

GEOGRAPHIC INFORMATION SYSTEMS MANAGER

DISTINGUISHING FEATURES OF THE CLASS: This position involves responsibility for the oversight, management and performance of professional and technical duties in support of the City Geographic Information Systems (GIS). Duties include day-to-day control over specific administrative, financial, and technical functions related to the establishment of GIS applications, such as spatial database development and database programming. This position also involves responsibility for multi-media applications within the City. The incumbent is expected to exercise independent judgment, as the position is responsible for acting in a coordinating capacity for development, implementation and maintenance of the City's GIS. Supervision may be exercised over a small number of subordinate personnel. Work will be performed in accordance with the directives of the Department Head or designee, with considerable leeway allowed to independently perform the duties of the position.

TYPICAL WORK ACTIVITIES:

- Administers the City GIS, provides technical oversight, advice, and general GIS services to departments and acts as liaison between City departments to coordinate the development of central GIS in the City;
- Develops and administers an enterprise geodatabase for a citywide spatial data server;
- Designs and implements a database structure for the City's GIS data;
- Administers a City GIS server as well as updating and enhancing existing online mapping applications;
- Coordinates all GIS data acquisition to assure compatibility with the citywide application;
- Manages contracted services relating to development of GIS applications, online mapping services, GIS data, and department web services;
- Assesses the need for use of consultants for implementation of certain components of the GIS projects and functions, issuance of the RFP for such services, selection of appropriate vendor and project oversight and coordination with the chosen consultant;
- Customizes ArcGIS for end users through application development;
- Performs GIS programming, database management, data development; map production and application development;
- Supports with base map creation and maintenance;
- Performs and/or coordinates GPS data acquisition;
- Produces maps, reports and presentations to support City activities;
- Performs web authoring for the City's website, including duties that may include the regular updating of content and the further development of web services;
- May represent the Department and the City on local or statewide boards and committees;
- Trains and/or coordinates training for staff to utilize GIS software and applications;
- Participates in special projects and planning efforts, when directed;
- Maintains an awareness of technology trends as they may relate to Departmental goals through professional associations, journals and other sources.
- Performs related work as required.

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

- Thorough knowledge of the general principles and techniques of Geographic Information Systems (GIS);
- Thorough knowledge of the current methods for collecting, analyzing and interpreting statistical data;
- Thorough knowledge of spatial data storage, relational database management systems, current GIS software concepts and applications including, but not limited to: ArcInfo, ArcSDE, ArcIMS, Spatial Analyst, 3D Analyst, IDRISI, Visual Basic, Visio, SQL Server, Windows server environment, Windows OS, and AutoCAD;
- Working knowledge of computer hardware utilized in the work;
- Ability to work independently on specific GIS database development efforts, including training applications;
- Ability to collect, analyze, and present planning data; Ability to process data and develop logical output products graphically displaying statistical and geographical data;
- Ability to prepare and interpret data in a wide variety of digital formats;
- Ability to use Global Positioning System (GPS) hardware and software to acquire GIS data;
- Ability to communicate technical information effectively to others, both verbally and in writing;
- Ability to establish sound working relationships with others both within and outside the organization; Resourcefulness;
- A high degree of accuracy;
- Good judgment;
- Good organizational skills;
- Physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS:

- A. Possession of a Master's degree from a regionally accredited college or university or one accredited by the New York State Board of Regents in **GIS** or related field, such as: civil engineering, geography, information systems, computer science with concentration in GIS, and one (1) year of acceptable full time paid, or its part time equivalent, experience working with computerized GIS; OR
- B. Possession of a Bachelor's degree from a regionally accredited college or university or one accredited by the New York State Board of Regents in **GIS** or related field, such as: civil engineering, geography, information systems, computer science with concentration in GIS, and two (2) years of full time paid, or its part time equivalent, experience working with computerized GIS; OR
- C. Possession of An Associate's degree from a regionally accredited college or university or one accredited by the New York State Board of Regents in GIS or related field, such as: civil engineering, geography, information systems, computer science with concentration in GIS, and four (4) years of full time paid, or its part time equivalent, experience working with computerized GIS; **OR,**
- D. An equivalent combination of training and experience as indicated in A, B or C above.

SPECIAL REQUIREMENT: Possession of a valid NYS driver's license at the time of appointment and this license must be maintained throughout employment.