

Project Environment

Strategic Vision

The founders and advocates of the NYS GIS Coordination Program envisioned a future where existing spatial data sets would be cataloged and described in a comprehensive and standard way; where potential users could easily contact and negotiate with the data custodians to re-use that data; where costly but highly beneficial projects to develop new spatial data resources would be undertaken by groups of organizations working together to create a shared asset; where GIS practitioners could readily share their problems, questions, and experiences with one another; and where GIS analyses of many kinds would contribute to improved environmental management, health care, social policy, education, land use planning and commerce. In the early 1990s, New York State lagged behind most other states in term of GIS coordination. Nearly every other state already had a mechanism to support GIS coordination. In 1994, only four states were without a formal or ad-hoc coordinating body(1). However, New York State benefited from many geographic data resources, deep pockets of GIS expertise, and a number of localized coordination efforts. The value of these resources needed to be substantially leveraged by a policy-driven coordination effort at the State level. The central issue facing NY was how to organize and sustain a collaborative effort across all levels of government and with the private sector that would take advantage of the analytical power of GIS to improve government services, drive down costs, and stimulate economic development.

Preliminary Studies

The GIS Coordination Program in New York emerged in 1996 from the convergence of several parallel efforts that had been developing for several years. Historically, New York State had an active community of GIS practitioners and a vast array of geographic data resources, but no formal mechanism to support GIS coordination. There were significant barriers to GIS data sharing in NYS which were identified in a 1995 study conducted by the Center for Technology in Government (CTG):

- Lack of awareness of existing data sets: the major barrier to GIS information sharing was the lack of information about data sets held by state and local agencies. Duplication and development of existing data sets which could have been shared was a common practice. At the local level, counties and smaller jurisdictions declined to start GIS projects for lack of funds to create the needed spatial data.
- Lack of or inadequate metadata: being aware of the existence of data sets is irrelevant without descriptive metadata. Indeed, for a user to determine the suitability of a particular data set for a particular purpose, specific information about its characteristics is necessary.
- Lack of uniform policies on access, cost recovery, revenue generation, and pricing: the absence of clear statewide policies on data dissemination was a major problem in NYS. It resulted in great inconsistency in the way agencies were dealing with dissemination of their data. Some offered open public access, others provided data sets at a premium price, at cost, or free of charge depending on the requester.
- Lack of uniform policies on data ownership, maintenance and liability: ownership of transferred data was another problem. When one agency obtains a data set from another agency and modifies it, thereby adding value to it, the ownership of the new data set becomes ambiguous. Consequently, liability issues become more complex. Since New York State had no clear policies on this question, many agencies were reluctant to share their data freely.
- Lack of incentives, tools, and guidelines for sharing: while there were clear costs and possible liabilities associated with data sharing, New York offered no tangible incentives such as enhanced funding or helpful tools such as model data sharing agreements to encourage agencies to make their data available for use by others.
- Absence of state-level leadership: each state agency and local government involved in GIS use acted independently of the others. Coordinated action could take place only on the margins when a few organizations saw cooperation as a means to reach their individual goals. The lack to statewide leadership also prevented New York from participating in and influencing a national movement to create a spatial data infrastructure. This situation put New York State at a competitive disadvantage with other states.

To demonstrate some possibilities for addressing these problems, CTG, in cooperation with many state and local agencies, produced an Internet-based prototype spatial data clearinghouse that contained a metadata repository and search capability. The same year, the State Archives and Records Administration (SARA) entered into a contract with the National Center for Geographic Information and Analysis at the State University of New York at Buffalo and the Erie County Water Authority to assist in improving records management practices for GIS in local

government. This project developed procedures and guidelines to assist local governments in planning their GIS activities.

Institutional and Legal Foundations

The State Legislature, persuaded by a series of studies and recommendations dating back to the 1980s, enacted Chapter 564 of the Laws of 1994 establishing a temporary state GIS coordinating council. This temporary council was charged with reporting to the Governor and the Legislature recommendations for improved coordination of GIS in New York State. The Council, comprising 57 members named by 28 separate appointing authorities, was chaired by the NYS Division of the Budget. It began its deliberations in the fall of 1995 and, drawing upon both the CTG and SARA projects in addition to the expertise of its members, made its recommendations in March 1996. The Council's highest priority recommendations included these: create a permanent GIS coordinating body with specific goals, duties and structure; establish a clearinghouse for spatial information; enact license agreement authority for local and state government; amend the Freedom of Information Law (FOIL) to authorize local and State agencies to set fees for commercial use of GIS data, and to use those fees to defray GIS costs and expand public access to GIS information; limit liability for spatial data providers.

A second concurrent development was the creation of the Governor's Task Force on Information Resource Management, New York's first central information technology agency, launched in January 1996 and charged with a policy-making and coordination role for all information resources in State government. The Task Force was subsequently created in law as the NYS Office for Technology (OFT). The Task Force requested that a Statewide GIS Coordination Plan be produced based on the conclusions of the Temporary Council Report. A Special Purpose Subcommittee on GIS, chaired by the Office of Real Property Services (ORPS), lead the establishment of a statewide integrated GIS initiative. To ensure that the plan represented the interests of all major GIS stakeholders, an advisory group was created which featured federal, state and local organizations as well as private and academic sectors. The Subcommittee delivered the Statewide GIS Coordination Plan in May 1996. It recommended that a GIS Coordinating Body be created as a standing subcommittee of the Task Force to set policy on GIS data sharing in NYS and that a spatial metadata and informational clearinghouse be established at the State Library, based on the prototype developed by CTG.

(1) National States Geographic Information Council (NSGIC), 1994