

JOB OPPORTUNITIES

JOB TITLE: GIS Analyst II

JOB ID: 25000004

SALARY: Grade 57

Minimum: \$1,374.57/week

Midpoint: \$1,718.19

DEPARTMENT: Geographical Information Systems

SUPERVISOR: Supervisor - GIS

WORK SCHEDULE: Monday – Friday, 7:00 a.m. – 4:00 p.m.

WORK LOCATION: 301 E. Central

PURPOSE OF POSITION:

The purpose of this position is to manage the entire lifecycle of City Utilities' Enterprise Geographic Information System (GIS) as a GIS expert. Will be responsible for maintenance, strategic design, development, data quality, and network integrity, as well as implementing data policies and procedures. This includes training and supporting Utility personnel on GIS data usage and its value extraction. Uses technical skills to fulfill internal and external customer requests and applications. These skills should include ArcGIS spatial analysis, Model Builder, Python, Arcade, or programming for data modeling, and Data Interoperability tools. Uses these tools for system data modeling, reporting, custom tracing, and visualizations. Uses communication and problem-solving skills to guide decisions on data integrity throughout the design, development, and deployment of mission-critical information for Utility operations. This ensures a scalable, secure, and efficient GIS infrastructure.

ESSENTIAL JOB FUNCTIONS:

- 1. An "expert" or highly experienced individual with utility institutional knowledge using the ArcGIS suite of products.
- 2. Supports the Supervisor-GIS with leading, overseeing, and supervising other GIS personnel. Leads, trains, and delegates GIS staff under the direction of the Supervisor-GIS, with regards to GIS related projects.
- 3. Manages ArcSDE version activity including:
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- a. Dealing with conflict versions and identifying/addressing version/design inconsistencies.
- b. Develops workflows for all processes that impact the ArcSDE database. This includes daily editing and data maintenance and ad hoc projects.
- c. Reviews ArcSDE log files on a regular basis and makes necessary adjustments if required.
- d. Reviews ArcSDE tables to confirm there are no orphaned states, orphaned records in delta tables, and that user log tables are being successfully truncated.
- e. Reviews logs and data base lineage to confirm successful execution of compress and analyze.
- f. Oversees the process of reconciling and posting all version activity.
- 4. Responsible for providing technical leadership for GIS staff, as well as training Engineers/Designers, field mobile users (rugged device, tablet, and phone), and other users of GIS by providing large group, small group, and one-on-one training.

5. Technical Expert:

- a. Responsible for overseeing all facets of the ArcGIS suite of products, including ArcGIS Pro, ArcMap, ArcGIS Portal, ArcGIS Server, and ArcGIS Online (AGOL).
- b. Provides in-depth knowledge of utility network data management using ArcGIS Utility Network and Geometric Network.
- c. Accountable for Model Builder, Arcade, or Python script for geoprocessing automation.
- d. Uses Data Interoperability tools like Spatial FME or ETL/ELT frameworks.
- e. Provides support for enterprise GIS deployments and integrations.

6. GIS Infrastructure Design and Management:

- a. Designs, implements, and maintains a scalable, secure, and performant GIS infrastructure using ArcGIS Pro, ArcMap, Portal, AGOL, and related systems.
- b. Integrates GIS with other enterprise systems (e.g., AIM, Mobile, GLK, WLK) to ensure data consistency.
- c. Manages user accounts, access controls, and permissions for the GIS System.
- 7. Uses Model Builder or programming/scripting to create geoprocessing models that can automate data conversion, maintenance, and create reports or visualizations.

8. Utility Network Data Management:

- a. Develops and implements data standards and best practices for utility network data within the ArcGIS Utility Network.
- b. Oversees the creation, validations, and maintenance of accurate and up-to-date utility network data layers.

9. Product development and functionality:

- a. Analyzes user requirements from various utility departments and translates them into technical specifications for GIS functionalities specific to gas, water, electric, and fiber networks.
- b. Collaborates with developers, contractors, and fellow IT staff to create new features, applications, and tools for efficient utility network management using ArcGIS Pro and Utility Network tools.
- c. Stays up to date on emerging GIS technologies and trends relevant to the utility industry.
- d. Creates Esri based applications utilizing core business tools.

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- 10. System Administration and Security:
 - a. Monitors system performance, troubleshoots technical issues, and performs system maintenance for ArcGIS Pro, ArcGIS Portal, ArcGIS Online (AGOL), and related software.
 - b. Implements and maintains security measures to safeguard sensitive utility network data.
 - c. Provides assistance with the installation, configuring, and maintenance of the ArcGIS Enterprise platforms.
- 11. Responsible for maintaining the quality and integrity of all network data on a regular basis which includes but is not limited to connectivity, corrective actions, loops, multi-feeds, system integrations, as well as mission-critical updates such as electric feeder changes, emergency valve isolation analysis, boil advisory analysis, etc.
- 12. Prepares and presents a variety of written and oral reports.
- 13. Leads in the variety of planning, design, and analysis work in order to administer GIS activities.
- 14. Implements the Supervisor-GIS vision with communicating requirements and priorities that affect the daily activities of employees in the GIS group.
- 15. Develops and writes GIS training documentation for all enterprise GIS users. Documentation includes system architecture design, web services, tools, developing standards, quality control procedures, and workflows for GIS systems and related applications.
- 16. Responsible for the development and management of project specifications and graphic standards of GIS data projects for consultants and internal project managers.
- 17. Uses complex spatial and data analysis tools and techniques within ArcGIS (e.g. Spatial Analyst, 3D Analyst, Insights, Geoprocessing tools, etc.) utilizing GIS data, related add-ons, and relational databases to meet the needs of internal and external customer requests, including but not limited to modeling of system data, reporting, custom tracing, and specialized views.
- 18. Applies the basics of Data Interoperability (Spatial FME and ETL/ELT) and how to apply this framework in an enterprise setting.
- 19. Administers ArcGIS Enterprise deployment, upgrades, and application development (ArcGIS Server, ArcGIS Portal, ArcGIS Online, ArcGIS Pro, ArcGIS Desktop, etc.). This includes defining the customers' requirements, establishing the data source(s), building the visualization (i.e., map display/document), publishing the data as a service, working with IT to establish an account, testing the application and training the user(s).
- 20. Performs other project-related duties or functions as needed when critical to business function.

QUALIFICATIONS:

Education and Experience:

- A bachelor's degree from an accredited college or university in geospatial sciences, geography, geology, planning, information technology, construction technology, or in a related field is required. Exceptional related experience may be considered in lieu of a college degree on a year-for-year basis.
- A minimum of five years of recent utility electric, natural gas, water or broadband experience in an engineering or operations supporting role is required.
- A strong background supporting GIS networks using Esri ArcGIS applications, with at least three-years of Esri ArcSDE experience, is required.
- Python, Arcade, or Model Builder experience is required.
- Spatial FME and/or Spatial ETL/ELT experience is preferred.
- Geocomputational skills preferred.
- Utility Network Data Management experience preferred.

Licensing/Certification:

Must have a valid driver's license (minimum Class F).

Knowledge, Skills and Abilities:

- Proficient with:
 - o Current Esri products (ArcGIS Suite of products).
 - o Current ArcGIS Server or related Esri technologies including ArcGIS Desktop, ArcGIS Pro, publishing services, and deployments in virtual or physical environments.
 - o ArcSDE administration.
- Working knowledge of:
 - o Enterprise-scale utility GIS implementation.
 - o Integrating with other Utility T&D applications (i.e., System Modeling Software, Work Management, Customer Information System, Outage Management, etc.).
 - o Using Model Builder.
 - o GIS Development or scripting languages (i.e, Python, Arcade) for customizing ArcGIS functionalities.
 - o Data Interoperability, Spatial FME, and ETL/ELT tools.
 - Microsoft Office products.
- Ability to:
 - o Architect, implement, and administer enterprise GIS solutions and systems that leverage ArcGIS Enterprise platforms: ArcGIS Desktop, ArcGIS Server, ArcGIS Portal, and ArcGIS Online.
 - o Delegate and effectively coordinate the activities of others.
 - o Quickly learn and become familiar with technical subjects.
 - o Communicate clearly, concisely, and convey technical information into non-technical terms.
 - o Work courteously with customers, co-workers, and individuals in other departments.
 - o Demonstrated abilities in meeting deadlines and scheduling of work for timely completion.
 - Successfully navigate various electronic programs including but not limited to Microsoft Office Suites, other applicable information technology applications, and self-service platforms.
- General understanding of ArcFM configuration and functionality.
- High analytical, organizational, problem-solving, and relational skills.

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- Excellent oral and written presentation skills.
- Strong understanding of enterprise GIS deployments and associated integrations.
- Maintain adherence to all company policies.

Physical Requirements:

Typically, sedentary work. Ability to express or exchange ideas by means of the spoken word and receive detailed information through oral communication. Substantial movements of the wrists, hands, and/or fingers, and close visual acuity to operate a computer is required. Bending and stooping may be required for filing and file retrieval. Must be able to visually differentiate between color-coded lines and symbols associated with utilization of geospatial software. May be required to lift up to 20 pounds occasionally.

Working Conditions:

Duties are primarily performed in an office environment. Will require occasional late hours and weekend work to perform system maintenance while users are off the system. Optional hybrid work from home schedule after probationary period.

Miscellaneous Requirements:

- Employee must remain alert and aware of their surroundings at all times and maintain the ability to respond to changing circumstances in a timely manner.
- Must be able to work successfully with diverse groups of people.

TESTING:

Testing may be required.

HOW TO APPLY:

Interested applicants may apply online at cityutilities.net under Careers/Search Jobs.