



Cayuga County Department of Human Resources and Civil Service Commission

JOB SPECIFICATION

Civil Service Title: **PRINCIPAL GEOGRAPHIC INFORMATION SYSTEMS ANALYST**
Jurisdictional Class: Competitive
Civil Division: Cayuga County Planning Board
Adoption: CSM 12/12/07
Revised: CSM

DISTINGUISHING FEATURES OF THE CLASS:

This position exists in the County Planning Department and includes responsibility to assist the Director of Planning in overseeing and implementing work program elements relating to the planning, design, maintenance, operation, enhancement, and utilization of the County's geographic information system (GIS). An employee in this class is responsible for overseeing a major portion of geographic data collection, mapping and spatial analyses performed by the planning agency in various and simultaneous municipal, regional and/or community planning projects. Such projects reflect the overall functional responsibilities of the Planning Department which include land use planning and local assistance, economic development, mass transit, housing and transportation planning, environmental management, and engineering services. Supervision is exercised over the GIS related work performed by subordinate staff. The incumbent does related work as required.

TYPICAL WORK ACTIVITIES: (Illustrative Only)

Oversees the management of most of the data layers contained in the County GIS including but not limited to transportation features, public utilities, environmental features, municipal boundaries, election districts, census data, aerial imagery, satellite imagery, and critical E911 system data such as fire and EMS districts, address ranges and access points;

Oversees preparation and implementation of GIS related components of community planning work elements carried out by staff under local, state and Federal programs;

Coordinates with other departments the collection of geographic data and the provision of GIS services;

Exercises policy direction and management over GIS programs and projects involving interdisciplinary staff;

Oversees the formulation of GIS program goals and objectives, including the development of new program initiatives and implementation strategies;

Provides policy guidance, interpretation and coordination of program staff on GIS work program elements;

Assists the Director of Planning in the administration of GIS programs and management of program personnel;

Represents the Director of Planning before local, County and State legislative bodies, executive departments, agencies and policy boards on matters of regional, Federal, State and county GIS program issues and policies;

Prepares a variety of records and reports related to the work;

Assigns duties to and supervises subordinate GIS Analysts, coordinates their projects and reviews final work;

Evaluates effectiveness of GIS projects underway and issues instructions as required;

Coordinates with the County Office of Real Property Services and the Data Processing unit of the Treasurer's Office to maintain the link between the GIS and the Real Property System (RPS) which contains property ownership information;

Directs preparation of maps and other geographic information products for distribution to the public;

Oversees input and analysis of collected data in various GIS based system modeling applications;

Trains staff in GIS tools and techniques when requested;

Oversees and/or directly implements difficult and complex planning applications of GIS;

TYPICAL WORK ACTIVITIES: (Illustrative Only) Cont...

Prepares and/or supervises preparation of a variety of geographic statistics, data, plans, charts, records, maps and reports and is familiar with and able to apply the various computer assisted techniques and programs now used for such purposes;
Confers with officials of government and representatives of various professional and lay groups and others regarding GIS policies and objectives;
Does related work as required.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES, PERSONAL CHARACTERISTICS:

Comprehensive knowledge of GIS tools and techniques, especially planning applications of such tools and techniques;
Comprehensive knowledge of principles, techniques, and terminology employed in municipal, regional and community planning;
Comprehensive knowledge of various governmental programs relevant to municipal planning activities;
Comprehensive knowledge of local government agencies within the county engaged in planning and development;
Comprehensive knowledge of current methods of collecting, analyzing and interpreting geographic data;
Thorough knowledge of the methods and techniques used in public participation activities related to municipal planning;
Thorough knowledge of State and Federal laws dealing with land use and development;
Ability to prepare project budgets and supervise subordinate personnel in various complex GIS project phases;
Ability to formulate and direct complex multidisciplinary studies related to spatial aspects of land use development, environmental and other planning matters including zoning and subdivision regulation;
Ability to express ideas clearly and concisely, both orally and in writing;
Ability to develop imaginative and practical approaches in enhancing and expanding the use of the County's GIS;
Good professional judgment.

MINIMUM QUALIFICATIONS:

Possession of a high school or equivalency diploma and either:

- (A) Graduation from a regionally accredited or New York State registered college or university with a master's degree in Geography, Municipal, Community or Regional Planning, Engineering, Environmental Science, Environmental Studies, Geographic Information Systems, Computer Science, or related field, plus five years of experience in a planning or engineering field working with data and information analysis, three years of which shall have involved working with Geographic Information Systems and demographic analysis, or related field and one year of which shall have been in a supervisory capacity; OR
- (B) Graduation from a regionally accredited or New York State registered college or university with a bachelor's degree in Geography, Municipal, Community or Regional Planning, Engineering, Environmental Science, Environmental Studies, Geographic Information Systems, Computer Science, or related field, plus six years of experience as described in (A) above, four years of which shall have involved working with Geographic Information Systems and demographic analysis, or related field and one year of which shall have been in a supervisory capacity; OR
- (C) Graduation from a regionally accredited or New York State Registered college or university with an associate's degree in Geography, Municipal, Community or Regional Planning, Engineering Technology, Environmental Science, Environmental Studies, Geographic Information Systems, Computer Science, or related field, plus eight years of experience as described in (A) above, six years of which shall have involved working with Geographic Information Systems and demographic analysis, or related field and one year of which shall have been in a supervisory capacity; OR
- (D) An equivalent combination of training and experience as defined by the limits of (A), (B) and (C) above.