



Geographic Information Systems (GIS) Specialist

SUMMARY

Under general supervision, performs specialized technical and professional work in the development, maintenance and support of the Town's geographic information system (GIS) functions.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the Innovation and Technology Officer and/or higher-level technical staff, as assigned. May exercise functional supervision over technical staff, vendors, and consultants as directed.

ESSENTIAL FUNCTIONS -- *Essential functions, as defined under the Americans with Disabilities Act, may include any of the following representative duties, knowledge, and skills. This list is ILLUSTRATIVE ONLY and is not a comprehensive listing of all functions and duties performed by incumbents of this class. Employees are required to be in attendance and prepared to begin work at their assigned work location on the specified days and hours. Factors such as regular attendance at the job are not routinely listed in job descriptions but are an essential function. Management reserves the right to add, modify, change or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job. Essential duties and responsibilities **may** include, but are not limited to, the following:*

- Assists in the day-to-day operations, administration, implementation, maintenance and support for the Town's geographic information system (GIS) and assigned related systems.
- Coordinates with staff in various departments to perform data analysis, update data and maps and provides general mapping expertise.
- Generates a variety of computerized maps and other data independently and as requested.
- Assists with spatial analysis, which may involve a major policy area or concern; utilizes multiple databases, modules, and GIS software.
- Creates, maintains and enhances GIS data sets to ensure usability and accuracy of all data entering the system; performs data entry and editing to update the GIS database; performs digitizing and coordinate geometry (COGO) tasks as needed.
- Performs field research and GPS data collection and processing.
- Conducts end-user training on new and existing GIS and ESRI products.
- Assists with developing and maintaining relational databases, such as Microsoft SQL; may utilize SQL scripting and reporting software such as SQL Reporting Services and Crystal reports, to create ad-hoc queries and reports.
- Develops, maintains, and publishes data and maps, including sewer, zoning, reference, topographic, political boundary, and parcel maps to ensure maps are current; maintains associated base map control for user departments.
- Produces reports of geographical data utilizing data visualizations.
- Maintains supplies and equipment required for system operation, including GPS devices and plotters; works closely with Innovation and Technology Department technical staff as needed.

- Assists in preparing and coordinating project scopes, procedure flow-charts, and schedules with internal customers and Town departments.
- Writes and maintains reports, programs database reports, forms, and queries.
- May develop mapping applications, scripts, and tools; may assist with GIS system administration and monitoring.
- Participates in the development and management of budgets as directed.
- Stays abreast of current trends, technologies, and developments in the field of GIS.
- May provide after-hours emergency and on-call support response for the Town's emergency operations; may be required to carry a Town-supplied cell phone during on-duty and off-duty hours.
- Maintains confidentiality of work-related issues and Town information.
- Performs other duties as assigned.

DISTINGUISHING CHARACTERISTICS

This is the professional-level class in the innovation and technology series. Incumbents perform a variety of entry level to complex GIS related work, including GIS technical support, spatial data analysis, updating data and maps and provides general mapping expertise. This class is distinguished from Innovation and Technology Coordinator in that the latter may exercise supervisory responsibilities over assigned Innovation and Technology Department functions and staff, including vendors and consultants as directed.

MINIMUM QUALIFICATIONS

Education, Training, and Experience Guidelines

An equivalent combination of training and experience that would provide the required knowledge, skills and abilities may be considered. A typical way to obtain the required qualifications would be:

Minimum of an Associate degree in Information Technology, GIS, Geography, Urban Planning, Civil Engineering, or related field, with major course work in GIS; AND four (4) years of recent related responsible experience utilizing geographic information systems, establishing and maintaining databases and digitizing as-built drawing plans, preferably within a local municipality; OR an equivalent combination of education, training and experience. Bachelor's degree in one of these fields or possession within probationary period (12 months) is desired.

LICENSE AND CERTIFICATION REQUIREMENTS

- Valid California class C driver's license with satisfactory driving record and automobile insurance.
- Geographic Information Systems Professional (GISP) certification is desired.

Knowledge of:

- Current principles, practices, terminology, and trends in Geographic Information Systems usage and modern land-based mapping application theory.
- Procedures, principles, and practices for the installation, configuration, upgrading, operating, and troubleshooting of GIS related hardware and peripherals, including printers/plotters, GPS collection devices and other related devices.
- GIS software including ESRI's ArcGIS Platform (ArcGIS, ArcCatalog, ArcServer, ArcSDE; v10.0+ preferred), related extensions such as Spatial Analyst; Autodesk AutoCAD Map (v 2014+ preferred), and web-enabled GIS related software.
- Relational Database Management Systems (RDBMS) such as Microsoft SQL Server, database and geodatabase principles and design, transact-SQL scripting, and database management and analysis techniques.

- Principles and practices of developing analytical maps, spreadsheets, graphs, charts, and written reports.
- Coordinate geometry (COGO), Cadastral Mapping, and digitizing operations.
- Standard business applications including software required to accomplish the essential functions listed; Microsoft desktop and server operating systems, and mobile operating systems.

Ability to:

- Provide efficient customer service and communicating clearly and objectively both verbally and in writing.
- Organize with the ability to prioritize work and exercise independent judgment, wisdom, common sense, and initiative.
- Thoroughly carry out oral and written instructions.
- Use initiative, discretion, and judgment within established procedures, guidelines, and rules.
- Define problems, establish facts, and draw valid conclusions.
- Read and understand technical manuals.
- Build effective teams and provide efficient customer service.
- Establish and maintain cooperative working relationships with department heads, managers, supervisors, employees, external public and private agencies, consultants, vendors, suppliers, contractors and the general public.
- Apply safe work practices.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

In the performance of daily activities, this position may require prolonged or intermittent standing, walking on level, uneven, or slippery surfaces, turning, kneeling, bending, squatting/crouching, and repetitive hand movement using a computer keyboard and mouse. May be required to lift and carry items weighing up to 75 pounds. Incumbent must be able to see and hear in the normal range with or without correction and communicate verbally and in written form with great facility and must be able to be understood.

Work is performed in an indoor and outdoor environment, in close proximity to other workers, and in the field collecting GPS points and information. May be exposed to excessive noise levels and hazardous chemicals. May be required to work within confined spaces. Incumbent shall be exposed to those conditions normally encountered in a business office environment and will occasionally be required to operate a motor vehicle to travel to different sites and locations; when working outdoors the incumbent may encounter extreme weather conditions, including wet, hot, cold, wind, snow, ice, and heavy vehicle traffic.

Incumbent may be required to work evenings, weekends, and holidays, and must have the stamina to work long hours for after-hours emergency response for on-call and callback assignments and attend after hour town meetings and events.

**FLSA designations cannot be assigned to a class. An employer must show that each employee meets every requirement of the claimed exemption. The FLSA designation listed above is for general administrative guidelines.*