2) All other Council members at the rate established in G.S. 138-5.

SECTION 2. The respective appointing authorities shall complete their appointments to the North Carolina Geographic Information Coordinating Council under G.S. 143-726(b) and (c), as enacted in Section 1 of this act, within 60 days of the date when this act becomes effective.

SECTION 3. This act shall not be construed to obligate the General Assembly to appropriate any funds to implement the provisions of this act. The provisions of this act shall be implemented from funds otherwise appropriated or available to the Office of the Governor.

SECTION 4. This act is effective when it becomes law.

In the General Assembly read three times and ratified this the 2nd day of August, 2001.

s/ Beverly E. Perdue
President of the Senate

s/ James B. Black
Speaker of the House of Representatives

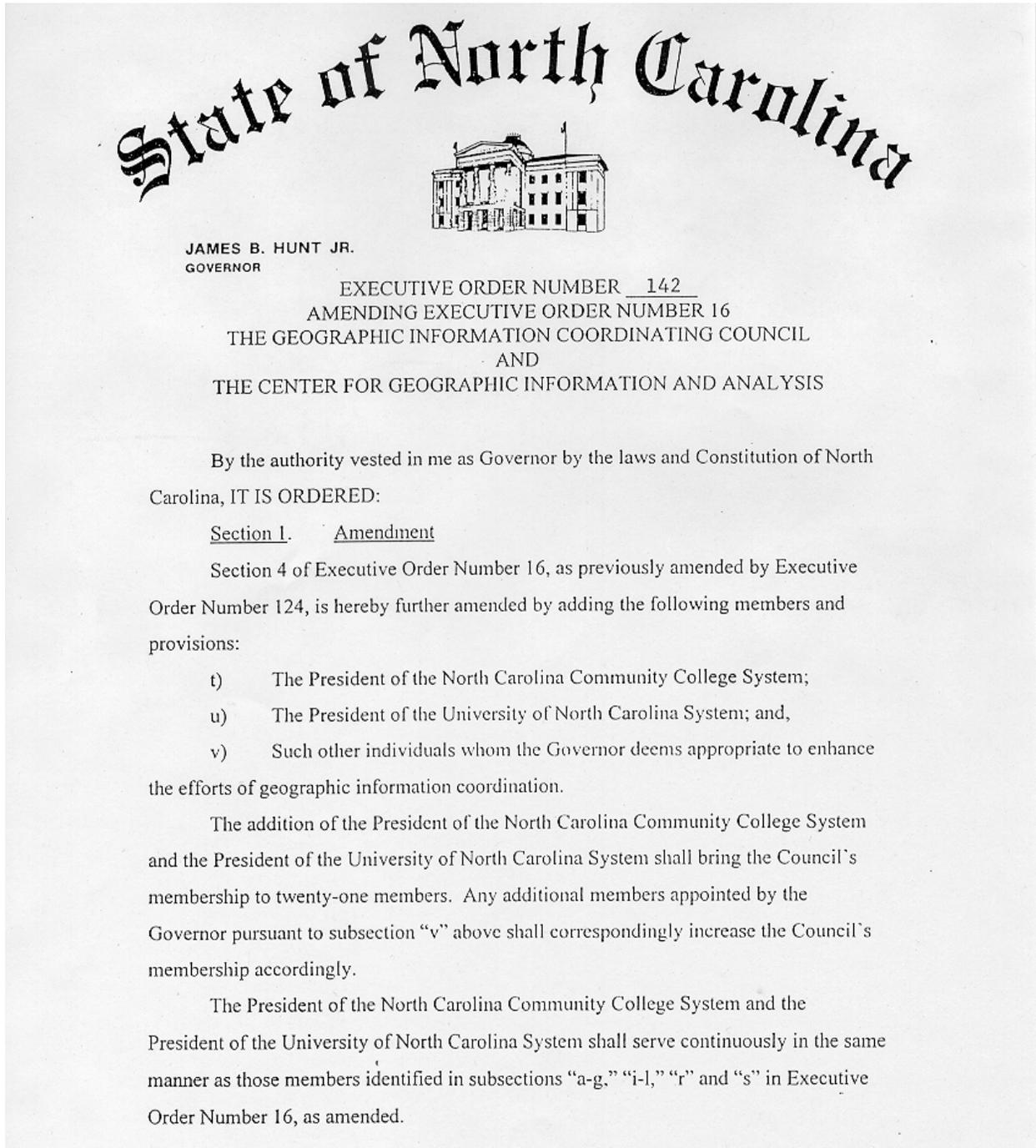
s/ Michael F. Easley
Governor

Approved 11:44 a.m. this 10th day of August, 2001

B. NORTH CAROLINA GICC EXECUTIVE ORDERS NOS. 142, 125, 15

North Carolina GICC Executive Orders, GICC Website:

<http://www.cgia.state.nc.us/gicc/>



Any member appointed pursuant to subsection "v" shall serve a term of three years from the date of appointment.

Subject to this amendment and the provisions within Executive Order Number 124, all provisions of Executive Order Number 16, as amended, shall remain in full force and effect.

Section 2. Effective Date

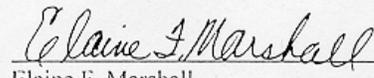
This executive order is effective immediately.

Done in the Capital City of Raleigh, North Carolina, this the 19th day of January, 1999.




James B. Hunt Jr.
Governor

ATTEST:


Elaine F. Marshall
Secretary of State

State of North Carolina



JAMES B. HUNT JR.
GOVERNOR

EXECUTIVE ORDER NO. 124
AMENDING AND EXTENDING EXECUTIVE ORDER NO. 16,
THE GEOGRAPHIC INFORMATION COORDINATING COUNCIL
AND
THE CENTER FOR GEOGRAPHIC INFORMATION AND ANALYSIS

By the authority vested in me as Governor by the laws and Constitution of North Carolina, IT IS ORDERED:

Section 1. Amendment

Section 4 of Executive Order Number 16 is hereby amended by adding the following two members:

- r) The Secretary of Crime Control and Public Safety; and,
- s) The Secretary of Health and Human Services.

These additions shall bring the Council's membership to nineteen members.

These two new members shall serve continuously in the same manner as members "a-g" and "i-l".

Subject to this amendment, all provisions of Executive Order Number 16 shall remain in full force and effect.

Section 2. Extension

Executive Order Number 16 is hereby extended for two years from the effective date provided below.

Section 3. Effective Date

This executive order shall be effective the first day of January, 1998.

Done in the Capital City of Raleigh, North Carolina, this the 18th day of
December, 1997.



A handwritten signature in cursive script, appearing to read "James F. Hunt Jr.", written over a horizontal line.

James F. Hunt Jr.
Governor

ATTEST:

A handwritten signature in cursive script, appearing to read "Elaine F. Marshall", written over a horizontal line.

Elaine F. Marshall
Secretary of State

State of North Carolina



JAMES B. HUNT, JR.
GOVERNOR

EXECUTIVE ORDER NUMBER 16
THE GEOGRAPHIC INFORMATION COORDINATING COUNCIL
AND
THE CENTER FOR GEOGRAPHIC INFORMATION AND ANALYSIS

WHEREAS, geographic information is an important strategic resource for the State of North Carolina;

WHEREAS, increasingly complex decisions, overlapping governmental responsibilities, and limited financial resources demand that agencies work together to develop and utilize geographic information;

WHEREAS, North Carolina has a history of effective utilization of geographic information and geographic information systems ("GIS") technology both at the State and Local level;

WHEREAS, geographic information and GIS technology are now being developed and used by many agencies and organizations in North Carolina;

WHEREAS, geographic information and GIS technology can only be fully and practically utilized with a statewide focus and cooperative effort;

NOW, THEREFORE, by the authority vested in me as Governor by the Constitution and laws of the State of North Carolina, IT IS ORDERED:

Section 1. Establishment.

With the concurrence of the Information Resource Management Commission ("IRMC"), there is hereby reestablished the Geographic Information Coordinating Council ("Council").

Section 2. Duties.

The Council shall guide the Center for Geographic Information and Analysis ("CGIA") and establish the State's direction in the utilization of geographic information, GIS systems, and other related technologies. The Council is responsible for (a) strategic planning, (b) resolution of policy and technology issues, (c) coordination, direction and oversight, and (d) advising the Governor, the Legislature, and the IRMC as to needed directions, responsibilities, and funding regarding geographic information. This statewide geographic information coordination effort seeks to further cooperation among State, Federal and Local government agencies; academic institutions; and the private sector to improve the quality, access, cost-effectiveness and utility of North Carolina's geographic information and to promote geographic information as a strategic resource for the State.

Section 3. Center for Geographic Information and Analysis.

Coordination of geographic information is the responsibility of the CGIA. This responsibility includes GIS production and consulting services; technical support including assistance in

planning, installing, and using GIS systems; a wide variety of GIS-related training services and education programs; a clearinghouse for the exchange of geographic information and services; and staff support for the Council and its committees. CGIA reports to the Office of State Planning.

Section 4. Membership.

The Council shall consist of 17 members, or their designees, as follows:

- a) The Secretary of the Department of Environment, Health and Natural Resources;
- b) The Secretary of Transportation;
- c) The Secretary of Administration;
- d) The Secretary of Commerce;
- e) The Secretary of State;
- f) The Commissioner of Agriculture;
- g) The Superintendent of Public Instruction;
- h) The head of an at-large State agency to be appointed by the Governor;
- i) The State Budget Officer;
- j) The State Planning Officer;
- k) One representative elected annually from the State Government User Committee;
- l) One representative elected annually from the Affiliated User Group Committee;
- m) One representative employee of a County Government to be appointed by the Governor;
- n) One representative employee of a Municipal Government to be appointed by the Governor;
- o) One representative employee of the Federal Government, who is stationed in North Carolina, to be appointed by the Governor;
- p) One representative from the Lead Regional Organizations, to be appointed by the Governor; and
- q) One non-government representative in North Carolina, to be appointed by the Governor.

The Deputy State Controller for Information Resource Management shall serve as a non-voting, ex officio member. The Governor shall appoint a Chair from among the membership to serve for a one-year period. Except for members "a-g" and "i-l" above, each member shall serve three-year terms.

Section 5. Administration and Expenses.

The Director of CGIA shall be secretary of the Council and provide staff support as it requires. Members of the Council shall receive necessary travel and subsistence expenses as allowed by North Carolina law.

Section 6. Committees.

The Council may establish work groups as needed, and shall oversee the following standing committees:

- a) State Government GIS User Committee: Membership shall consist of representatives from all interested State government departments. The committee shall elect its Chair and advise the Council on issues, problems, and opportunities relating to GIS.
- b) State Mapping Advisory Committee ("SMAC"): The Council shall select the Chair of SMAC, which shall be organized and operated in a manner acceptable to the United States Geological Survey's ("USGS") National Mapping Division. Membership shall not be limited. Members from Federal agencies may not vote, but the Council, upon recommendation by the SMAC Chair, may permit other members to vote.

The SMAC shall consolidate statewide mapping requirements into a single annual report to the USGS; inform the users of geographic information about the status of mapping programs and the availability of map materials from USGS; and attempt to gain statewide support for financing cooperative programs with USGS. The Committee shall also advise the Council on issues, problems, and opportunities relating to USGS programs and information.
- c) Affiliated GIS User Group Committee: Membership shall consist of representatives from Local and Federal government, private industry, universities, and the General Assembly. The committee shall elect its Chair and advise the Council on issues, problems, and opportunities relating to the use of GIS systems.

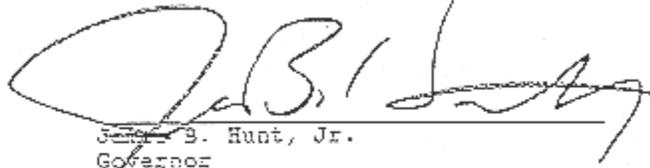
Section 7. Rescission.

Executive Order 147 of the Martin Administration is hereby rescinded.

This Order is effective immediately.

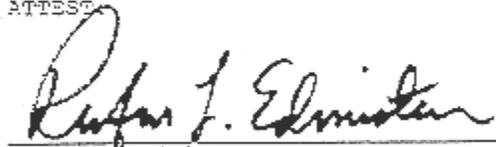
Done in the Capital City of Raleigh, this 21st day of

May, 1993.



James B. Hunt, Jr.
Governor

ATTEST



Rufus L. Edmisten
Secretary of State



C. NORTH CAROLINA GEOGRAPHIC INFORMATION COORDINATING COUNCIL BY-LAWS, ADOPTED MAY 14, 2002

NORTH CAROLINA GEOGRAPHIC INFORMATION COORDINATING COUNCIL

BYLAWS May 14, 2002

Article I. Name

The name of this organization shall be the North Carolina Geographic Information Coordinating Council hereinafter referred to as the Council. The Council was established by North Carolina General Statutes §143-725 through 143-727 in August 2001.

Article II. Purpose

The purpose of the Council is to further cooperation among State, federal and local government agencies; academic institutions; and the private sector to improve the quality, access, cost-effectiveness and utility of North Carolina's geographic information and to promote geographic information as a strategic resource in the State. The Council shall be responsible for the following:

- a. Strategic planning,
- b. Resolution of policy and technology issues,
- c. Coordination, direction and oversight, and
- d. Advising the Governor, the General Assembly, and the Information Resource Management Commission as to needed directions, responsibilities, and funding regarding geographic information.

Article III. Objectives

The objectives of the Council are as follows:

- Sec. 1. To coordinate the collection, documentation, management, use and dissemination of geographic information statewide.
- Sec. 2. To identify, make known, and recommend actions to meet geographic information needs statewide.
- Sec. 3. To foster communication and cooperation in matters related to geographic information among federal, state and local government agencies, universities and private entities in North Carolina.
- Sec. 4. To promote fiscal strategies that result in cost-savings and added value of geographic information through innovative and cooperative inter-governmental agreements.
- Sec. 5. To formulate and recommend standards for data architecture, quality, accuracy, resolution, and maintenance.

- Sec. 6. To promote sharing of geographic information by recommending standard methods and means, devising model agreements, developing and maintaining a corporate database, and performing other appropriate information sharing actions.

Article IV. Reporting

The Council shall report at least annually to the Governor and to the Joint Legislative Commission on Governmental Operations.

Article V. Council Membership

- Sec. 1. Appointment of Council Members.
The members shall be appointed pursuant to N. C. Gen. Stat. §143-726.
- Sec. 2. General Powers.
The business and affairs of the Council shall be managed by its membership.
- Sec. 3. Voting Membership.
Voting membership shall include all members, or their designees, present at a meeting. It is the responsibility of each member to be active in the Council and to attend scheduled meetings on a regular basis.
- Sec. 4. Non-Voting Membership.
The State Chief Information Officer shall serve as a non-voting *ex officio* member. The Chair may appoint additional non-voting members to terms coincident with that of the Chair.
- Sec. 5. Terms and Vacancies.
All members appointed by the Governor shall serve three-year terms. Members serving by *ex officio* shall serve terms coinciding with their respective offices. All members appointed by the Speaker of the House and President Pro Tempore of the Senate shall serve one-year terms. The appointing authority may reappoint a Council member for successive terms. In the event a vacancy occurs, notification shall be made to the appointing authority so that a replacement can be made.

Article VI. Officers

- Sec. 1. The Governor shall appoint the Chair from the membership to serve for a one-year period.
- Sec. 2. A Vice Chair shall be appointed by the Chair from the membership and shall serve for a one-year period.

Article VII. Duties of Officers

- Sec. 1. Chair. The Chair shall be the principal officer of the Council and shall in general coordinate all of the business and affairs of the Council. The Chair shall preside at all meetings of the Council and shall be responsible for the implementation of the Council's decisions.
- Sec. 2. Vice Chair. The Vice Chair shall assist the Chair in the discharge of the Chair's duties as requested and in the absence or inability of the Chair to act shall perform the Chair's duties.

The Chair and Vice Chair, or persons specifically appointed by the Chair, are authorized to represent the Council with other organizations.

Article VIII. Committees and Subcommittees

- Sec. 1. The following Committees are authorized by N. C. Gen. Stat. §143-726. They shall be directed by the Chair with the concurrence of a majority of voting members. These Committees are:
- a. State Government GIS User Committee (SGUC).
This committee shall consist of representatives from all interested State government departments and shall advise the Council on issues, problems and opportunities relating to geographic information, GIS and related technologies. The Chair of the Council shall appoint the committee chair from one of the State agencies represented on the Council.
 - b. Local Government Committee (LGC).
This committee shall be comprised of representatives from organizations and professional associations that serve or represent local government geographic information users, the North Carolina League of Municipalities, the North Carolina Association of County Commissioners, and Lead Regional Organizations. The committee members will elect one of its members to the Council. Its purpose is to advise the Council on issues, problems and opportunities relating to geographic information, GIS and related technologies.
 - c. Federal Interagency Committee (FIC).
The purpose of the FIC is to aid in the coordination of data activities within North Carolina, especially between Federal agencies and other geographic data users and distributors represented on the Council. Members shall consist of all interested Federal agencies and Tribal governments with an office located in North Carolina. The appointed Federal representative serving pursuant to N. C. Gen. Stat. §143-726 shall serve as the chair of the FIC.

- d. Statewide Mapping Advisory Committee (SMAC).
The purpose of the SMAC is to consolidate statewide geographic information requirements and attempt to gain statewide support for financing cooperative programs. The committee shall advise the Council on issues, problems and opportunities relating to federal, State and local government geospatial data programs. The Chair of the Council shall appoint the committee chair.
- e. GIS Technical Advisory Committee (GIS TAC).
The purpose of the GIS TAC is to advise the Council on technical issues, including the statewide technical architecture for GIS. The chair of the Council shall appoint the committee chair.
- f. Management and Operations Committee.
This committee shall consider management and operational matters related to geographic information, GIS and related technologies and other matters that are formally requested by the Council. The committee membership shall consist of the Chair of the Council, the State Budget Officer, the chair of each of the standing committees of the Council and other members of the Council appointed by the Chair.

Sec. 2. The Council may create other standing committees and recommend that representatives of such committees be incorporated into the SMAC, GIS TAC and/or other committees as appropriate.

Sec. 3. The Council may create *ad hoc* committees as necessary to research and assist with policy issues.

Article IX. Office and Staff

Sec. 1. Principal Office. The principal Office of the organization shall be located in the offices of the Center for Geographic Information and Analysis (CGIA), New Education Building, Raleigh, North Carolina.

Sec. 2. The Director of the Center for Geographic Information and Analysis shall be secretary of the Council and CGIA shall provide staff support for the Council, as directed by N. C. Gen. Stat. §143-725.

Article X. Meetings

Sec. 1. Council meetings shall be held at least quarterly at a time and location selected by the Chair. Notice of meetings shall be provided to members of the Council at least 15 days prior to the meeting.

- Sec. 2. Additional meetings of Council membership may be called by the Chair with at least a 72-hour notice to discuss and take action on critical issues.
- Sec. 3. Committees advising the Council shall meet, discuss, study and/or resolve assigned issues as needed to carry out the business of the Council.

Article XI. Quorum and Amendment of Bylaws

- Sec. 1. A Quorum is established when more than one-half of the voting members of the Council, exclusive of vacancies, are present in a meeting of the Council.
- Sec. 2. A majority of affirmative votes on any issue will establish a Council decision.
- Sec. 3. Power to propose, repeal or amend these bylaws is hereby delegated to the Chair of the Council. Approval of changes in the bylaws may be obtained by a 2/3-majority vote at any meeting of the Council provided that members receive notice of the meeting at least 15 days in advance.

Article XII. Parliamentary Procedure

Meetings may be conducted in an informal manner by the Chair, but Robert's Rules of Order (Revised) may be invoked at any time by a majority vote of the members present.

Article XIII. Obligations and Expenses

- Sec. 1. It is the intent of these bylaws to set a basis for cooperation between member agencies.
- Sec. 2. All obligations and expenses for participation in the Council by state agencies shall be borne by each member's agency or organization. Members representing local governments and the private sector shall, upon their request, have their travel and subsistence reimbursed by the Council.

Adopted by the Council:

Dempsey Benton
Chair

August 21, 2002
Date



D. NORTH CAROLINA MEMORANDUM OF AGREEMENT FOR DATA SHARING

NC CGIA Website, Memorandum of for Data-Sharing:

<http://www.cgia.state.nc.us/gicc/cdsa/moa.pdf>

MEMORANDUM OF AGREEMENT

Between

XXXXXXXXXX, NORTH CAROLINA

And

NC CENTER FOR GEOGRAPHIC INFORMATION AND ANALYSIS (CGIA)

For

SHARING OF STRATEGIC GEOSPATIAL DATA RESOURCES AND ASSOCIATED DOCUMENTATION BETWEEN THE AGENCIES AND AMONG THEIR DATA USERS

WHEREAS, geospatial base map and other strategic locational data about North Carolina are currently produced and maintained by numerous state, federal and local government organizations; and

WHEREAS, representatives of local, regional, and statewide public programs and private citizens now expect up-to-date and accurate geospatial information to be readily available; and

WHEREAS, geographic information system software tools and maps on the Internet are increasingly vital to public and private business operations; and

WHEREAS, numerous business operations require the integration of geospatial data from disparate sources to support display and analysis using the Internet and GIS, examples include tax mapping, flood insurance rate mapping, census mapping, hazard mitigation, highway design, open space/farm preservation, and water quality protection, among others; and

WHEREAS, data sharing among primary data sources is recognized as the key to the success and efficiency of many business applications that require geospatial data; and

WHEREAS, primary government data sources of geospatial data in North Carolina are municipalities, counties, lead regional organizations, state and federal agencies; and

WHEREAS, user demand for access and regional integration of base map and thematic data is expected to increase and thus will further challenge government organizations to develop effective policies and technical methods to efficiently share geospatial data and associated documentation; and

WHEREAS, the North Carolina Geographic Information Coordinating Council (Council) has adopted a vision called *NC OneMap*, intending to organize "geographic data for a statewide community," and calling for the development of a statewide resource of strategic data that are produced, distributed, and maintained by local, regional, state, and federal agencies and other organizations; and

WHEREAS, the goals of *NC OneMap* are intended to serve the growing geospatial data user community with better maps and data; and

WHEREAS, the primary instrument for 'NO FEE' access to *NC OneMap* is the Internet; and

WHEREAS, *NC OneMap* will be succeed only as a result of effective partnerships among data producers and in collaboration with CGIA as the lead administrative agency on behalf of the Council;

NOW THEREFORE, the UNDERSIGNED,

AGREE that geospatial data sharing between XXXXXXXXXXXX, NC and CGIA is an important business practice that furthers shared agency goals for effective use of public information; and

AGREE to identify a primary point of contact for data sharing in ATTACHMENT; and

AGREE to identify sharable data layers, associated documentation (metadata), transfer formats, transfer media, schedules for transfer, and disclaimers (if any) in ATTACHMENT; and

AGREE to waive agency fees, if any, for data sharing between the agencies; and

AGREE that data shared under this agreement may be further redistributed with applicable metadata by either agency WITHOUT FEES in the public domain and without restriction, unless otherwise noted herein and/or unless otherwise subject to public laws of governing authorities; and

CGIA further AGREES to develop Internet capabilities as the primary mechanism for NO FEE access to the geographic data, including community data shared under this agreement; and

CGIA further AGREES to provide training and assistance, if requested and when resources are available, to XXXXXXXXXXXX, NC in the area of metadata creation and dissemination as part of the North Carolina Geographic Data Clearinghouse.

This agreement is effective upon signature by the authorities, and is valid until rescinded. It may be amended by mutual agreement or rescinded by either agency at any time during the effective period with 60 days written notice.

SIGNED HERETOFORE,

For XXXXXXXXXXXX, NC

For Center for Geographic Information and Analysis

XXXXXXXXXX
XXXXXX

Date

Tim Johnson,
CGIA Acting Director

Date

**ATTACHMENT to
DATA SHARING AGREEMENT between XXXXXXXXXXX, NC and CGI**

PRIMARY CONTACTS FOR DATA SHARING

For XXXXXXXXXXXX

Name

Title

Address

Phone

Fax

Email

For Center for Geographic Information and Analysis

Zsolt Nagy / David Giordano

New Education Building

20322 Mail Service Center

Raleigh, NC 27699-0322

(919) 733-2090 ph

(919) 715-0725 fx

zsolt.nagy@ncmail.net / david.giordano@ncmail.net

www.cgia.state.nc.us

DATA AVAILABLE FROM XXXXXXXXXXXX

- ☐ Digital Orthophotography
- ☐ Elevation models
- ☐ Elevation contours
- ☐ Road and Street Centerlines
- ☐ Railroad Rights of Way
- ☐ Surface Waters
- ☐ Municipal Boundaries
- ☐ Extraterritorial Jurisdictional Boundaries
- ☐ County Boundaries
- ☐ Parcel and Land Ownership Data
- ☐ Zoning
- ☐ Schools
- ☐ Airports/Airstrips
- ☐ Other:
- ☐ Other:

XXXXXXXXXX DOCUMENTATION FORMAT: Compliant FGDC Metadata

XXXXXXXXXX DATA EXCHANGE FORMATS:

VECTOR: ESRI .E00
VECTOR: ESRI SHAPE
RASTER: MrSID
RASTER: GEOTIFF

XXXXXXXXXX TRANSFER/ACCESS METHODS:

XXXXXXXXXX DISCLAIMER

Applicable Disclaimers are recorded in the metadata for each data layer

DATA AVAILABLE FROM CGIA

Data available from CGIA is administered as part of the North Carolina Corporate Geographic Database (CGDB). The CGDB contains over 100 statewide layers of geospatial data that are developed and/or maintained on varying schedules. The CGDB is jointly supported by numerous organizations by cost sharing, in-kind services, service/maintenance agreements, or direct contributions.

All data contained in the CGDB is part of the public domain.

The North Carolina Geographic Information Coordinating Council, a statewide multi-jurisdictional policy board, guides the development of the CGDB.

A full listing of the layers in the CGDB and complete metadata can be found at www.cgia.state.nc.us.

CGIA DOCUMENTATION FORMAT: Compliant FGDC Metadata

CGIA DATA EXCHANGE FORMAT:

- VECTOR: ESRI .E00
- VECTOR: ESRI SHAPE
- RASTER: MrSID
- RASTER: GEOTIFF

CGIA ACCESS/TRANSFER MECHANISM:

The preferred mechanism to access data from CGIA is through the Internet. At this time, the number of layers available at the CGIA Internet Web Site (www.ncmapnet.com) is under 15 but is expected to grow as CGIA places more emphasis on its Internet Mapping capacities. Unless otherwise noted at the time of request, CGIA responses for off-line transfers will be handled in a reasonable period of time, subject to the availability of staff resources.

CGIA DISCLAIMER

Applicable Disclaimers are recorded in the metadata for each data layer

For XXXXXXXXXXXX: _____

For CGIA: _____

Date: _____

Date: _____