

City of Oregon City

Position Description

Position: GIS Technician	AFSCME Union
Department/Site: City Hall	FLSA: Non-exempt
Evaluated by: Information Technology Supervisor	Salary Grade: 33

Summary

Performs a variety of technical duties that are of a more routine nature in the development and maintenance of the Geographic Information System (GIS) database.

Distinguishing Career Features

The GIS Technician is the entry-level class into the GIS career path. This position is responsible for collecting, digitizing, and managing spatial data using AutoCad, Esri ArcGIS software, SDE databases, and GPS software. Integrates data from asset maintenance / management database programs, as-built record drawings, and field data collection to provide end users with accurate mapping and attribute information. Advancement to GIS Analyst requires the ability to apply GIS and database technology to produce advanced GIS analysis and databases, to perform advanced drafting and digitizing, to produce documentation and metadata, and to perform the most complex, integrated 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

- Produces maps and other analytical products using GIS software in response to requests from staff and the public.
- Develops and maintain the cartographic and tabular databases, and the GIS map base layers using ESRI and AutoCAD software; represent current conditions, such as new or corrected addresses, annexations, minor partitions, etc.
- Examines engineering plans, aerial photographs, maps and legal descriptions in order to enter data into digital format to create layers or corrections to existing data; translate engineer's technical data in GIS format.
- Responds to information provided by staff and the public and evaluate need for atlas changes; make needed changes in a timely manner; print and distribute periodic updates to atlas holders.
- Maintains accurate records of layer and map creation activities, and list of atlas holders.
- Participates in project and long range planning process; may provide software evaluation.

- Performs routine GIS data maintenance, manipulation, analysis, extraction and generation assignments; develops and prepares custom maps, views and coverage using cartographic techniques to represent spatial data; enters, updates and maintains data layers, using GIS tools, CAD tools and relational data bases.
- Establishes and administers information databases; collects and updates data to ensure the integrity and applicability of the information; performs record keeping and inventory; documents and files data sources and map files for future reference.
- Track time-sensitive projects and assignments to ensure timely completion.
- Researches and collects data to establish inter-/intra-agency partnerships.
- Provides presentation graphics support for City staff and responds to requests from the public for GIS data.
- Codes and digitizes maps and geographical feature data into various GIS layers.
- Consults with supervisor and staff regarding scope of mapping requests; researches available data; develops map layouts and executes design drafts
- Keeps management informed of project status by developing program reports.
- 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.
- Conducts technical research in the geographic information systems, asset management, 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.
- May provide general technical assistance and training to staff of software and hardware GIS, Asset, and related database programs and applications.
- 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 basic knowledge of:

- AutoCAD, ArcGIS, and Asset management software programs.
- Database design and applications.
- Mapping principles.
- Windows and DOS operating systems.

Knowledge and Skills (cont.)

- Principles, practices, methods and techniques of GIS, cartography, manual drafting and map design.
- Data capture procedures.
- Standard reproduction processes for maps, drawings, and blueprints.
- Personal computers and related software applications.

- **Abilities**

Requires the ability to

- Understand mapping principles.
- Determine and implement best methods for making product.
- Gather, compile and present information in a cartographic and tabular format.
- Develop and implement GIS projects.
- Perform GIS analysis.
- Provide good customer service.
- Comply with safety requirements of the position and actively promote safe work practices.
- Communicate effectively with coworkers, management, elected officials and the general public, and display excellent interpersonal skills and awareness of controversial and/or sensitive issues.

- **Physical Abilities**

Frequent repetitive motions including, but are not limited to, hand, wrist and finger movements; daily walking, reaching, standing, talking, hearing and seeing. Sedentary work: Exerting up to 10 pounds of force occasionally and/or a negligible amount of force frequently or constantly to lift, carry, push, pull or otherwise move objects, including the human body. Sedentary work involves sitting most of the time. Jobs are sedentary if walking and standing are required only occasionally and all other sedentary criteria are met. Requires the ability to alternatively sit and stand for sustained periods of time to perform desk and counter work.

- **Education and Experience**

A typical way of obtaining the knowledge, skills and abilities outlined above is through a Bachelor's degree in Geography, Computer Science, Engineering, or a related field, and one year of work experience in GIS and computer science or equivalent combination of education and experience.

- **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.