

## City of Oregon City

## Position Description

Position: GIS Coordinator	AFSCME Union
Department/Site: City Hall	FLSA: Non-exempt
Evaluated by: Information Technology Supervisor	Salary Grade: 41

### **Summary**

Designs, develops, writes, implements, and maintains a centralized geographic information system that accommodates use by all departments. Identifies, documents, and analyzes work processes for the purpose of automating tasks using GIS technology. Sets up and administers networked computer workstations for GIS as well as general business applications and data communication.

### **Distinguishing Career Features**

The GIS Coordinator is the third and senior level in a multi-level career path encompassing computer-aided mapping, database design, and communication related to spatial data. The GIS Technician is a broadly defined technical position that would serve as the first and entry level into the GIS career path. Advancement to GIS Analyst requires the ability to apply GIS and database technology to produce advanced GIS analysis and database and perform advanced drafting and digitizing, producing documentation and the most complex, integrated maps and analysis for users using advanced spatial analysis and modeling. The Analyst must also be able to write macros, design and manage databases and construct queries to support central programming, access information, and produce certain map elements. Advancement to GIS Coordinator requires the ability to lead a small team and integrate enterprise GIS into computer networks used by the City for data communications.

### **Essential Duties and Responsibilities**

- Develops GIS programs that enable data analysis and map production using ESRI software (ArcGIS, ArcServer, SDE databases), programming and macro languages, and advanced data base setups.
- Establishes standards for mapping, documentation, data storage and retrieval, and programming, and overall quality. Trains, assigns and reviews the work of GIS staff to conform to quality and detail standards.
- Consults with departments to define GIS programming needs. Evaluates needs, develops streamlined approaches and programming projects to include priorities, schedules, and programming goals. Establishes programming and database standards for the City.
- Designs and develops tools for displaying or retrieving GIS information from relational databases using modern database utilities. Coordinates with departments to plan, design, and implement procedures that enhance access and responsiveness of GIS.
- Digitizes and drafts, using GIS software and peripheral devices, advanced and integrated geographic information for producing complex maps that include multiple layers and features. These maps require understanding related data sources and interfaces to other land-based data and mapping systems such as roads, electrical infrastructure, buildings, and other overlaid or three-dimensional applications.

- Determines appropriate data compression techniques, resolutions, sizes, color maps, and depths to ensure that images and synthesized graphics are delivered at a sufficient speed and quality for optimal intended media output.
- Troubleshoots and performs maintenance on multiple GIS workstation system problems that require consideration of alternative solutions and resources.
- Develops research techniques, trains others, and conducts technical research in the geographic information systems and other relational databases to produce maps and supporting documentation for use in an array of situations.
- Implements and develops time-saving program enhancements and simplifications in multiple languages including Visual Basic, macros, and query.
- Designs, develops, and maintains web sites and related pages and links. Facilitates discussions with staff to develop specifications, display standards, and templates or structures that assist users to update web content within established standards.
- Participates in website development of GIS applications and integrated databases. Writes website language and recommends programs related to GIS data and web site navigation structures. Configures browser parameters to control file caching, font mapping, Multi-Purpose Internet Mail Exchange (MIME) awareness, and application launching.
- Performs scripting and programming of web site features and applications. Programs in languages appropriate for web browsing and transaction applications (e.g., HyperText Markup Language (HTML), Java Script, and ASP).
- Uploads web pages to web sites. Coordinates, writes, updates, and maintains internet and intranet web pages related to GIS that contain text and graphics and are accessed through the City's web site.
- Maintains up-to-date knowledge of trends for GIS applications and local and regional issues affecting GIS. Participates in cross-industry groups for GIS.
- Performs other duties as assigned that support the overall objective of the position.

## **Qualifications**

### **▪ Knowledge and Skills**

The position requires specialized professional knowledge in geography, geology, GIS, or related field. Requires considerable specialized knowledge of the principles, methods and techniques of geographic information systems. Well-developed knowledge and programming skills using ESRI-based ArcGIS programs and programming languages, Visual Basic, complex database query and other programs/tools used by the City. Considerable knowledge of current trends and principles, techniques, and standards for base mapping, cadastral mapping, GIS technologies, assessment (valuation), and permitting. Requires advanced technical knowledge of spatial analysis, data generation, and mapping. Requires sufficient human resources skill to communicate technical concepts to internal and external customers, facilitate small group processes, and conduct training. Requires advanced math skills at least to the level of geometry and trigonometry.

- **Abilities**

Requires the ability to perform all aspects of the position within managerial guidance. Requires the ability to lead a small team, establish, prioritize and sequence projects. Requires the ability to establish geographic information system standards, plan and organize application development projects, and provide technical support. Requires the ability to apply advanced GIS techniques and geo-processing applications to design, write, and maintain GIS software. Requires the ability to apply computer programming languages and utilities to maintain local area networks and troubleshoot problems with data storage, retrieval, and communications. Requires the ability to work cooperatively with senior citizens. Requires the ability to work as contributing member of a team, work productively and cooperatively with other teams and external customers, and convey a positive image of the City and its services.

- **Physical Abilities**

Requires the ability to function primarily indoors in an office environment engaged in work of primarily a sedentary nature. Requires sufficient ambulatory ability to move about to office and remote locations. Requires auditory ability to carry on audience, ordinary, and telephonic conversation. Requires near and far visual acuity to read detailed maps, drawings, other printed material, computer screens, and observe multi-dimensional physical layouts. Requires manual and finger dexterity to write and to operate microcomputers and other office equipment. Requires the ability to alternatively sit and stand for sustained periods of time to perform desk and counter work.

- **Education and Experience**

The position typically requires a Bachelor's degree in Geography, Geology, Civil Engineering or Information Systems and five years of progressive experience in programming, digitizing, and drafting maps using GIS applications.

- **Licenses and Certificates**

May require a valid driver's license.

- **Working Conditions**

Work is performed indoors where minimal safety considerations exist.

*This job/class description, describes the general nature of the work performed, representative duties as well as the typical qualifications needed for acceptable performance. It is not intended to be a complete list of all responsibilities, duties, work steps, and skills required of the job.*