

GEOGRAPHIC INFORMATION SYSTEMS TECHNICIAN

Definition:

Under general supervision performs technical work in the maintenance of computerized data relative to geographic information system (GIS) functions; performs GIS input and editing; generates a variety of maps and reports and performs related work as required.

Essential Duties and Responsibilities:

The responsibilities and essential duties performed on a frequent and recurring basis by an incumbent include the following:

Operates GIS software to input and update public right-of-way data enhancing the GIS database.

Converts data received from internal and external sources to make them usable in the GIS system.

Performs GIS-based analysis and manipulation of databases to support a variety of City operations.

Creates and maintains computerized files and makes corrections from a variety of sources.

Maintains data and documentation in online and hard copy formats.

Conducts field surveys as needed to gather and verify data.

Uses a computer to prepare a variety of reports, documents and technical material.

Generates a variety of geographic maps related to public facilities to include storm drains, sewers, street lights, water mains and traffic signals.

Works with hardware/software vendors regarding GIS equipment.

Coordinates Engineering Department GIS activities with other departments.

Operates GIS related computer equipment including printers, scanners and plotters.

Lifts and carries boxes of records weighing 30 pounds or less.

Drives a vehicle on City business.

Other Duties and Responsibilities:

Performs other projects/tasks as assigned.

Class Characteristics:

GIS Technician is a single incumbent technical position in the Engineering Department with duties related to the support of GIS functions. The Technician is differentiated from the GIS Specialist in the Development Services Department by the Specialist's broader range of duties and higher level of responsibilities.

Contacts and Relationships:

The GIS Technician establishes and maintains contact with staff in the Engineering Department and will also have substantial contact with staff in the Development Services Department and other departments using GIS technology. Additional contact will occur with vendors and the public.

Qualification Guidelines:

The knowledge and abilities which are required to perform the duties and responsibilities of this class are as follows:

Knowledge of:

Basic principles, practices and techniques of GIS applications, design and database management.

Other computer applications as they relate to area assigned.

Basic practices of civil engineering and/or public works departments.

Advanced mathematics to include the principles of algebra, geometry, trigonometry and statistics.

English usage, spelling and grammar and punctuation.

AND

Ability to:

Read and interpret maps, plans and related source documents.

Operate a personal computer and use applicable software programs.

Understand and carry out oral and written instructions independently.

Work in accordance with established policies and procedures.

Establish and maintain effective relationships with those contacted in the course of work.

Handle multiple deadlines and multiple projects.

Communicate effectively orally and in writing.

Read and write at the level required for successful job performance.

A typical way to obtain the knowledge and abilities is as follows:

Education:

Associates Degree in Computer Science, Mathematics or a closely related field from an accredited college.

AND

Experience:

One year of public agency related experience to include some GIS experience.

Special Requirements:

Valid and appropriate California Drivers License and acceptable driving record at time of appointment and throughout employment in this position.

Must be able to work a flexible schedule to accommodate City needs.

Physical Tasks and Working Conditions Include the Following:

Work is performed indoors in an office environment and on-site in the field. When work is performed outdoors there is exposure to the elements. The incumbent drives a vehicle on City business, sits for extended periods of time, stands, walks, reaches, bends, kneels, crouches, operates a computer keyboard, screen and related equipment, and lifts and carries boxes of records and other items weighing 30 pounds or less. When in the field, the incumbent may stand and walk on slippery and uneven surfaces and be exposed to vehicular traffic. The incumbent must be able to meet the physical requirements of the class and have mobility, balance, coordination, vision, hearing and dexterity levels appropriate to the duties to be performed.

Fair Labor Standards Act Designation: Non-exempt.

Established August 2004