GEOGRAPHIC INFORMATION SYSTEM ANALYST

DISTINGUISHING FEATURES OF THE CLASS:

The primary responsibility of this position is to perform tasks and functions related to Geographic Information System (GIS) database management and advanced GIS data creation. The incumbent will perform technical duties in the application of GIS including the production of standard maps, system maintenance, and ongoing quality control measures. The incumbent will also provide technical support, training, and assistance in the installation and configuration of GIS software for county departments. This class differs from GIS Technician in that a GIS Analyst performs a greater scope of work with more significant countywide impact. Work is performed under the general supervision of a higher level employee with considerable leeway allowed for exercising independent judgment in carrying out the details of the work. Supervision is not normally a responsibility of this position

TYPICAL WORK ACTIVITIES:

The following is indicative of the level and types of activities performed by incumbents in this title. It is not meant to be all inclusive and does not preclude a supervisor from assigning activities not listed which could reasonably be expected to be performed by an employee in this title.

1. Identifies and gathers data relevant to projects and transforms it into usable geographic formats;
2. Processes requests for maps, obtains digital and non-digital data and creates maps;
3. Maintains data integrity by assuring quality of information and standardization through regular editing and review of datasets;
4. Integrates GIS datasets with web pages and other applications;
5. Assists in the installation, configuration and data replication of GIS applications across server platforms for all county departments;
6. Provides technical support and training for county departments on GIS applications;
7. Answers questions regarding mapping and makes recommendations on geographic data within projects;
8. Researches advances in GIS technology, networking and platform dependent technical issues and apply it to work as necessary.

FULL PERFORMANCE KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of computer-assisted mapping in order to create, maintain and document geographic data;

Knowledge of SQL and the SDE data structure within a relational database management system to efficiently store and access data;

Knowledge of software such as ArcGIS Desktop to create digital geographic data from hard copy maps and to maintain a mapping database;

Knowledge of object oriented programming and familiarity with Model Builder and Python in order to effectively automate geoprocessing tasks;

Knowledge of web services and, HTML, CSS, Javascript, XML technologies to integrate GIS
data on county web page and other applications;
Knowledge of the principles and practices of systems analysis sufficient to
independently develop small projects under the general supervision of others;
Knowledge of Enterprise GIS architecture to efficiently communicate data from the desktop to
web environments;
Ability to gather and analyze data and draw logical conclusions;
Ability to understand and follow complex oral and written instructions;
Ability to communicate effectively, both orally and in writing;
Ability to establish and maintain effective working relationships;
Ability to develop and carry out training programs for users of developed applications;
Skill in manipulating data stored on the geographic information system to produce
desired results;
Skill in cartography for County-wide mapping standards and web-based
application base maps;
Personal characteristics necessary to perform the duties of the position;
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's degree in Geographic Information Systems, Geography, Environmental Studies, Information Systems, or a related degree;

OR: (B) Completion of sixty credit hours at a regionally accredited or New York State registered college or university with major course work in Geographic Information Systems, Geography, Environmental Studies, Information Systems, or a related degree and two years of paid work experience in traditional mapping, surveying or drafting, one year of which must have included the use of Geographic Information Systems;

OR: (C) Four years of paid work experience in traditional mapping, surveying or drafting, one year of which must have included the use of Geographic Information Systems;

OR: (D) An equivalent combination of training and experience as outlined in (A), (B), and (C) above.

SPECIAL REQUIREMENT:

Possession of a valid New York State Driver License at time of appointment.

ADOPTED: 8/11/2016