

GIT GOVERNANCE

State Models and Best Practices

New York

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 William F. Johnson, Assistant Deputy Director & CIO, NYS Office of Cyber Security & Critical Infrastructure Coordination, 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)

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New York GIT Governance

GEOSPATIAL COORDINATION STRUCTURES AND PROCEDURES

Implementation of GIS began in New York State in the 1960s, although early coordination efforts were not sustained.¹ Indeed, statewide GIS coordination did not gain momentum until 1994 when the State Legislature created the New York State Temporary Geographic Information Systems (GIS) Council. The Legislature directed the Council “to examine various technical and public policy issues relating to GIS and geographic information systems and analysis; to identify the structure, functions and powers of a [permanent] state-level geographic information systems coordinating body; and to examine the role a state-level body could play in assisting in the development and implementation of local government geographic information systems” (Chapter 564 of the Laws of 1994; see Appendix).

As enumerated in Chapter 564, the Temporary GIS Council was to be comprised of directors and commissioners from various state agencies; representatives from county government, regional planning boards, and the private sector, as appointed by the Governor and Legislature; and ex-officio members representing federal agencies and academic institutions. Notably, this legislation identified the Director of the State Division of the Budget as the Council’s Chair, which anchored the Temporary GIS Council in fiscal reality. However, the appointing process for these fifty-seven (57) Council members, which were selected by twenty-eight (28) separate appointing authorities, was lengthy; and consequently, the Temporary GIS Council did not

¹ Warnecke, L., 2000. State Geographic Information and Related Technology (GI/GIT) Profile: New York. (Annapolis, Maryland: NSGIC).

convene until its sunset was close at hand. Nevertheless, the Council persisted, initially meeting in the fall of 1995 and producing a report by March of 1996.²

In its report *Geographic Information Systems: Key to Competitiveness*,³ the Temporary GIS Council explored the role of GIS in economic development, enumerated the potential users of GIS in the state, and considered the role of the state's universities and the private sector in GIS innovation. In addition, the Temporary GIS Council provided an inventory and analysis of the state's GIS data and systems. It discussed the development of GIS data standards and addressed issues related to records management, confidentiality, privacy, and security. The Temporary GIS Council also examined the treatment of GIS data as a public resource available to private citizens, and as a marketable resource for commercial users. It studied the legal ramifications of assuming a proprietary interest in GIS data, including the potential impact to the NYS freedom of information law (FOIL).⁴

Most importantly, the Temporary GIS Council emphasized in its report that "the central GIS issue facing New York is how to organize and sustain a collaborative effort across all levels of government and with the private sector that will harness this powerful tool to improve

² Eglene, Ophelia and Sharon S. Dawes, 2003. *New Models of Collaboration: A Guide for Managers*. (Albany, NY: Center for Technology in Government), pp. 15. CTG Website: http://www.ctg.albany.edu/publications/online/new_models/cases/gis_for_cefrio.pdf#search=%22%20geographic%22

³ The temporary Council drew on the recommendations of at least three initiatives when writing its report: 1) the NYS Forum for Information Resource Management Reports on GIS, including the briefing paper "Geographic Information Systems: Issues, Activities and Resources"; the Center for Technology in Government's (CTG) GIS Cooperative Project 1995 report on the barriers to GIS data sharing, and the Center's development of a prototype online geospatial data clearinghouse; and, 3) the State Archives and Records Administration (SARA) Local Government Demonstration Project findings and recommendations on best practices for GIS management in local government. See Chapter 1: Background to Creating and Convening the Council. In *Geographic Information Systems: Key to Competitiveness*. NYSGIS Clearinghouse Website, Coordination Program: <http://www.nysgis.state.ny.us/cordinationprogram/reports/key2comp/gtcreport/1c1backg.htm>

NYS Geographic Information Council, 1996. *Geographic Information Systems: Key to Competitiveness*. A Report submitted to Governor George E. Pataki and the New York State Legislature by the New York State Temporary Geographic Information Systems Council pursuant to Chapter 564 of the Laws of 1994. NYS GIS Clearinghouse Website: <http://www.nysgis.state.ny.us/coordinationprogram/reports/key2comp/index.cfm>

⁴ NYS Geographic Information Council, 1996. Executive Summary. In *Geographic Information Systems: Key to Competitiveness*. A Report submitted to Governor George E. Pataki and the New York State Legislature by the New York State Temporary Geographic Information Systems Council pursuant to Chapter 564 of the Laws of 1994. NYS GIS Clearinghouse Website: <http://www.nysgis.state.ny.us/coordinationprogram/reports/key2comp/gtcreport/1c0exsum.htm>

governmental services, drive down costs, and stimulate economic development.” The Council recommended “the creation of a [permanent] state-level geographic information systems and analysis coordinating entity,” outlined its “structure, goals, powers, duties, and funding,” and defined “the role a state-level body would play in assisting in the development and implementation of county and local government geographic information systems” (Chapter 564 of the Laws of 1994). A permanent GIS coordinating body, the Temporary GIS Council stated, should establish and administer a state GIS clearinghouse. It also should “coordinate data development, maintenance and sharing by brokering partnerships, publishing standards and guidelines, and facilitating access to education, training and technical support and services.”

Even so, the Temporary GIS Council understood that “it would be unrealistic to expect significant new funding at this time, from any level of government, and that it would be self-defeating to predicate initial recommendations on such an expectation....While desirable, and hopefully achievable in the future, ‘new money’ is not necessarily required to make progress. Much can be accomplished by improving coordination and maximizing the use of existing resources.”⁵

Prompted by the Temporary GIS Council’s report, the NYS Office for Technology (OFT), an executive branch agency formerly known as the Governor’s Task Force on Information Resources Management, formed a Special Purpose Subcommittee on GIS to develop a Statewide GIS Coordination Plan. The Subcommittee on GIS, in turn, solicited input from local and state government representatives and from the private sector before publishing its findings in May 1996.⁶ Like the Temporary GIS Council, the Subcommittee recommended the establishment of a permanent coordinating body to be organized under the OFT, as well as the creation of a statewide GIS clearinghouse to be administered by the NY State Library.

⁵ NYS Geographic Information Council, 1996. Executive Summary. In *Geographic Information Systems: Key to Competitiveness*. A Report submitted to Governor George E. Pataki and the New York State Legislature by the New York State Temporary Geographic Information Systems Council pursuant to Chapter 564 of the Laws of 1994. NYS GIS Clearinghouse Website: <http://www.nysgis.state.ny.us/coordinationprogram/reports/key2comp/gtcreport/1c0exsum.htm>

⁶ Warnecke, L, 2000. *State Geographic Information and Related Technology (GI/GIT) Profile*: New York (Annapolis, MD: NSGIC).

These concurrent efforts culminated in September 1996 with the establishment of the NYS GIS Coordination Program under Technology Policy 96-18, issued by the Director of State Operations in the Governor's Office (see Appendix). This Policy called for the creation of a GIS Coordinating Body under the Office for Technology (OFT) and for the development of a GIS Metadata Clearinghouse under the NY State Library. This policy charged the new GIS Coordinating Body with providing policy recommendations to the Office for Technology and with establishing advisory and work groups to tackle specific GIS issues and stakeholder concerns. Although not explicitly specified in Technology Policy 96-18, membership of the permanent GIS Coordinating Body was drawn equally from local and state government and from the private sector and academia.

To meet its responsibilities, the GIS Coordinating Body initially created three advisory groups, including Local, State, and Private, as well as six working groups, including Clearinghouse and Communications, Standards and Data Coordination, Digital Orthoimagery, Education, Finance, and Legal. Notably, the Standards and Data Coordination Working Group developed a GIS data sharing policy to facilitate statewide GIS data sharing across all levels of government. Implemented by the Office for Technology as Technology Policy 97-6, this data sharing policy directed the GIS Coordinating Body to establish and administer the NYS GIS Data Sharing Cooperative, "an organized mechanism for sharing GIS data across the State and will allow members to easily obtain computerized data from other members under a standardized data sharing agreement" (see Appendix). It also required state agencies to "follow Standards for GIS data and metadata as adopted by the GIS Coordinating Body," to share GIS data with all levels of government "at little or no cost," to participate in the Cooperative, and to contribute to the NYS GIS Metadata Clearinghouse. Local governments were encouraged, but not required to participate.⁷ The Legal Working Group supported this effort by producing the NYS GIS Cooperative Data Sharing Agreement, a standard license agreement that all state agencies

⁷ Eglene, Ophelia and Sharon S. Dawes, 2003. *New Models of Collaboration: A Guide for Managers*. (Albany, NY: Center for Technology in Government), pp. 15. CTG Website: http://www.ctg.albany.edu/publications/online/new_models/cases/gis_for_cefrio.pdf#search=%22%20geographic%22

signed in September 1997 to join the Cooperative. A local government license agreement was implemented in the beginning of the following year.⁸

In December 2000, the Office for Technology (OFT) created the NYS Center for Geographic Information to serve as the lead agency for statewide GIS coordination. The primary function of the Center was “to develop integrated GIS framework data; [to] facilitate GIS use in State and local governments; and [to] provide assistance to the GIS Coordination Program.” In addition, responsibility for the administration of the GIS Clearinghouse was transferred, along with the associated personnel, from the NY State Library to the newly created Center.

In 2002, however, the functions of the NYS Center for Geographic Information were relocated to the newly created NYS Office of Cyber Security and Critical Infrastructure Coordination (CSCIC), under the NYS Office of Homeland Security (OHS).⁹ The CSCIC assumed responsibility for providing administrative support to the GIS Coordinating Body and its advisory and working groups, as well as for administering the GIS Clearinghouse, the Statewide GIS Coordination Program, and the GIS Data Sharing Cooperative, under the advisory guidance of the GIS Coordinating Body (see Figure 1).

Responding to these administrative changes and to concerns about meeting the needs of local government, the GIS Coordinating Body adjusted the composition of its membership, revised its operating procedures, and restructured its working groups in 2003. Importantly, it expanded its membership to include additional stakeholder groups and to increase local government representation.

The State of New York has a significant number of informal and formal regional and local coordination programs, as well as a number of GIS user groups and professional associations, including the NYS GIS Association.

⁸ NYS GIS Clearinghouse Website, The Data Sharing Cooperative: <http://www.nysgis.state.ny.us/coordinationprogram/cooperative/>

⁹ CSCIC Website, About CSCIC: <http://www.cscic.state.ny.us/about/>

Two other organizations worth noting include the Local Government Records Advisory Council and the Office of Real Property Services (ORPS). The Local Government Advisory Council oversees the operation of the Local Government Records Management Improvement Fund (LGRMIF) Program, which is intended to help local governments establish records management programs or to develop new program components. The Office of Real Property Services (ORPS) established the Real Property Tax Administration Technology Improvement Grant Program (RPTATIP), which is intended to improve access to parcel level data and sales information, and to improve the "efficiency and effectiveness of business processes through intergovernmental collaboration and cooperation in the use of real property data." However, neither of these grants is specific to GIS, and the Local Government Records Advisory Council and the Office of Real Property Services do not coordinate directly with the GIS Coordinating Body.

Assistant Deputy Director & CIO, NYS Office of Cyber Security and Critical Infrastructure Coordination

The NYS Office of Cyber Security and Critical Infrastructure Coordination's (CSCIC) Assistant Deputy Director and CIO serves as Operations Manager for the agency, and functions as the state's GIS coordinator. The Assistant Deputy Director chairs the 18-member NYS GIS Coordinating Body, which oversees the Statewide GIS Coordination Program.

Office of Cyber Security & Critical Infrastructure Coordination

Established in 2002 under the NYS Office of Homeland Security (OHS), the Office of Cyber Security & Critical Infrastructure Coordination (CSCIC) is "responsible for leading and coordinating New York State's efforts regarding cyber security readiness, geographic information systems (GIS) and critical infrastructure preparedness."¹⁰ The CSCIC is charged with administering the Statewide GIS Coordination Program, as well as the NYS GIS Data Sharing Cooperative, under the guidance of the NYS GIS Coordinating Body. The CSCIC also provides staff support to the NYS GIS Coordinating Body. As mentioned above, the Assistant Deputy Director of CSCIC serves as the Coordinating Body's Chair.

¹⁰ CSCIC Website, About CSCIC: <http://www.cscic.state.ny.us/about/>

To facilitate statewide data sharing, the CSCIC maintains and updates GIS framework data and digital ortho-photography, which it distributes through the NYS GIS Clearinghouse and through the sale of maps and data products. Correspondingly, CSCIC provides web-based, interactive mapping templates to state agencies and local governments so that they, in turn, may make their GIS data available to the public. The CSCIC also offers GIS training and technical support for government entities in the state.¹¹

In addition, the CSCIC is responsible for “leading and coordinating geographic information technologies...in State declared emergencies, where CSCIC is the single point-of-contact.” As such, the CSCIC is obligated to:

- “Improve GIS capabilities deployed in the event of a State declared emergency;
- Establish a remote GIS team to support State and local government emergency response needs;
- Provide for an emergency response capability to acquire remote sensing imagery during emergencies;
- Establish a statewide network of GIS professionals able to respond to emergency needs; [and,]
- Coordinate GIS emergency response activities among the federal, state, county and municipal governments.”¹²

To support GIS development and coordination activities, CSCIC has approximately twenty (20) FTE staff members, including the CSCIC’s Assistant Deputy Director as well as the Manager of GIS and Critical Infrastructure Coordination.

¹¹ CSCIC Website, CSCIC Responsibilities: <http://www.cscic.state.ny.us/about/responsibilities/>

¹² CSCIC Website, CSCIC Responsibilities: <http://www.cscic.state.ny.us/about/responsibilities/>

Statewide GIS Coordination Program

As noted earlier, Technology Policy 96-18 and Technology Policy 97-6 established the framework for the Statewide GIS Coordination Program (see Appendix). Technology Policy 96-18, the Governor’s first technical policy on GIS, called for the creation of a NYS GIS Coordinating Body and for the development of a NYS GIS Clearinghouse. It also emphasized the facilitation of GIS data sharing between state agencies and local governments at little or no cost. Subsequently, Technology Policy 97-6 directed the GIS Coordinating Body to establish and administer the NYS GIS Data Sharing Cooperative, and required state agencies to participate in both the Cooperative and NYS GIS Clearinghouse.

With the goal of making “GIS development and implementation simpler, less costly, and more effective throughout New York State,” the Statewide GIS Coordination Program focuses on four areas of concern: 1) leadership, guidance, and strategic planning; 2) coordination of data acquisition and development across all levels of government; 3) facilitation of data access and data sharing between all levels of government; and, 4) clarification of legal issues surrounding GIS, including NYS Freedom of Information Law (FOIL), liability, licensing, and privacy.

NYS GIS Coordinating Body

The NYS GIS Coordinating Body serves as the lead entity for statewide coordination in New York. Organized under the NYS Office of Cyber Security and Critical Infrastructure Coordination (CSCIC), located within the Office of Homeland Security, the GIS Coordinating Body “coordinates, promotes and facilitates the development, effective use, and sharing of geographic information. It also removes barriers to implementing geographic information technology to improve the delivery of public services, protect the public and the environment, and enhance the business climate for the benefit of the State, its municipalities, businesses and citizens.”¹³ The GIS Coordinating Body advises the CSCIC on policy and establishes advisory and work groups to tackle specific GIS issues and stakeholder concerns. In addition to quarterly meetings, the GIS Coordinating body meets once a year for an all-day strategic planning session.

¹³ NYS GIS Clearinghouse Website, Coordination Program: <http://www.nysgis.state.ny.us/coordinationprogram/>

As described earlier, concurrent efforts resulted in the establishment of NYS GIS Coordinating Body. In 1996, the New York State Temporary Geographic Information Systems Council issued a report recommending that a permanent statewide GIS Coordinating Body be created to:

- “Foster an integrated statewide geographic information infrastructure composed of people, technology, data, and organizations;
- Advance the coordinated development of GIS in NYS as a decision making and operational tool to efficiently serve the needs of the State's citizens; and,
- Promote data development, dissemination and sharing.”

To achieve these goals, the Temporary Council recommended that the GIS Coordinating Body should have the responsibility and power to:

- “Establish and oversee a spatial data clearinghouse and GIS Resource Center, with global communications, to facilitate access to spatial information and GIS technical support and services;
- Coordinate data development, maintenance, and sharing by brokering partnerships, publishing standards, coordinating development and funding of large scale databases, adopting statewide geodetic monumentation (reference points), and working with [New York State Archives and Records Administration (SARA)] on long term preservation and access to digital GIS data;
- Facilitate coordination and communication among GIS users, and education and training;
- Establish, and publish, non-binding content and accuracy standards, or "preferred practices," for GIS;
- Recommend consistent public sector data sharing policies;
- Establish guidelines for agency data collection planning to facilitate GIS applications;
- Keep abreast of, and participate in, Federal GIS coordination and standards efforts;

- Designate preferred statewide reference data sets for minor civil divisions, roads, hydrography, etc;
- Issue advisory opinions regarding data custody and maintenance or any other subject matter addressed by the previously enumerated powers;
- Monitor the development of GIS technology and uses for potential privacy threats and promote fair information practices, working with the Committee on Open Government to ensure adequate procedures for citizen redress of any misuse or abuse of confidential data and for correcting inaccurate data;
- Submit biennial reports to the Governor and Legislature that include activities, accomplishments, recommendations for strategic use of geographic information and such other recommendations as may be appropriate; and,
- Conduct periodic self evaluation.”¹⁴

These recommendations, in combination with similar recommendations from other entities, resulted in a state Technology Policy 96-18, which authorized the establishment of the NYS GIS Coordination Program and the NYS GIS Coordinating Body (see Appendix).

In 2003, a number of key stakeholders voiced their concerns that the Statewide GIS Coordination Program and Coordinating Body were not adequately meeting the needs of local government. Specifically, the Program was “not providing enough resources (i.e., funding) for local government GIS projects.” Stakeholders also raised concerns about the priorities of the CSCIC; the CSCIC, they contended, was “only interested in supporting GIS projects related to emergency response and critical infrastructure, and was no longer interested in the other elements of the Statewide GIS Coordination program.” Finally, stakeholders worried that possible recent data security requirements and data access restrictions might have a chilling effect on GIS data sharing.¹⁵

¹⁴ NYS Geographic Information Council, 1996. Chapter 10: Summary of Recommendations. GIS Coordination Body. In *Geographic Information Systems: Key to Competitiveness*. A Report submitted to Governor George E. Pataki and the New York State Legislature by the New York State Temporary Geographic Information Systems Council pursuant to Chapter 564 of the Laws of 1994. NYS GIS Clearinghouse Website: <http://www.nysgis.state.ny.us/coordinationprogram/reports/key2comp/gtcreport/1c10recs.htm>

¹⁵ NYS GIS Clearinghouse, Revisions to the NYS GIS Coordinating Body, August 27, 2003: http://www.nysgis.state.ny.us/coordinationprogram/workgroups/wg_10/misc/coordbdy_struct.htm

To address these concerns, the GIS Coordinating Body, along with the Chairs of the Work Groups and Advisory Committees, met to reevaluate the organizational structure of the Statewide GIS Coordination Program and of GIS Coordinating Body.¹⁶ Meeting participants universally agreed that “[t]he rapid success of the program in its first years is strong evidence that there is a need for a state-sponsored organization to ensure that the basic resources needed by all GIS users are made available.”¹⁷ But, they also acknowledged the need for some changes, particularly to the structure of the GIS Coordinating Body.

The GIS Coordinating Body was originally comprised of fifteen (15) members, including five (5) representatives each from state government and local government, two (2) representatives each from the private sector and not-for-profits, and one (1) representative from academia. This structure, however, did “not match the composition or needs of the GIS community statewide.” Thus, meeting participants recommended that representation on the GIS Coordinating Body be expanded to include additional stakeholder groups and to increase the role of local government; bringing the total number of members on the GIS Coordinating Body to eighteen (18), the new structure includes:

- Four (4) representatives from state agencies, including an CSCIC representative as Chair;
- Seven (7) representatives from local government, including a combination of municipal and county governments, as well as rural and urban governments;
- Two (2) representatives from academia 2, including universities, community colleges, and K-12
- Two (2) representatives from the private sector, including one (1) utility company representative;
- Two (2) representatives from not-for-profits; and,

¹⁶ “The meeting was conducted using a combination of large group discussions and smaller break-out sessions. The break-outs were done in 2 groups, with each group being asked to recommend revisions to the membership composition of the Coordinating Body.” NYS GIS Clearinghouse, Revisions to the NYS GIS Coordinating Body, August 27, 2003:
http://www.nysgis.state.ny.us/coordinationprogram/workgroups/wg_10/misc/coordbdy_struct.htm

¹⁷ NYS GIS Clearinghouse, Revisions to the NYS GIS Coordinating Body, August 27, 2003:
http://www.nysgis.state.ny.us/coordinationprogram/workgroups/wg_10/misc/coordbdy_struct.htm

- One (1) representative from the Federal government from an in-state Federal agency field office.¹⁸

As individual government agencies and organizations are not explicitly identified in the composition of the Coordinating Body, the Nominating Committee has some flexibility in selecting members whose expertise may be needed to address specific needs or concerns as they arise.

In addition to changes to the Coordinating Body's composition, three-year term limits were implemented, with one third (6) of the terms expiring each year. A Nominating Committee is formed annually, and has the responsibility for generating a list of potential Coordinating Body members. The CSCIC executive management reviews and approves the list.

The Assistant Deputy Director of the NYS Office of Cyber Security and Critical Infrastructure Coordination's chairs the NYS GIS Coordinating Body. There are no other officers.

Finally, the GIS Coordinating Body has three standing advisory groups, including the Local Government Advisory Group, the State Agency Advisory Group, and the Private Sector Advisory group. In addition to the standing advisory groups, the Coordinating Body has several ad hoc work groups, which are "charged with making recommendations on specific actions, and [then]... "decommissioned" upon completion of their tasks." ¹⁹ New work groups can be created and old ones revived, as specific topics or needs arise. Membership in the advisory and ad hoc work groups are voluntary and open to anyone who wishes to participate. The advisory groups and work groups are described below.

NYS GIS Coordinating Body Advisory Groups. The current standing advisory groups to the GIS Coordinating Body include the Local Government Advisory Group; the State Agency

¹⁸ NYS GIS Clearinghouse, Revisions to the NYS GIS Coordinating Body, August 27, 2003:
http://www.nysgis.state.ny.us/coordinationprogram/workgroups/wg_10/misc/coordbdy_struct.htm

¹⁹ NYS GIS Clearinghouse, Revisions to the NYS GIS Coordinating Body, August 27, 2003:
http://www.nysgis.state.ny.us/coordinationprogram/workgroups/wg_10/misc/coordbdy_struct.htm

Advisory Group; and the Private Sector Advisory Group.²⁰ Members of the advisory groups are volunteers drawn from the larger GIS community within New York State. These advisory groups are described below.

- **Local Government Advisory Group.** The Local Government Advisory Group (LGAG) currently has eighteen (18) members, including representatives from local and county government, the private sector, and a utility.
- **State Agency Advisory Group.** The State Agency Advisory Group (SAAG) currently has sixty-eight (68) members, including representatives from state government and state authorities. The mission of SAAG is “to raise issues and provide feedback about the impact of relevant GIS matters from a state agency perspective. The group also serves to provide a forum for information exchange regarding current statewide GIS programs, initiatives, and activities with which the agencies are involved.”
- **Private Sector Advisory Group.** The Private Sector Advisory Group (PSAG) currently has ten (10) members, including nine representatives from the private sector and one from the CSCIC. The mission of the Private Sector Advisory Group is “to advise and respond to the NYS GIS Coordinating Body concerning the part of its policy that aims to foster and advance the business climate in NYS, in a way that adds value to the private sector, based on NYS GIS technology, GIS data and GIS policy. GIS technology and GIS data affect the greater business environment of New York State, above and beyond the immediate GIS-related industry. We will also advise the Coordinating Body, without prejudice or direct self-interest, regarding the impacts of GIS-related technology and/or policy changes on NYS private industry.”

Private sector participation as members of the Coordinating Body has not been as strong as other stakeholders’ involvement because state laws prohibit vendor participation in government decision-making that results in

²⁰ NYS GIS Clearinghouse, Coordination Program Advisory Groups:
<http://www.nysgis.state.ny.us/coordinationprogram/workgroups/index.cfm?groupType=1>

procurement contracts that the vendor intends to bid on. The Private Sector Advisory Group, on the other hand, allows the private sector to provide information to the Coordinating Body without a conflict of interest arising.

Ad Hoc Work Groups. The current *ad hoc* work groups to the GIS Coordinating Body include: the Cadastral Work Group; Data Coordination, Standards & Clearinghouse Work Group; Data Sharing Cooperative Work Group (recently decommissioned); Education Work Group; Emergency Response Work Group (replaces First Responder Task Force); Land Use and Land Cove Work Group; and Remote Sensing Work Group.²¹ The Data Sharing Cooperative Work Group made an energetic effort to explore possible structural changes to the way the cooperative operates, but in the end the Work Group validated that the original approach was best. The Cadastral Work Group, for example, developed a cadastral data standard, which is being adopted voluntarily, while the Remote Sensing Work Group oversees the digital ortho-imagery program. Members of the ad hoc work groups are volunteers drawn from the GIS community in New York State.

The Coordinating Body also will solicit information and feedback from the newly created NYS GIS Association, which is comprised of a broad range of professionals interested in GIS and related geospatial technologies.

NYS GIS Data Sharing Cooperative

Issued by the Director of State Operations in 1997, Technology Policy 97-6 authorized the NYS GIS Coordinating Body to establish and oversee the NYS GIS Data Sharing Cooperative, a consortium of “governmental entities and not-for-profit organizations that have executed data sharing agreements for the purpose of improving access to GIS data among members.”²² The CSCIC provides administrative support to the Cooperative.

²¹ NYS GIS Clearinghouse, Coordination Program Participant Groups:
<http://www.nysgis.state.ny.us/coordinationprogram/workgroups/>

²² NYS GIS Clearinghouse, The Data Sharing Cooperative:
<http://www.nysgis.state.ny.us/coordinationprogram/cooperative/>

Membership in the NYS GIS Data Sharing Cooperative is open to government and not-for-profit entities only. Technology Policy 97-6 requires that all New York state agencies participate in Cooperative, while local and regional government participation is optional. Federal government agencies, sovereign nations, academia, and not-for-profit organizations also may join the Cooperative. In 2005, the Cooperative considered expanding membership to include the private sector, but ultimately chose to retain the original structure. Of note, public entities from other states also have become members, including the State of New Jersey; the Commonwealth of Pennsylvania; the Vermont Center for Geographic Information; two River Basin Commissions; and one regional planning commission. At the writing of this report, the Cooperative had 642 members (see Table 1).²³

Table 1 . NYS GIS Data Sharing Cooperative Members, September 2006

COOPERATIVE MEMBERS BY SECTOR	SECTOR MEMBERS
Education Institutions	138
Local Government	218
County Government	60
New York State Government	81
Other State Governments	6
Sovereign Indian Nations	1
Not for Profits	119
Federal Government	19
Total Cooperative Members	642

Prior to joining the Cooperative, members must sign the NYS GIS Cooperative Data Sharing Agreement, a standardized license agreement that adheres to the following principles:

²³ NYS GIS Clearinghouse Website, Data Sharing Cooperative Members:
<http://www.nysgis.state.ny.us/coordinationprogram/cooperative/members/index.cfm>

- “Data creators (primary custodians) retain ownership of their GIS data sets, but agree to share it with other Cooperative members for free or, at most, for the cost of copying it; and
- Users of the GIS data (secondary custodians) pass updates, corrections, and revisions back to the creators of the data set, resulting in improved data quality.”²⁴

In addition, members are required to designate a GIS contact person, to compile an inventory of their existing GIS data sets, and to submit the related metadata for inclusion in the NYS GIS Clearinghouse's Metadata Repository (see Appendix). Members may terminate their agreement unilaterally; but in doing so, they must return the GIS data they have borrowed from the Cooperative.²⁵

The Cooperative does not charge a fee to join. Upon joining, Cooperative members agree to make their data available to other members for no more than the “cost of the media and shipping,” unless a custom request is made. In nearly all cases, members actually are sharing data at no cost. Members are not restricted from distributing data they own outside of the Cooperative; however, they cannot share data they received through the Cooperative with non-members, unless required by law, and they cannot use this data for any profit making or commercial activity, marketing, or advertising, etc.²⁶ Much of the data in the Cooperative is hosted at the NYS GIS Clearinghouse, as a free service that CSCIC provides to the members.

Some local governments have been reluctant to make substantial investments in GIS or to share their GIS data for fear that they might have to release this information under New York's Freedom of Information Law (FOIL) to commercial entities for the cost of reproduction, or that

²⁴ NYS GIS Clearinghouse Website, The Data Sharing Cooperative:
<http://www.nysgis.state.ny.us/coordinationprogram/cooperative/>

²⁵ The Cooperative adheres to a set of principals as enumerated under NYS GIS Data Sharing Cooperative Concepts, NYS GIS Clearinghouse Website:
http://www.nysgis.state.ny.us/coordinationprogram/workgroups/wg_12/related/coopconcepts.htm

²⁶ The Cooperative adheres to a set of principals as enumerated under NYS GIS Data Sharing Cooperative Concepts, NYS GIS Clearinghouse Website:
http://www.nysgis.state.ny.us/coordinationprogram/workgroups/wg_12/related/coopconcepts.htm

they “might expose [themselves] to litigation over liability or privacy issues.”²⁷ The NYS GIS Data Sharing Cooperative, however, alleviates these concerns by facilitating data sharing between non-commercial entities without dictating data pricing policy to local governments.

Local Government Records Advisory Council, NY State Archives

The Local Government Records Advisory Council is organized under the NY State Archives within the NY State Education Department (SED), and is appointed by the Commissioner of Education. The Council advises the Commissioner of Education on the operation of the Local Government Records Management Improvement Fund (LGRMIF) Program, which is intended to help local governments establish records management programs or to develop new program components.

The Local Government Records Advisory Council and LGRMIF Program were authorized and established under the Local Government Records Management Improvement Fund Act (Chapter 78, Laws of 1989). The Local Government Records Management Improvement Fund is a dedicated fund “comprised of the fees collected by county clerks and the New York City Register for the recording of selected documents, including deeds and mortgages, and for the assignment by county clerks of index numbers for certain court cases.”²⁸ The LGRMIF grants are competitive and grant amounts vary from year to year. They are not meant to support local government records management programs indefinitely. Importantly, these grants are not specific to GIS, and the Local Government Records Advisory Council does not coordinate directly with the GIS Coordinating Body.²⁹

²⁷ Eglene, Ophelia and Sharon S. Dawes, 2003. *New Models of Collaboration: A Guide for Managers*. (Albany, NY: Center for Technology in Government), pp. 15. CTG Website:
http://www.ctg.albany.edu/publications/online/new_models/cases/gis_for_cefrio.pdf#search=%22%20geographic%22

²⁸ NYS Archives, LGRMIF Reporting Guidelines:
http://www.archives.nysed.gov/a/grantsawards/ga_lgrmif_rg_background.shtml

²⁹ This is consistent with the 1987 Local Government Records Law (Arts and Cultural Affairs Law 57-A), which requires most local governments to designate a Records Management Officer (RMO) and to develop a records management program.” NYS Archives, LGRMIF Reporting Guidelines:
http://www.archives.nysed.gov/a/grantsawards/ga_lgrmif_rg_background.shtml

Office of Real Property Services

The Office of Real Property Services (ORPS) established the Real Property Tax Administration Technology Improvement Grant Program (RPTATIP) “to advance the agency's mission ‘to support local governments in their pursuit of real property tax equity.’ Users of parcel level data can be provided more effective and efficient access to the information they need through the sharing of parcel level data, advancements in the use of technology and integrated real property systems. An important component to this grant program is to enable taxpayers, both current and potential, to gain access to parcel level data and sales information with greater ease and efficiency. Also important is improving the efficiency and effectiveness of business processes through intergovernmental collaboration and cooperation in the use of real property data.”³⁰ Grants are offered yearly, are competitive, and are open to any county, city, town or consortium in New York State.

Grants are awarded for, among other things, “implementation projects that provide taxpayers with web-based parcel level information” (\$30,000), or “implementation projects that provide a multi-purpose web-based parcel-related software application that promotes the integration and use of parcel data among multiple levels of government” (<\$110,000). Such projects might include, for example, adding “[GIS] functionality to existing systems to help various municipal or county departments do their jobs more effectively via spatial analysis of parcel records; [i]mplementing a GIS to correlate digital parcel boundaries with state orthophotography and local property inventories; [or,] [d]eveloping intergovernmental infrastructures in data sharing arrangements to ensure that parcel level records can be shared electronically and efficiently. This could pertain to record-sharing within municipal boundaries (i.e., between an assessor's office, planning department, highway department, etc.) or more broadly at county or regional levels.”³¹ Importantly, these grants are not specific to GIS, and the Office of Real Property Services does not coordinate directly with the GIS Coordinating Body.

³⁰ NYS Office of Real Property Services, Grant Home: <http://www.orps.state.ny.us/lis/rfa/index.cfm>

³¹ NYS Office of Real Property Services, Grant Home: <http://www.orps.state.ny.us/lis/rfa/index.cfm>

NYS GIS Association

Initiated in May 2003 and formally incorporated in April 2006 as a not-for-profit organization, the NYS GIS Association³² (NYSGISA) is an organization for professionals involved in GIS, Global Positioning Systems (GPS), land information systems (LIS), remote sensing and related geospatial technologies. The Association's primary goals and objectives are to:

- “Support development of the GIS profession throughout the state of New York;
- Assist, educate, and contribute towards the implementation and development of GIS technology in the state of New York;
- Foster a spirit of cooperation among local, state and federal agencies, educational institutions and the private sector in addressing priority GIS issues and data development initiatives for New York;
- Contribute towards hosting regular meetings, conferences and technical workshops for the exchange of information and to exhibit products and services;
- Educate the general public about the nature of, and benefits from geospatial information and related technologies, including but not limited to, geographic and land information systems, the Internet, and global positioning technologies (GPS); and,
- Publish documents, produce educational materials, and promote education pertaining to geographic information and related technologies.”³³

The Association is governed by a six (6) member Board of Directors, and its activities are supported by numerous regional coordinators who volunteer to organize regular, regional meetings throughout the state.

³² NYS GIS Association Website: <http://www.nysgis.org/>

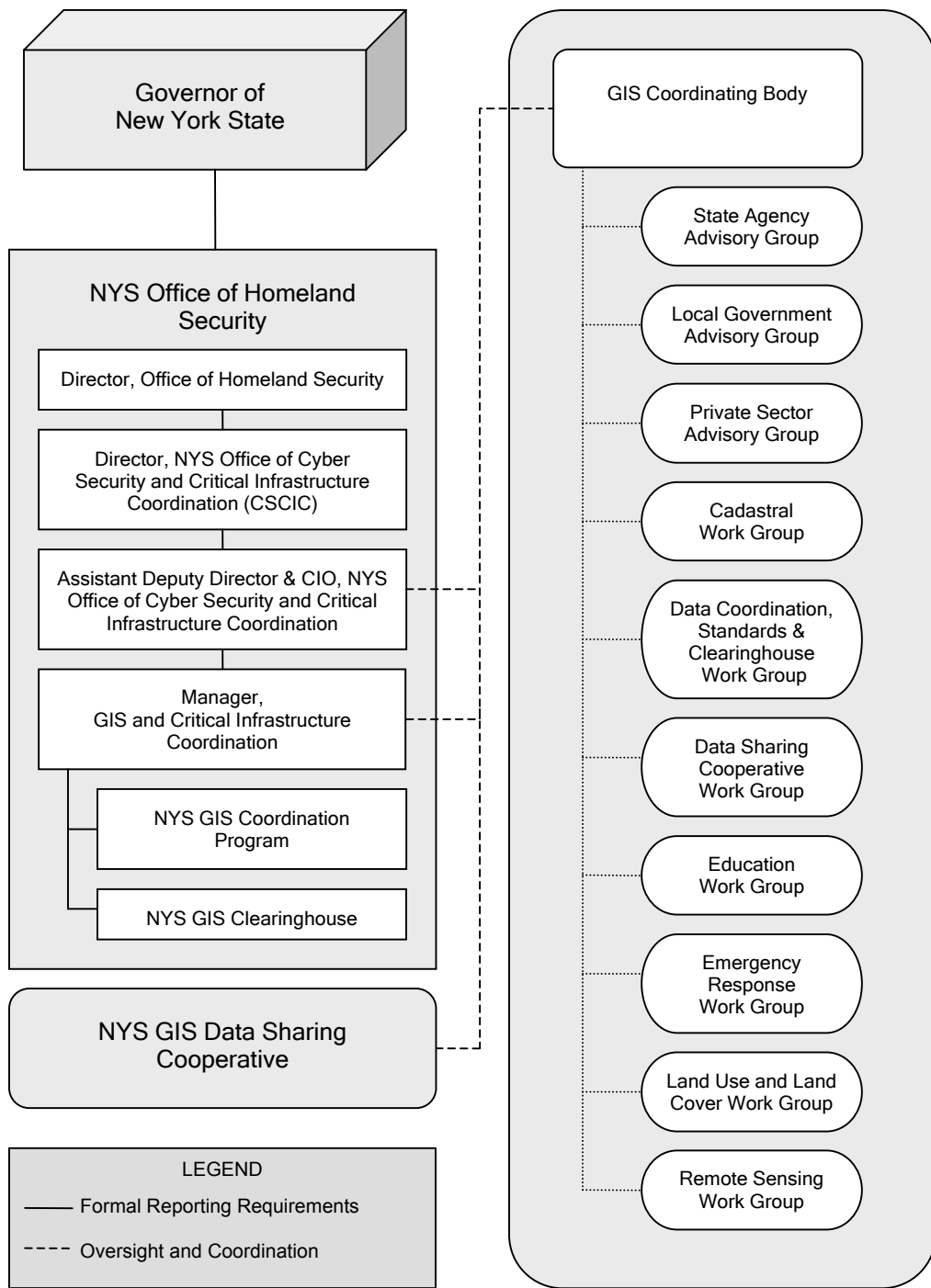
³³ NYS GIS Association, Mission and Vision: <http://www.nysgis.org/aboutus/missionvision.htm>

Other Coordination Bodies

The State of New York has a significant number of informal and formal regional and local coordination programs, as well as a number of GIS user groups and professional associations. For a detailed list, see Appendix IV: Local, Regional and State Coordination Efforts in New York (NYS GIS Clearinghouse Website:

<http://www.nysgis.state.ny.us/coordinationprogram/reports/key2comp/gtcreport/1n4coord.htm>.

Figure 1. New York GIS Coordination Organizational Structure, 2006



FUNDING AND SUPPORT

The Office of Cyber Security & Critical Infrastructure Coordination (CSCIC) is funded through legislative appropriation, which covers administrative support of the NYS GIS Coordination Program, the GIS Coordinating Body, and the GIS Data Sharing Cooperative, and which supports development and administration of the NYS GIS Clearinghouse. In addition, CSCIC receives grants for cooperative projects with state and local agencies, and builds cooperative partnerships with federal agencies to share costs and combine resources. CSCIC recently received a grant of \$15,000 from the US Geological Survey for its GIS Clearinghouse in order to automate the process of keeping contact information and the data inventory up-to-date, which is noteworthy as not all the GIS data contained within the GIS Clearinghouse is made publicly available.

CSCIC maintains a staff of 20 full-time employees, including the GIS Manager and Assistant Deputy Director. At least 5 FTEs are required per year to conduct all coordination efforts, including administratively supporting the Statewide GIS Coordination Program, the Coordinating Body, and the GIS Data Sharing Cooperative, as well as communicating with national GIS coordination organizations such as the Federal Geographic Data Committee (FGDC) and National States Geographic Information Council (NSGIC). Allocated budget and staffing numbers specifically for local, state, and national coordination activities were not available.

The NYS GIS Coordinating Body does not have dedicated funding, but is supported administratively by the CSCIC, as mentioned above. Members of the Coordinating Body are not compensated for their time nor are they reimbursed for their travel expenses.

CHALLENGES AND OPPORTUNITIES

Although initial adoption of geospatial technologies began in New York State nearly forty-years ago, statewide coordination efforts were not sustained consistently until the establishment of the NYS GIS Coordinating Body in 1996. Furthermore, efforts to obtain legislative authorization for the GIS Coordinating Body, which was created through Technology Policy 96-18, have been stymied. Nevertheless, New York State has made impressive strides in statewide GIS

coordination over the last decade. The Statewide GIS Coordination Program has facilitated educational and training opportunities, developed and promoted the adoption of GIS software and data standards, applied GIS solutions to meet the business needs of local communities, and opened the lines of communication between all levels of government regarding GIS activities in New York State.³⁴ For example, the GIS Coordination Program annually sponsors a free training workshop at eight to ten sites around the state, reaching between 500-800 individuals ever year for under \$25,000. The workshops also provide an opportunity to discuss statewide GIS initiatives and issues. In addition, the GIS Coordination Program funds a free online GIS help desk at a cost of approximately \$100,000 per year, and administers a GIS listserv and directory of GIS professionals in the state. The online GIS help desk, in particular, receives substantial positive feedback and generates support for the overall program. Interview respondents credit these outreach efforts as critical factors in the GIS Coordination Program's success.

Importantly, the Statewide GIS Coordination Program also has fostered the NYS GIS Data Sharing Cooperative, which is administered by the Office of Cyber Security & Critical Infrastructure Coordination (CSCIC) and guided by the GIS Coordinating Body. In the beginning, local governments were slow to join the NYS GIS Data Sharing Cooperative. Local officials and legal authorities, as noted by Eglene and Dawes (2003), needed "considerable time to become familiar with the idea and to review [and approve] the [Cooperative's data sharing] agreement." Moreover, some expressed concerns about hidden costs. To assuage these concerns, the Coordination Program developed a user-friendly standard license agreement with an easy termination clause.³⁵ Today, the Cooperative has grown to over 640 members, including all but three counties, as well as six out-of-state entities. To date, no members have executed the termination clause.

³⁴ Eglene, Ophelia and Sharon S. Dawes, 2003. *New Models of Collaboration: A Guide for Managers*. (Albany, NY: Center for Technology in Government), pp. 15. CTG Website: http://www.ctg.albany.edu/publications/online/new_models/cases/gis_for_cefrio.pdf#search=%22%20geographic%22

³⁵ Eglene, Ophelia and Sharon S. Dawes, 2003. *New Models of Collaboration: A Guide for Managers*. (Albany, NY: Center for Technology in Government), pp. 15. CTG Website: http://www.ctg.albany.edu/publications/online/new_models/cases/gis_for_cefrio.pdf#search=%22%20geographic%22

As discussed earlier, NYS GIS Data Sharing Cooperative members adhere to GIS data standards that are adopted by the GIS Coordinating Body, and share and distribute their GIS data through the NYS GIS Clearinghouse, which has received numerous awards, including the Federal Geographic Data Committee (FGDC), the Urban and Regional Information Systems Association (URISA), and the National Association of State Chief Information Officers (NASCIO). In 2006, nearly 5000 datasets are accessible to Cooperative members, and a considerable volume of additional data, including ortho-imagery, are publicly accessible through the NYS GIS Clearinghouse.³⁶ Participation in the Cooperative has reduced duplication of effort and investment in data creation, clarified data custodianship, and fostered long-lasting professional relationships amongst its members.³⁷ For example, under the umbrella of the GIS Data Sharing Collaborative, the NYS Office of Cyber Security & Critical Infrastructure Coordination (CSCIC), the NYS Department of Motor Vehicles (DMV), and the NYS Department of Transportation (DOT) jointly developed the Accident Location Information System (ALIS) street and address database. The ALIS project generated public and private street vectors using high resolution ortho-imagery, while local governments contributed the associated attribute information, such as street names, street name aliases, and addresses. Local governments continue to provide data updates. Furthermore, all GIS Data Sharing Cooperative members may access the ALIS data sets through the NYS GIS Clearinghouse, and a public version of these data sets is also available. In sum, the ALIS database could not have been built by any single agency for as low a cost, and its benefits accrue to everyone involved. Indeed, the NYS GIS Data Sharing Cooperative and the NYS GIS Clearinghouse have proven to be successful models for percolating GIS data up from the local level to state agencies and vice versa with minimal costs.

In addition to administering the Statewide GIS Coordination Program, the CSCIC is responsible for updating and integrating GIS framework data for New York State, including digital orthophotography, digital soils information, and a statewide roads and address range dataset

³⁶ NYS GIS Clearinghouse, NYS Geographic Information Systems Coordination Program, March 2001: <http://www.nysgis.state.ny.us/coordinationprogram/reports/gisbriefing/index.cfm>

³⁷ Eglene, Ophelia and Sharon S. Dawes, 2003. *New Models of Collaboration: A Guide for Managers*. (Albany, NY: Center for Technology in Government), pp. 15. CTG Website: http://www.ctg.albany.edu/publications/online/new_models/cases/gis_for_cefrio.pdf#search=%22%20geographic%22

that is tied to the DOT's road databases. The CSCIC administers the New York Statewide Digital Orthoimagery Program (NYS DOP) with the assistance of the Remote Sensing Work Group of the Coordinating Body.³⁸ By collecting the high-resolution, digital ortho-photography incrementally across the state on a multi-year cycle, the DOP has maintained a consistent level of funding from year to year. In addition, the New York State Interactive Mapping Gateway, a web-mapping application developed to provide user-friendly access to the DOP's imagery and data, was one of the first its kind in the country.³⁹ In fact, the Digital Orthoimagery Program and Interactive Mapping Gateway received a 2006 Best of New York Award for the "Project Demonstrating Best Sustainable Value." The CSCIC's street centerline initiative also received an ESRI 2006 Special Achievement in GIS (SAG) award.

More recently, the CSCIC developed the "Map New York" portion of the Governor's e-Commerce/e-Government web portal, which "will not only provide citizens with the ability to search for government services geographically," but also will provide them with the ability to find information "about numerous economic, cultural, educational and recreational opportunities that New York State has to offer."⁴⁰

In the future, the CSCIC and the NYS GIS Coordinating Body will focus their efforts on building greater capacity at the local level. For example, in 2007, the CSCIC and GIS Coordinating Body, in cooperation with the NYS GIS Association, plan to develop an updated strategic plan that focuses on engaging the stakeholder community in shared development and maintenance of framework data. As part of this process, the CSCIC and GIS Coordinating Body would like to conduct regional strategic planning workshops across the state to refine and document strategies for framework maintenance.

Two state grant programs worth noting that support local government modernization efforts are the State Archives and Records Administration's (SARA) Local Government Records Management Improvement Fund Program, and the Office of Real Property Services (ORPS)

³⁸ NYS GIS Clearinghouse, NYS Statewide Digital Orthoimagery Program Status: <http://www.nysgis.state.ny.us/gateway/orthoprogram/index.cfm>

³⁹ The New York State Interactive Mapping Gateway Website: <http://www1.nysgis.state.ny.us/mainmap.cfm>

⁴⁰ Map New York Website: <http://www.nysegov.com/map-NY.cfm>

Real Property Tax Administration Technology Improvement Grant Program. However, both of these grant programs are competitive, provide limited one-time funding, and are not specific to GIS. Furthermore, these grants programs are not directly influenced by the GIS Coordinating Body. Therefore, they do not provide a consistent source of funding for GIS development and training at the local level. It is hoped that alternative sources of sustainable funding might be identified.

In 2006, the First Responder Mapping Task Force Bill was vetoed. If it had passed, this bill would have established a formal, legislative council tasked with making recommendations to address the mapping needs of first responders.⁴¹ The NYS GIS Coordinating Body would like to ensure its long-term sustainability through enabling legislation. The First Responder Mapping Task Force, while more limited in scope than the Coordinating Body, may have been an opportunity to present recommendations to the legislature for a permanent coordination function that supports both emergency management as well as day-to-day government operations that are improved through GIS.

⁴¹ First Responder Mapping Task Force Bill, No. A11499, New York Assembly Website: <http://assembly.state.ny.us/leg/?bn=a11499>

NEW YORK STATE GIS COORDINATION

For a detailed discussion of New York State's GIS coordination efforts, the evolution of the NYS GIS Coordination Program and Coordinating Body, and the Program's impact, refer to:

NYS Geographic Information Council, 1996. Chapter 1: Background to Creating and Convening the Council. In *Geographic Information Systems: Key to Competitiveness*. A Report submitted to Governor George E. Pataki and the New York State Legislature by the New York State Temporary Geographic Information Systems Council pursuant to Chapter 564 of the Laws of 1994. NYS GIS Clearinghouse Website:

<http://www.nysgis.state.ny.us/coordinationprogram/reports/key2comp/gtcreport/1c1backg.htm>

Eglene, Ophelia and Sharon S. Dawes, 2003. *New Models of Collaboration: A Guide for Managers*. (Albany, NY: Center for Technology in Government), pp. 15. CTG Website:

http://www.ctg.albany.edu/publications/online/new_models/cases/gis_for_cefrio.pdf#search=%22%20geographic%22

Revisions to the NYS GIS Coordinating Body, August 27, 2003. NYS GIS Clearinghouse Website:

http://www.nysgis.state.ny.us/coordinationprogram/workgroups/wg_10/misc/coordbdy_struct.htm

Appendices

A. CHAPTER 564 OF THE LAWS OF 1994 – GEOGRAPHIC INFORMATION SYSTEMS TEMPORARY STATE COORDINATING COUNCIL

NYS GIS Clearinghouse Website:

<http://www.nysgis.state.ny.us/coordinationprogram/reports/key2comp/qtcreport/1n1ch564.htm>

GEOGRAPHIC INFORMATION SYSTEMS—TEMPORARY STATE COORDINATING COUNCIL, CHAPTER 564 OF THE LAWS OF 1994

AN ACT to create a temporary state coordinating council on geographic information systems and providing for the repeal of such provisions upon expiration thereof The People of the State of New York, represented in Senate and Assembly, do enact as follows:

§ 1. The legislature finds that advances in computer technology have made the use of digital, computerized mapping a highly valuable tool to support governmental programs. Over the past decade, numerous state agencies have invested large sums in software and hardware for geographic information systems (GIS), as well as in adapting data for their systems. While the development of these mapping programs has a direct relationship to mandated agency responsibilities, the purchasing of hardware and software, and the development of geographically based data are functions which should be coordinated within and among state agencies.

The legislature also finds that federal, state, county, and local geographic information system activities represent a significant investment in the information infrastructure which can be fostered through open communication between and among all levels of government.

The legislature additionally finds that increasing numbers of local, county and regional planning and economic development agencies are using digital cartography in a wide range of applications in the exercise of their duties. Geographic information systems are an increasingly important analytical tool to track trends, improve productivity and address service delivery issues not possible by conventional information systems.

The legislature hereby declares that a temporary geographic information systems council should be formed to examine various technical and public policy issues relating to GIS and geographic information systems and analysis; to identify the structure, functions and powers of a state-level geographic information systems coordinating body; and to examine the role a state-level body could play in assisting in the development and implementation of local government geographic information systems.

§ 2. A temporary geographic information systems council is hereby established for the purpose of evaluating and making recommendations to the governor and the legislature on the development of a state-level geographic information systems coordinating body, to examine various technical and public policy issues relating to geographic information systems, and to assess the potential costs and benefits associated with coordinating or integrating geographic information systems within New York state.

§ 3. A temporary geographic information systems council shall consist of the director of the division of budget, the commissioners of the departments of agriculture and markets, economic development, environmental conservation, education, health, public service, state, transportation, the office of parks, recreation, and historic preservation, and the directors of the division of equalization and assessment, state archives and records administration, and geological survey, or their representatives. In addition, the governor, president pro tem of the Senate, minority leader of the senate, speaker of the assembly shall each make the following appointments: two representatives from county government; one representative from a regional

planning board; one representative from a city, village, or town government; and two representatives from the professional or business sector and one other representative of their choice. Ex officio members of the council shall include a representative of the United States Bureau of the Census; the United States geological survey; the United States department of agriculture; the United States environmental protection agency; the United States department of transportation; as well as a representative from the state university of New York at Buffalo; the state university of New York at Albany, the state university of New York college of environmental science and forestry and Cornell university. The director of the division of the budget or his or her representative shall act as the chairperson for the council. Members of the council shall serve without compensation.

§ 4. The council shall develop and issue a report of findings and recommendations to the governor and the legislature on or before one year after this act has become a law. After such report is issued the council shall cease to exist. Such report shall include, but not be limited to:

(a) an inventory and analysis of the following:

- (i) the types of geographic information system data available from state, local and federal agencies operating in New York state, data compatibility, and current networking capabilities;
- (ii) the types of hardware and software being used by state, local and federal agencies operating in New York state;
- (iii) potential users of state and local geographic information systems services;
- (iv) the use of geographic information systems as an economic development tool;
- and
- (v) the role of university and private sector resources within New York state as they pertain to geographic information services.

(b) recommendations which address the public policy implications of making data accessible to the public. Such recommendations shall address the following issues:

- (i) the development of protocols which address content, format, data element definition, accuracy, spatial scale and other items, in order to facilitate the

- handling and transfer of information among federal, state, and local entities, educational institutions, not-for-profit corporations, businesses and individuals;
- (ii) treatment of data generated by a geographic information system as a public service available to private citizens and/or as a marketable resource to commercial users;
- (iii) changes to the freedom of information law or other laws to allow the charging of fees for the development, reproduction and distribution of data; and an analysis of the legal ramifications of assuming a proprietary interest in data;
- (iv) the maintenance of government records in electronic or digital formats in the context of records management requirements;
- (v) confidentiality and privacy issues, as well as computer security.

(c) recommendations relating to the creation of a state-level geographic information systems and analysis coordinating entity, including the structure, goals, powers, duties, and funding of such coordinating body, as well as the role a state-level body would play in assisting in the development and implementation of county and local government geographic information systems.

§ 5. This act shall take effect on the sixtieth day after it shall have become a law, and shall expire and be deemed repealed one year after such effective date.

B. TECHNOLOGY POLICY 96-18 STATEWIDE GIS PROGRAM, SEPTEMBER 17, 1996

New York State Office for Technology Website:

http://www.of.t.state.ny.us/policy/tp_9618.htm

Governor's Task Force on Information Resource Management Technology Policy 96-18

Subject: Statewide Geographic Information Systems

Date: September 17, 1996

Purpose

The purpose of this bulletin is to establish a framework for the development of a Statewide GIS Program.

Background

In its simplest form, a Geographic Information System (GIS) is an electronic map used to display data based on its location; in its more complex form, it becomes a powerful analytical tool with millions of pieces of data that are related geographically and can be displayed in a format that allows the user to make the inter-relationships between the data visually understandable.

GIS is currently being used by many State agencies for such things as emergency response planning, business development, real property tax valuation and analysis, health care (disease studies), and school district (school aid distribution) and political boundary mapping. It is used at the local government level for similar things as well as police, fire, sewer, water, development planning and engineering. It is used in the private sector by utility, insurance and real estate companies, as well as marketing firms. GIS is becoming an increasingly valuable tool for both State and local governments. Because up to 80% of its cost is contained in the capture and maintenance of its data, it is important that we establish standards and maximize its reuse among government agencies at all levels.

General Policy

Structure

The attached structure has been adopted to implement the Statewide GIS initiative and obtain broad representation among the State's varied GIS user community. It includes a 15 person Coordinating Body which shall act as a Standing Subcommittee to the Governor's Task Force on Information Resource Management. The Coordinating Body shall be charged with providing policy recommendations to the Task Force and establishing temporary work groups utilizing

Statewide GIS resources to investigate or resolve specific GIS issues. Members of the Coordinating Body shall be invited to serve for terms of one year. Advisory groups representing State and local government and the private sector shall also be established to provide forums for input to the Coordinating Body. Workgroups will be formed to address various issues, the results of which shall be Technology Policies in the 96-18 series.

Standards

A work group will be established to design GIS standards for New York State. These standards will be coordinated with the developing federal standards.

Data Coordination

A GIS Metadata Clearinghouse will be established in the State Library. The clearinghouse will be set up to provide descriptions of the data available to users and easy access to data currently residing within State and local agencies. Other data coordination issues will be addressed through a work group.

Cost/Access to Data

Much of the GIS data with Statewide applications is created by State agencies. The more detailed data is developed at the local level either because of local need or State mandate. Although the majority of the costs associated with GIS are attributable to gathering and maintaining the data, it is not often shared among agencies. This not only adds to the cost of GIS, but also inhibits its development around the state. The coordinating body will be charged with developing a statewide policy that will allow the transfer of digital data between State and local governments. The goal of this policy will be to provide easy access to the data at minimum or no cost.

Legal Issues

Legal issues for GIS involve FOIL, liability, licensing, and privacy. These will be addressed in a legal work group under the Coordinating Body. A work group will be responsible for drafting any necessary legislation.

Communication/Education/Financing

To be effective, communications structure must be in place to notify users of policies, directions, standards, innovations, and opportunities for sharing development efforts on projects. Also, education for users and program administrators on the effective uses of GIS will be necessary. Finally other potential funding sources will need to be identified. A work group will address each of these three areas.

C. TECHNOLOGY POLICY 97- 6 GIS DATA SHARING, JULY 17, 1997

New York State Office for Technology Website:

http://www.oft.state.ny.us/policy/tp_976.htm

Governor's Task Force on Information Resource Management Technology Policy 97-6

Subject: GIS Data Sharing

Date: July 17, 1997

Purpose

Computerized geographic data that is created, collected, processed, disseminated, and stored by public agencies in New York State is a valuable information resource. This policy will facilitate the sharing of Geographic Information System (GIS) data and improve access to computerized geographic data across all levels of government.

Overview

This policy encourages public agencies to share in the creation, use, and maintenance of GIS datasets at the least possible cost, while providing citizens, the media, and other data users easy access to this resource. In addition, it is designed to: reduce costs and duplication of effort; increase awareness of the availability of existing datasets; ensure the completeness and accuracy of information describing the datasets (metadata); encourage adherence to data standards; improve the quality of data; ensure consistent and enhanced access to data; provide

public access to information in accordance with FOIL; and facilitate coordination of GIS data gathering, maintenance, and sharing among State, Regional, County, and Local Agency users.

Policy

State agencies should share GIS data in a consistent and appropriate manner with other State and Federal agencies, and County, Regional, and Local Agencies at little or no cost. Local Governments are encouraged to participate in order to minimize their costs. To accomplish this, the following provisions shall apply:

Establishment of a NYS GIS Data Sharing Cooperative - The GIS Coordinating Body, established in Technology Policy 96-18 and serving as a Standing Subcommittee of the Governor's Task Force on Information Resource Management, will establish and administer the "New York State GIS Data Sharing Cooperative." This body will provide an organized mechanism for sharing GIS data across the State and will allow members to easily obtain computerized data from other members under a standardized data sharing agreement. State agencies are required to participate in the Cooperative and County, Regional, and Local Governments are encouraged to join the Cooperative.

Creation of Statewide Standards - State agencies shall follow Standards for GIS data and metadata as adopted by the GIS Coordinating Body. These standards, which are currently under development, will guide the collection and maintenance of newly developed datasets and provide direction for the revision and updating of existing datasets.

Designation of the "Primary Custodians" (Owners) of GIS Data - Agencies that create, develop or own GIS datasets will be considered the primary custodians of those datasets. Where ownership is unclear, the GIS Coordinating Body will determine the primary custodian. Secondary custodians, or agencies in possession of a GIS dataset acquired from the primary custodian, shall refer agencies wishing to acquire datasets to the primary custodian of those datasets for distribution. Should an entity request a dataset under the Freedom of Information Law, secondary custodians should notify the requestor of the primary custodian. In doing so, they should encourage the requestor to obtain the dataset from the primary custodian to insure

that they receive the latest information. Should the requestor still wish to receive the dataset from the secondary custodian, the secondary custodian should respond in accordance with the statute.

Making GIS Data Available - State agencies shall make their GIS computerized data available in digital format to other State, Local and Federal agencies as permitted by statute. Furthermore, agencies are expected to develop efficient methods for the distribution of this data using electronic dissemination to the extent possible.

Maintenance of GIS Data - Primary custodians have the responsibility for ensuring sound management of computerized GIS data as to its form, content, and integrity. Secondary custodians are required to report any errors to the primary custodian. In the event that a secondary custodian updates the data contained in the data set, it must provide that information to the primary custodian who may choose to include it in its original dataset.

Submission to the GIS Clearinghouse - State agencies shall contribute GIS metadata to the New York State GIS Clearinghouse, located in the State Library (<http://nysgis.nysed.gov/gis>) after September 1, 1997. Agencies will be expected to complete this task as soon as possible thereafter and continue to update and add new metadata in a timely manner. Local Government Agencies and others are encouraged to provide their metadata to the Clearinghouse to facilitate data sharing. All agencies are encouraged to contribute information on GIS data development and other GIS activities.

Pricing of Shared GIS Data - State Agencies are encouraged to make computerized GIS data available to all government agencies at no cost. When charges must be imposed, in no case shall they exceed the actual cost of fulfilling the request.

Requests Which Involve Programming - The Freedom of Information Law (FOIL) does not require an agency to create a record, therefore, when an agency requests services which require programming of the primary custodian's data, fulfilling these requests is at the option of the primary custodian.

Schedule

In order to insure a smooth implementation of the Technology Policy, agencies are being asked to adhere to the following implementation schedule:

September 1997 - State agencies are asked to sign the NYS Cooperative Data Sharing Agreement in September 1997. A copy of this will be distributed by the Task Force in August. Agencies should plan to fully implement GIS data sharing with other State Agencies by January 1998. State Agencies should begin forwarding their GIS Metadata to the GIS Clearinghouse in September 1997.

January 1998 - State Agencies will begin sharing their GIS data with Local Governments that sign the NYS Cooperative Data Sharing Agreement. Full implementation is scheduled for June 1998.

D. THE NYS GIS COOPERATIVE DATA SHARING AGREEMENT FOR USE WITH LOCAL GOVERNMENTS OF NYS AND NOT-FOR-PROFITS ENTITIES

NYS GIS Data Clearinghouse Website:

<http://www.nysgis.state.ny.us/coordinationprogram/cooperative/agreement.cfm#text>

THE NEW YORK STATE GEOGRAPHIC INFORMATION SYSTEMS (GIS) COOPERATIVE DATA SHARING AGREEMENT FOR USE WITH LOCAL GOVERNMENTS OF NEW YORK STATE AND NOT-FOR-PROFIT ENTITIES

This Agreement is executed by and between the Office of Cyber Security and Critical Infrastructure Coordination, responsible for planning and coordinating Geographic Information Systems (hereafter collectively referred to as the State), having an office at 30 South Pearl Street, Albany, NY 12207-3425, and:

(Agency) _____, having an office at
(Address) _____, which is
legally recognized as a local governmental agency or not-for-profit entity (hereafter referred to
as the Member).

WITNESSETH:

WHEREAS, the State, under Technology Policy 96-18, established an initiative to create a framework and criteria for the development of a Statewide New York State Geographic Information Systems (GIS) Program; and,

WHEREAS, this initiative includes a structure to implement the GIS program and obtain broad representation among the State's varied GIS user community. The GIS structure includes a Coordinating Body charged with providing policy recommendations to the Office of Cyber Security and Critical Infrastructure Coordination (CSCIC) and establishing a framework for the easy dissemination of GIS Data between agencies at minimal cost and without delay. The Coordinating Body recommended creating the New York State GIS Data Sharing Cooperative (hereinafter known as the Cooperative) as a mechanism to accomplish this data sharing; and

WHEREAS, one of the purposes of the Office of Cyber Security and Critical Infrastructure Coordination (CSCIC) is to coordinate GIS, the State wishes to encourage agencies of the State of New York and its political subdivisions and other non-profit corporations or other non-commercial entities to join and become Members of the Cooperative and participate in sharing of GIS Data and Member wishes to join and participate in the Cooperative and share GIS Data. The State also wishes to encourage agencies of the Federal government, other states, and other sovereigns to join and become Members of the Cooperative and participate in sharing of GIS Data; and

WHEREAS, Member wishes to join and participate in the Cooperative and share GIS data.

NOW THEREFORE, in consideration of the mutual covenants herein contained, the parties do agree as follows:

I. GENERAL TERMS AND CONDITIONS

A. Definitions - For the purposes of this Agreement, the following terms are defined:

1. Clearinghouse - a worldwide web site hosted by the State of New York, which acts as a repository for spatial Metadata and other information that promote cooperation among users in the GIS community.
2. Cooperative - the group of governmental agencies and not-for-profit entities which have executed Data Sharing Agreements for the purpose of exchanging and improving access to GIS Data for Members.
3. Cooperative Custodian - a custodian designated by the Coordinating Body for distribution, only within the Cooperative, of data for which the custodian may not otherwise be considered the primary custodian of such data.
4. Coordinating Body - acts as a Standing Committee of the State.
5. Data - consists of the digital databases or data layers which contain references to locations on the earth's surface.
6. Improved Data - includes any or all of the following: correction of errors; addition of missing features for feature categories already represented in the Data; improvement of positional accuracy; revision to improve the temporal quality of the Data; correction of descriptive attribute data for categories already represented in the Data; and any other action which improves the existing Data without creating new categories of data not previously present in the Data.
7. "Intermediary Custodian" - a Member, designated in writing by one or more Members, who agrees to act on behalf of such Member(s):

- (i) as a Primary Custodian to collect and distribute Data owned by such Member(s) to other Members; and
- (ii) as a Secondary Custodian to receive Data acquired from other Members who are Primary Custodians and redistribute it to Member(s) designating it as its Intermediary Custodian.

The Intermediary Custodian shall have the duty to notify the Coordinating Body of its designation to act on behalf of any Member upon designation by the Member. The Intermediary Custodian shall transmit to the Coordinating Body a copy of the document, signed by the Member, establishing the relationship between the Member and the Intermediary Custodian.

- 8. Member - an entity that executes a Data Sharing Agreement to participate in the Cooperative.
- 9. Metadata - information supplied by a Member which describes the characteristics of the Data, which must be in accordance with the Standards for information developed after Member joins the Cooperative.
- 10. New Data - categories of information not previously present in the Data or Improved Data.
- 11. Primary Custodian - the Member that developed or owns the Data. Each collection of Data (database, file, layer, etc.) shall have a single Primary Custodian.
- 12. Secondary Custodian - a Member in possession of Data acquired from the Primary Custodian or from the Cooperative.
- 13. Standards - the criteria adopted and revised by the Coordinating Body for GIS Data, Improved Data, Metadata, transfer of Data, and/or hardware, software or other items included in the development, dissemination, and use of GIS.

14. "The State" or "State agency" refers to New York State and means any state department, board, bureau, division, commission, committee, public authority, public benefit corporation, council, or office or other governmental entity in the State of New York.

B. Nature of the Agreement - The parties expressly acknowledge and agree that this Agreement sets forth the terms and conditions governing the services to be delivered and performance of services to be rendered by the parties.

C. Merger and Order of Precedent -

1. The term "Agreement" or "Contract" shall be deemed inclusive of the following items, as if merged and set forth herein at length:
 - a. The body of the Agreement (i.e., that portion preceding the signatures of the parties in execution);
 - b. Appendix A- Standard Clauses for All New York State Contracts
2. In the event of any inconsistency in or conflict among the document elements of the Agreement identified in Section C.1 herein, such inconsistency or conflict shall be resolved by giving precedence to the document elements in the following order:
 - a. First, Appendix A, Standard Clauses for All New York State Contracts, attached to the Agreement;
 - b. Second, body of the Agreement

D. Agreement Approval -

1. Member shall cause this Agreement to be executed by the appropriate corporate officer, having the authority to sign on behalf of the Member and such

Member shall execute, by signature and affixation of corporate seal in the presence of a notary public.

2. The parties recognize that the Agreement is wholly executory and not fully executed and binding until and unless approved by the State.

E. Term and Termination -

1. This Agreement shall commence on the date the Agreement is fully executed by both parties and shall remain in effect until such time as the Agreement is terminated in accordance with the following provisions:
 - a. Voluntary termination shall take effect upon ninety (90) days' written notice to the other party.
 - b. Termination for cause shall take effect after the Coordinating Body issues a notice of violation to the Member and such Member fails to cure the violations within thirty (30) days of such notice. Within ten (10) days of the termination date, the Member shall return all Data, Improved Data or New Data to the Primary Custodians.
2. Member agrees not to sell, disclose, or make available any Data, Improved Data or New Data obtained through the Cooperative to anyone subsequent to termination of the Agreement unless required to do so by law. If a Member is required, by law, to release data, improved data or new data, Member agrees to notify the Primary Custodian of such disclosure.
3. If a Primary Custodian ceases to be a Member of the Cooperative, all Secondary Custodians of Data provided by such Primary Custodian shall continue to have the ability to use the Data in accordance with the terms and conditions of this Agreement.

F. Consideration - As a Member of the Cooperative, Member is entitled to receive and exchange GIS Data. In return, Member agrees to provide Data and Improved Data as specified in Part II, Section A of this Agreement.

G. Disclaimer - Neither the State nor Member assumes any risk, liability or responsibility for the accuracy of Data, Metadata, New Data or material facts submitted by Member to the GIS Clearinghouse.

H. Liability Relating to Third Parties -

1. Member shall indemnify and hold the State harmless from and against any and all damages, expenses (including reasonable attorneys' fees), claims, judgments, liabilities and costs which may be finally assessed against the State in any action for infringement of a United States Letter Patent, or of any copyright, trademark, trade secret or other third party proprietary right, arising out of, or resulting from, Member's acts or omissions in relation to this agreement, provided that the State shall give Member (i) prompt written notice of any action, claim or threat of infringement suit, or other suit, (ii) the opportunity to take over, settle or defend such action, claim or suit at Member's sole expense, and (iii) all reasonable assistance in the defense of any such action at the expense of Member.
2. If principles of governmental or public law are involved, the State may participate in the defense of any action identified in this paragraph, but no costs or expense shall be incurred upon the account of Member without Member's written consent.

I. Force Majeure - Neither party will be liable for losses, defaults, or damages under these Agreements which result from delays in performing, or inability to perform, all or any of the obligations or responsibilities imposed upon it pursuant to the terms and conditions of these Agreements, due to or because of acts of God, the public enemy, acts of government, earthquakes, floods, strikes, civil strife, fire or any other cause beyond the reasonable control of

the party that was so delayed in performing or so unable to perform provided that such party was not negligent and shall have used reasonable efforts to avoid and overcome such cause. Such party will resume full performance of such obligations and responsibilities promptly upon removal of any such cause.

J. Subcontracting -

1. If Member hires a contractor to develop GIS data, contractor will be required to comply with Standards in providing Metadata.
2. Member shall give the State immediate notice in writing of any legal action or suit filed, and prompt notice of any claim made, against Member by any contractor or subcontractor which may result in litigation related in any way to this Agreement or which may affect the performance of duties under this Agreement.

K. Assignment -

1. The State agrees not to assign this Agreement without prior notice to the Member.
2. Member may not assign this Agreement without the prior written consent of the State.
3. All provisions contained in this Agreement shall be binding upon, inure to the benefit of, and be enforceable by the respective successors and assigns of the parties hereto to the same extent as if each such successor or assign were named a party hereto.

L. Entire Agreement - These documents constitute the entire Agreement between the parties. No statement, promise, condition, understanding, inducement or representation, oral or written, expressed or implied, which is not contained herein shall be binding or valid. This Agreement

shall not be changed, modified or altered in any manner except by written instrument executed by authorized representatives of both parties.

M. Applicable Law - This Agreement shall be governed by and construed in accordance with the laws of the State of New York.

N. Member's Status - The legal status of Member, its agents, officers and employees is that of an independent contractor. In no manner shall it or they be deemed employees of the State of New York, and, therefore, are not entitled to any of the benefits associated with such employment.

O. Notices - All notices, demands, designations, certificates, requests, offers, consents, approvals and other instruments given pursuant to this Agreement shall be in writing and shall be validly given when mailed by registered or certified mail, or hand delivered, (i) if to the State, addressed to the State at its address set forth herein, and (ii) if to Member, addressed to Member at its address set forth herein. The parties may specify any address in the United States as its address for purpose of notices under this Agreement by giving fifteen (15) days written notice to the other party. The parties agree to mutually designate individuals as their respective representatives for purposes of this Agreement.

P. Conflict of Interest - If during the term of the Agreement Member becomes aware of an actual or potential relationship, which may be considered a conflict of interest, Member shall notify the State in writing immediately.

Q. Severability - Should any provision of the Agreement be declared or found to be illegal, unenforceable, ineffective or void, then each party shall be relieved of any obligation arising from such provision; the balance of the Agreement, if capable of performance, shall remain in full force and effect.

II. SPECIFIC TERMS AND CONDITIONS

A. Member's Responsibilities - Member warrants and represents the following:

1. **Population of GIS Clearinghouse** - Member agrees to populate the GIS Clearinghouse with Metadata in accordance with the Standards and other information regarding Member Representative, projects, training opportunities and other events of interest to the GIS community for the easy dissemination and use of its Data to Members as well as others. Information supplied by a Member which describes the characteristics of the Data created prior to Member's participation in the Cooperative is not required to meet such Standards.

2. **Maintenance and Improvement of Data** -
 - a. Member agrees that a significant benefit of the Cooperative is the potential for improvement of Data for all Members. Accordingly, Member agrees to provide Primary Custodians with any improved Data which may be produced during the Member's use of the Data, including work done by third parties such as consultants or contractors that may perform on behalf of the Member. Improved Data shall belong to the Primary Custodian of the original Data unless a separate agreement has been reached with the original Primary Custodian and notice thereof sent to the Coordinating Body.
 - b. Member shall provide Improved Data to the Primary Custodian in accordance with the Standards. Such Standards shall include references to or copies of relevant supporting information sources that the Primary Custodian would need to verify the improvements and incorporate them into the Data. Improved Data are to be provided to Primary Custodians in a timely manner but not less than annually. The Primary Custodian shall determine whether to incorporate the improvements into the Data.

3. **Data Sharing** - Where the Member is a Primary Custodian, such Member agrees to make Data available to the Cooperative. Such Member agrees to

provide Data within a reasonable time to the Cooperative at an amount not to exceed the cost of media and delivery, unless specifically authorized to charge otherwise by Federal or State statute. In the event another Member requests Data which requires additional work such as programming, analysis, or conversion by the Primary Custodian, the Primary Custodian may, at its option, undertake the work and charge a fee limited to the actual cost of fulfilling the request, including personnel expense, unless otherwise specifically authorized to charge otherwise by Federal or State statute.

4. **Requests for Data** - Member agrees to forward any requests for Data to the Primary Custodian, unless disclosure of Member's records containing such data is otherwise required by law; and, in such latter case, Member agrees to notify the Primary Custodian of such disclosure.

5. **Release of Data, New Data, or Improved Data** -
 - a. Unless required by law, under no circumstances shall a Member release Data, New Data, or Improved Data in whole or in part for which it is not the Primary Custodian to a non-member of the Cooperative.
 - b. Unless otherwise restricted by law, there are no restrictions on the release of Data, New Data, or Improved Data in whole or in part by a Member of the Cooperative who is the Primary Custodian of such data.
 - c. Information exchanged or received from the Cooperative by a Member shall not be used for any commercial activity, marketing or advertising when the purpose of such activity is for profit-making or other commercial purpose.

6. **Member's Agents or Consultants** - Member shall ensure in writing that any Data transferred to or prepared by Member's agent or consultant will be in the custody and control of Member and shall not alter the rights and obligations of

Member as a Primary or Secondary Custodian of the Data. Member agrees to adhere to the criteria adopted by the Coordinating Body regarding release of Data to an agent or consultant.

7. New Data -

- a. Member acknowledges and agrees that New Data shall belong to the Member which produced it and that such Member shall be deemed the Primary Custodian of the New Data. Member may transfer Primary Custodian designation of the New Data to another Member upon mutual agreement and notice to the Coordinating Body. In the event that a dispute exists over ownership of New Data, the Coordinating Body shall be responsible for designating the Primary Custodian.
- b. Members are encouraged to enhance, extend, or supplement the Data to meet their needs. Member, upon creating New Data, agrees to consult with all Primary Custodians upon whose Data the New Data may be based to notify them of the creation of the New Data.

- 8. Standards -** Except for information supplied by a Member which describes the characteristics of the Data created prior to the Member joining the Cooperative or Standards adopted by other states and federal agency Members, Member agrees to adhere to all Standards adopted by the Coordinating Body as soon as practicable. The Office of Cyber Security and Critical Infrastructure Coordination, through the Coordinating Body, shall notify Member of all Standards adopted and revised by the Coordinating Body for GIS Data, Improved Data, Metadata, transfer of Data, and/or hardware, software, or other items included in the development, dissemination, and use of GIS. While other states and federal agencies are not required to adopt New York State's Standards, they are encouraged to consider them for their adoption, where appropriate.

9. **Privacy/Confidentiality** - Member agrees that no party will be required to disclose any Data for which it is not the primary custodian unless required by law.

10. **Member Representative** - Member agrees to designate a single representative who will act as the authorized liaison to other Members of the Cooperative for purposes of data sharing, notification of Improved Data, Clearinghouse information, and other communication as required by the Cooperative. Each Member representative shall be listed with name, Member business address, telephone and facsimile numbers, and e-mail address at the Clearinghouse.

11. **Member Status** - Member acknowledges that its participation in the Cooperative is contingent upon having and maintaining its status as a valid governmental Member, non-profit corporation or other non-commercial entity. If at any time Member's status has changed or is subject to change, Member shall immediately notify the Cooperative in writing of such change or potential change.

12. **Provisions Required by Law** - Member agrees to comply with all of the provisions set forth in Appendix A, Standard Contract Clauses for All New York State Contracts, attached hereto and made a part hereof as Appendix A.

B. State's Responsibilities -

1. **Standards** - The State, through the Coordinating Body, shall notify Member of all Standards adopted and revised by the Coordinating Body for GIS Data, Improved Data, Metadata, transfer of Data, and/or hardware, software, or other items included in the development, dissemination, and use of GIS.

2. **Disputes** - When disputes arise among Members of the Cooperative, the State, through the Coordinating Body, shall mediate such disputes.