

GEOGRAPHIC INFORMATION SYSTEMS (GIS) TECHNICIAN

Job Summary:

Under general supervision, performs paraprofessional technical tasks related to geographic data and mapping applications for a variety of planning, engineering, economic development and administrative functions.

Distinguishing Characteristic:

The GIS Technician is distinguished from the GIS Analyst which has a higher level of specialized professional GIS support and programming responsibilities.

Essential Duties and Responsibilities:

(These functions are representative and may not be present in all positions in the class. Management reserves the right to add, modify, change or rescind related duties and work assignments.)

1. Operates computer-based GIS, such as ArcMap, for purposes of entry, editing, maintenance, reporting, and display of information.
2. Performs data entry through on-screen digitizing, keyboard data entry, scanning, Global Positioning System (GPS), portable data entry units, field data collection, and other methods.
3. Researches, collects, compiles, evaluates, reconciles, and analyzes geographic data.
4. Maintains Internet-based mapping applications.
5. Maintains, edits and updates geographic and tabular data.
6. Converts data received from internal and external sources for GIS application.
7. Performs GIS-based analyses and manipulation of databases to support a variety of city operations.
8. Assists information services staff in troubleshooting hardware and software related to GIS.
9. Designs and produces cartographic output appropriate for publication and public display.
10. Performs quality control on data, identifies and corrects errors or omissions in data.
11. Maintains metadata and documentation, online and hard copy.
12. Establishes and maintains effective working relationships with city employees, employees of other agencies and the public.
13. Provides information to and consults with the public.
14. Assists in the training and orientation of new employees; may lead the work of interns.
15. Performs related duties as required.

Qualification Guidelines:

A typical way to obtain the requisite qualifications to perform the duties of this class is as follows:

Education and/or Experience:

Bachelor's degree in public or business administration, geography, computer science, urban planning, engineering or related field and two years full-time paid paraprofessional experience in the use and/or operation of ArcGIS in a business, planning and/or engineering environment. Experience and/or education in a related field may be substituted on a year for year basis.

Knowledge of:

- Personal computer and GIS-related software.
- Effective English grammar usage both in oral and written communications.
- Office practices and procedures.
- Principles of economics, statistics, and geography.
- Database use and maintenance.
- General programming principles and use of the Internet.
- Recordkeeping techniques.
- HTML & Web editing software such as FrontPage.

Skill and Ability to:

- Analyze, compare, count, differentiate, measure and/or sort, copy, record and transcribe data and information.
- Accurately perform mathematical, algebraic and statistical computations.
- Interpret and present basic descriptive statistical reports.
- Analyze and interpret geographic data.
- Effectively communicate orally and/or in writing.
- Establish and maintain effective working relationships with others and deal tactfully with the public.
- Operate a variety of office machines and equipment including personal computer and related software.
- Plan and organize work; meet schedules and deadlines.

License or Certificate:

Possession of a valid California Class C driver's license. Employees in this classification will be enrolled in the Department of Motor Vehicles (DMV) Government Employer Pull Notice Program which confirms possession of a valid driver's license and reflects driving record.

Physical Requirements and Working Conditions:

Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis. Positions in this class normally:

- Require vision (which may be corrected) to read small print and diagrams.
- Require to meet approved minimal physical and medical standards.
- Require the mobility to stand, stoop, reach and bend.
- Require mobility of arms to reach and dexterity of hands to grasp and manipulate small objects.
- Perform lifting, pushing and/or pulling which does not exceed 50 pounds and is an infrequent aspect of the job, such as moving equipment and paper rolls.
- Is subject to inside and outside environmental conditions.
- May be required to use city or personal vehicle in the course of employment.
- May be required to attend periodic evening meetings and/or travel within and out of city boundaries to attend meetings.
- May be required to work evenings or weekends.