Civil Division: Oneida County Government

Jurisdictional Class: Competitive EEO Category: Paraprofessional

Revised: 05/02/11

## **SENIOR GEOGRAPHIC INFORMATION SYSTEMS ANALYST**

<u>DISTINGUISHING FEATURES OF THE CLASS:</u> This is a professional position responsible for supervising, preparing documentation, projects, and planning efforts related to county and regional projects. This class differs from the lower level positions by virtue of its increased responsibility for supervision and completing projects. The employee reports directly to and works under the general supervision of the Geographic Information System (GIS) Coordinator. Supervision is exercised over technical/clerical staff. The incumbent performs related work as necessary.

## **TYPICAL WORK ACTIVITIES:** (Illustrative Only)

Prepares using GIS software, a variety of graphic materials (including associated data and databases) such as: thematic maps, statistical data, plans, charts, records and reports; including the preparation of maps and materials in support of projects related to economic/industrial development, transportation, natural resources, comprehensive planning, physical and natural features, land use, agriculture, community facilities, infrastructure, emergency services, public health and tax parcel data;

Performs data entry of geographic related material and associated databases;

Maintains inventory of digital map files, digital base coverage information, associated database attribute files and GIS program files;

Supervises, conducts and participates in special projects and planning efforts relating to Geographic or spatially sensitive issues;

Responds to requests and provides information directly regarding GIS data, procedures and issues related to GIS:

Develops standards and methods for field collecting data for use in GIS products using Global Positioning System (GPS) equipment;

Develops standards and methods for processing, manipulating and incorporating field collected GPS data in GIS products;

Implements and designs, using sound GIS principles, appropriate map production protocols, including metadata requirements, and supervises the preparation of various spatial and database sources in support of any projects;

Works interactively with county and regional agencies personnel in development and implementation of the regional Geographic Information System. Works with same to facilitate data transfer, reliability and availability;

Prepares technical reports, documents administrative and informational activities, participates in or may have a lead role in presentations made to public officials, technical committees and other general public to provide and elicit information;

Supervises, trains, and evaluates the work performance of GIS staff;

Serves as a contact person for the public, vendors, contractors, and consultants on questions related to the regional GIS/GPS or GIS/GPS capability;

Creates, maintains and updates computer data as needed;

Assists in training staff with regard to GIS/GPS and GIS/GPS related issues.

Collects and Analyzes spatial data based upon geographic proximity;

Operates the regional GIS including: database management, base map creation, theme and coverage maintenance, data backup, map production and application development:

Firm understanding of GPS data collection, post processing techniques and theory.

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

Thorough knowledge of the purposes, principles, terminology and practices employed in GIS and spatial trades; thorough knowledge of GIS applications, particularly with respect to planning projects; thorough knowledge of current methods for digital data storage and handling; good knowledge of technical mathematics and statistics; thorough knowledge of current GIS software; thorough knowledge of use and operation of computer aided data capture hardware and software; thorough knowledge of database management; good knowledge of physical and natural resource factors involved in construction, development and planning procedures; good knowledge of computer networking; ability to keep current of trends, problems and literature in the field; ability to understand complex written and oral instructions; ability to plan, train, and supervise the work of others; ability to work independently and meet established deadlines; ability to exercise sound professional judgment in analyzing complex problems and projects; ability to write effectively and deliver oral and multimedia presentations; ability to exercise discretion and sound judgment; ability to develop effective working relations and deal diplomatically with the public, subordinates, and other work contacts; physical condition commensurate with the demands of the position.

## **MINIMUM QUALIFICATIONS:** Either:

- (A) Graduation from a regionally accredited or New York State registered college or university with a Bachelor degree in Urban Planning, Geography, Surveying Engineering, Mapping Science, Civil Engineering, Environmental Science, Geomatics, or a closely related field including or supplemented by six (6) credit hours of GIS training and three (3) credit hours in GPS AND three (3) years of experience using GIS software and analysis or manipulating spatially dependent information, one (1) year which must have been as a supervisor;\* OR
- (B) Graduation from a regionally accredited or New York State registered college or university with a Bachelor degree in Geography, Urban Planning, Landscape Architecture, Environmental Studies, Data Processing or a closely related field **AND** four (4) years of experience using GIS software and analysis or manipulating spatially dependent information and GPS data, one (1) year which must have been as a supervisor;\* **OR**
- (C) Graduation from a regionally accredited or New York State registered college or university with an Associate degree in Civil Engineering, Geography, Landscape Architecture, Environmental Studies, Data Processing or a closely related field **AND** six (6) years of experience using GIS software and analysis or manipulating spatially dependent information and GPS data, one (1) year which must have been as a supervisor;\* **OR**
- (D) Graduation from high school or possession of a high school equivalency diploma **AND** eight (8) years of paraprofessional or professional level work experience using GIS software and analysis or manipulating spatially dependent information, and GPS, three (3) years of which must have been in a professional level capacity involving the use of full-featured GIS software capable of creating and modifying GIS data, one (1) year which must have been as a supervisor.\*
- \* <u>Supervisor</u>: Supervises the work of paraprofessional and/or professional staff and has responsibility for the assignment and review of work, providing work instruction, the evaluation of work performance, maintenance of work standards, handling absenteeism, discipline, and input on hiring and firing.

**NOTE:** Verifiable part-time experience as defined in (A) above will be pro-rated toward meeting full-time experience requirements.

**SPECIAL REQUIREMENTS:** Possession of an appropriate level, valid Driver's License at time of appointment. This license must be maintained throughout appointment.

Adopted: 08/30/01 Revised: 05/02/11