

## **GEOGRAPHIC INFORMATION SYSTEM (GIS) ADMINISTRATOR**

**DISTINGUISHING FEATURES OF THE CLASS:** This position is responsible for the overall development and management of Broome County's Geographic Information System (GIS) program. The incumbent will implement and oversee related technical activities and provide for the planning and implementation of countywide GIS infrastructure, system design, projects and related applications. The GIS includes computer systems, cartographic, photogrammetric and spatial information, and other related data. The GIS Administrator will work with County departments and other external agencies to implement programs and procedures incorporating the use of GIS technology and spatial information into their operations, as well as to ensure that data can be interfaced and shared in an appropriate and cooperative manner. This position will act as the principle representative within the GIS community to assist in the coordination of County, State and regional based GIS initiatives. The work is performed under the general supervision of a higher level administrator, with a wide leeway allowed for a use of high level autonomy and independent judgement. Does related work as required.

### **TYPICAL WORK ACTIVITIES:**

Coordinates and implements countywide GIS programs, involving the cooperation and participation of County, State, regional and municipal agencies;

Coordinates departmental and intergovernmental committees related to the design, development, population and use of the GIS database and related cartographic issues;

Works with State, regional and local public officials as well as private agencies, to explore program opportunities in support of local GIS development and coordination;

Analyzes GIS user needs and system resources for the purpose of developing project specifications, flow charts, schedules and programming;

Incorporates current GIS management practices related to data acquisition and maintenance programs;

Coordinates with and provides technical assistance to the Office of Real Property for the maintenance of County tax maps and other information;

Coordinates with Emergency Services for computer aided dispatch and 911 mapping needs;

Coordinates with and provides technical assistance to the Public Health Department;

Oversees the development of GIS access by various other County departments;

Develops and links databases pertaining to property, demography, infrastructure and related information to County based maps;

Promotes procedures to standardize databases and protocols for inclusion in the County's GIS and data repository;

Develops and implements a curriculum for GIS training for staff within the various County departments and local municipalities;

Develops policies and systems for public access to County GIS data;

Promotes the use and understanding of the Broome County GIS program and related technology through a public information and educational campaign which includes public presentations, demonstrations and other interaction with the community.

**FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:**

Thorough knowledge of principles and practices of Geographic Information Systems planning, development and maintenance;

Thorough knowledge of database mapping and related software necessary to perform and oversee tasks associated with the design, development and maintenance of the County GIS;

Thorough knowledge of advanced GIS and cartographic concepts and terminology;

Good knowledge of ArcView 3.x and extensions including Spatial Analyst and 3D Analyst, ArcIMS, AutoCAD, MS Access, Avenue, Visual Basic for Applications, Java and HTML;

Good knowledge of network infrastructures, local area networks and wide area networks;

Good knowledge of procedures for software installation and their related software functions;

Good interpersonal skills necessary to communicate and work with diverse public interests pertaining to GIS issues;

Working knowledge of network operating systems such as Novell and NT;

Ability to train GIS users and work effectively with people at different skill levels;

Ability to analyze and resolve technical problems related to the operation of GIS equipment and software;

Ability to reason with a high degree of logic and accuracy;  
Ability to understand and follow complex oral and written instructions;  
Ability to gather, analyze and prepare data;  
Ability to communicate effectively, both orally and in writing;  
Ability to establish cooperative working relationships with co-workers, town/village officials and the public;  
Ability to present information/speak in public;  
Resourcefulness;  
Initiative;  
Accuracy;  
Tact;  
Physical condition commensurate with the demands of the position.

**MINIMUM QUALIFICATIONS:**

- A) Graduation from a regionally accredited or New York State registered college or university with a Master's Degree in Computer Science, Geography, Planning or closely related field and three years experience in GIS development and maintenance; OR
- B) Graduation from a regionally accredited or New York State registered college or university with a Bachelor's Degree in Computer Science, Geography, Planning or closely related field and five years experience in GIS development and maintenance; OR
- C) An equivalent combination of training and experience defined between the limits of A) and B) above.

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COMPETITIVE