



## JOB DESCRIPTION

### GIS Coordinator

Date Prepared: July, 2021

**SUMMARY:** Under limited supervision from the GIS Manager, develops, organizes, manages, designs, and maintains the City's Geographic Information Systems (GIS). Provides advanced training and technical support to end users regarding GIS and related hardware and software operations; performs related duties, as required.

**ESSENTIAL FUNCTIONS:** -- *Essential functions, as defined under the Americans with Disabilities Act, may include any of the following representative duties, knowledge, and skills. This is not a comprehensive listing of all functions and duties performed by incumbents of this class; employees may be assigned duties which are not listed below; reasonable accommodations will be made as required. The job description does not constitute an employment agreement and is subject to change at any time by the employer. Essential duties and responsibilities may include, but are not limited to the following:*

- Coordinate, administer, maintain, and support the City's Geographic Information System (GIS) and other systems; related hardware and software including peripheral equipment, printers/plotters, GPS and other mobile devices.
- Curate web GIS content to help users better understand geographic data and information, including web maps, story maps, dashboards, mobile applications, or other web mapping applications; ensure the content is easily locatable on the City's GIS Portal.
- Manage user access to GIS web applications on the City's GIS Portal and on ArcGIS Online.
- Configure and maintain the City's GIS databases, applications, web servers, and web enabled GIS applications using ArcGIS Portal, ArcGIS Web AppBuilder, Survey123, or other related ArcGIS or web mapping software; may include providing on-call support.
- Prepare, collect, organize, and input data to maintain and enhance the City's GIS including reading and interpreting as-built drawings, construction plans, engineering plans, recorded maps, deeds, legal descriptions, imagery, and related source documents.
- Use various tools and methods including coordinate geometry (COGO), digitizing, field research, GPS data collection, and processing.
- Create and maintain multiple GIS layers including parcels, streets, right-of-way, zoning, other development layers, and water and sewer system layers; including making necessary changes to back-end database structures.
- Monitor, maintain, and troubleshoot map services hosted on ArcGIS Server, ensuring maximum operating efficiency and availability.
- Perform GIS and data analysis, prepare and execute queries, produce maps, spreadsheets, graphs, and other analytical products.
- Automate workflows using ArcGIS Model Builder, Python programming language, Microsoft SQL Server scripts, or other automation tools currently available.
- Assist in the development, design, planning, and implementation various GIS projects including integration with other City systems and data sources.
- Develop, test, prepare reports, and implement quality assurance (QA) and quality control (QC) processes; perform routine data management tasks, data validation and correction, queries and editing in GIS to ensure data accuracy, integrity, and completeness.

- Conduct research, provide recommendations, and assist in the development and implementation of goals, objectives, standards, specifications, and policies and procedures relating to the City's GIS; assist the GIS Manager in any needs assessments and assist in the development and maintenance of the City's GIS Master Plan.
- Maintain confidentiality of work-related issues and City information.

**MINIMUM QUALIFICATIONS:**

**Education, Training and Experience Guidelines:**

Bachelor's degree in Geographic Information Systems, Information Technology, Geography, Civil Engineering, or related field, with major course work in GIS; AND three (3) years of professional experience utilizing geographic information systems including ESRI's suite of products, establishing and maintaining databases and digitizing as-built drawings plans; OR an equivalent combination of education, training, and experience.

**LICENSE AND CERTIFICATION REQUIREMENTS:**

- Must possess a minimum of a valid California Class "C" driver's license upon hire and maintain throughout the length of employment with the City of Victorville.

**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, operation, and troubleshooting of GIS related hardware and peripherals, including printers/plotters, GPS devices and other related devices.
- GIS software including Esri, Inc.'s ArcGIS Platform (ArcGIS Enterprise, ArcGIS Online, ArcGIS Pro, ArcGIS Server, ArcSDE; Version 10.6+ preferred) and related extensions such as Spatial Analyst, Network Analyst, and Data Reviewer.
- 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 cartography in developing analytical maps, spreadsheets, graphs, charts, and written reports.
- Standard business applications including software required to accomplish the essential functions listed; Microsoft desktop and server operating systems, mobile operating systems, and website management software such as Microsoft Internet Information Services (IIS).
- General municipal infrastructure including street networks (right-of-way and traffic control), water system networks (mains, hydrants, valves, meters), sewer system networks (gravity mains, manholes, cleanouts, laterals), and storm drain system networks (culverts, inlets, catch basins, dry wells).
- General municipal land management principles and concepts, such as land use and zoning, survey and cadastre, right-of-way, easements, dedications, land subdivision, etc.

**Preferred Knowledge of:**

- Programming and web development languages such as Python, HTML/CSS, JavaScript and Arcade.
- Land-based management systems including permitting, licensing, and other development processes.

**Skill in:**

- Providing efficient customer service and communicating clearly and objectively both verbally and in writing.
- Organizing with the ability to prioritize work and exercise independent judgment, wisdom, common sense, and initiative.
- Thoroughly carrying out oral and written instructions.
- Using initiative, discretion, and judgment within established procedures, guidelines, and rules.
- Defining problems, establishing facts, and drawing valid conclusions.
- Reading and understanding technical manuals.

- Establishing and maintaining cooperative working relationships with department heads, managers, supervisors, employees, external public and private agencies, consultants, vendors, suppliers, contractors and the general public.
- Applying safe work practices.

**PHYSICAL DEMANDS AND WORKING ENVIRONMENT:**

Work is performed in an indoor and outdoor environment and in close proximity to other workers. May work in the field collecting GPS points and information. May be exposed to excessive noise levels. May be required to work within confined spaces. Incumbent shall be exposed to those conditions normally encountered in a business office environment. Physical demands are light, consisting primarily of sitting, standing and walking. 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. Incumbent must have the stamina to work long hours and attend night meetings after regular working hours.

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Department Head Approval

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Date

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Personnel Officer Approval

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Date