

## **SYSTEMS ANALYST (GIS)**

### **DISTINGUISHING FEATURES OF THE CLASS:**

This is a high level position responsible for the technical development of a project. Responsibilities may include flow charting, documentation, database specifications, user output specifications, and the determination of the necessary programming tools to meet user needs. Incumbents have a great deal of contact with users in identifying and designing system requirements. The class differs from Programmer/Analyst in that the work focuses on complex systems analysis and application design rather than a balance of systems analysis and programming. The position differs from other Systems Analyst positions in that it specializes in the development of the Geographical Information System (GIS). Work is performed under the general direction of a project leader or other administrative staff. Supervision of others is normally a function of the position.

### **TYPICAL WORK ACTIVITIES:**

Typical work activities for incumbents in this title include those listed below in addition to those typical work activities performed by lower level titles in the series. They are 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. Develops and fully documents standards for the Geographical Information System and its applications;
2. Evaluates and edits data for inclusion to the GIS database;
3. Establishes standards for levels of accuracy for GIS data layers;
4. Reviews and designs application needs for GIS users;
5. Develops and documents procedures for GIS staff;
6. Operates GIS software to perform analysis and to produce maps and other graphic output;
7. Develops and conducts training for GIS users;
8. Makes modifications to GIS applications;
9. Assists subordinate staff in overall system design and programming techniques;
10. Functions as user liaison during project development.

### **FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES:**

Knowledge of GIS system design and analysis sufficient to lead in the development of a wide variety of user applications;

Knowledge of GIS programming languages and techniques sufficient to oversee the work of subordinates and to make minor changes to applications;

Knowledge of the current principles, practices, methods, capabilities and techniques of high speed electronic data processing for both mainframes and networked microcomputers sufficient to design and link GIS applications within a complex system of platforms;

Ability to present ideas clearly and concisely, 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;

Personal characteristics necessary to perform the duties of the position;

Physical condition commensurate with the demands of the position.

## **SYSTEMS ANALYST (GIS)** (Cont'd)

### **MINIMUM QUALIFICATIONS:**

Graduation from high school or possession of a high school equivalency diploma AND:

- EITHER:        (A)      Graduation from a regionally accredited or New York State registered college or university with an Bachelor's degree in Geographical Information Systems (GIS), geography, urban planning, or a closely related field AND three (3) years of paid work experience as a programmer/analyst primarily involved in an enterprise GIS environment using web-based programming languages;
- OR:              (B)      Graduation from a regionally accredited or New York State registered college or university with an Associate's degree in GIS, geography, or a closely related field and five (5) years of work experience as indicated in (A) above;
- OR:              (C)      An equivalent combination education and experience between the limits of (A) and (B) above.

### **SPECIAL REQUIREMENT:**

An appointing authority may require the possession of a New York State Driver License at time of appointment.

ADOPTED:    01/01/00  
REVISED:    03/01/00            05/08/01            06/08/15