

GIS (GEOGRAPHIC INFORMATION SYSTEM) SUPERVISOR

JOB DESCRIPTION

Classification Responsibilities: A GIS (Geographic Information System) Supervisor is responsible for supervising staff that develop, create, and maintain the GIS databases, coverages, layers, and linkages to various databases. Duties may include: coordinating the development and implementation of GIS applications within a department or unit; selecting, training, and evaluating professional and technical personnel; assigning and reviewing GIS data for completeness, accuracy, and neatness; performing complex spatial analysis and high-level queries; documenting complex procedures; developing policies and procedures; assisting with the preparation and administration of a department/unit budget; testing new applications and programs; serving as a member or leader of intra- and inter-departmental application development teams; conducting mapping research in the field and in the office to resolve conflicting information and ensure the accuracy of data; and creating maps using GIS software. This class performs related duties as required.

Energy Resources Assignment: The primary and significant emphasis of this assignment is to supervise the GIS Specialists and oversee the natural gas and electric utilities' implementation and optimization of Computerized Maintenance Management System (CMMS). This class oversees the digitization of paper records into electronic forms, documents those processes and maintains them while searching for process efficiency improvements. This class sets overall direction through master planning efforts for the GIS group to ensure efficient, accurate, and complete data collection and retention. Implements innovative data gathering methods such as the use of barcode scanning, GPS, QR codes, and RFID. Provides feedback and analysis mechanisms for utility field groups for analyzing risks to the utility systems and managing assets. Digitizes, organizes, manages, and links legacy documentation to the GIS for simple record retrieval for staff.

Engineering Assignment: The primary and significant emphasis of this assignment is to supervise the GIS Specialist; to oversee and maintain spatial data unique to the Engineering Department, including LiDAR data and vector datasets contained in the Engineering SDE database; to ensure efficient map production for Real Estate Services, the Right of Way Manager, Engineering Project Managers, and other departments. This class oversees ongoing efforts to research and develop spatial methodologies and tools that will assist the department in spatial data modelling, the results of which will help the engineers and other technical staff to make decisions and to streamline repetitive spatial data processes. This class is further distinguished from the GIS Specialist class by the creation of documentation procedures and standards. This class works independently and with limited supervision.

Distinguishing Features: This class is distinguished from the GIS Specialist class by the full supervisory responsibilities of professional and/or technical staff, extensive area knowledge, documentation of procedures and standards, and knowledge of system design. This class is supervised by an Assistant City Engineer, Deputy Engineer, Transportation Field Operations Superintendent, or Administrative Supervisor depending on assignment. This class is FLSA exempt-administrative.

QUALIFICATIONS

Employee Values: All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect, and Integrity.

Minimum Qualifications Required. Any combination of training, education, and experience equivalent to graduation from an accredited college or university with a Bachelor's Degree in GIS, Geography, Planning, Engineering, Computer Science, or closely related field. Considerable (3 - 5 years) experience working with GIS or a related field using Esri ArcGIS Desktop, ArcGIS Server, ArcGIS Pro, ArcGIS Online or related GIS mapping software. Good (1 - 3 years) supervisory or lead experience. Minimum of one year experience using AutoCAD, SharePoint, and/or Microsoft Office products.

Special Requirement. Must possess a valid Class D Arizona Driver's License by hire or promotion date.

Substance Abuse Testing. None.

Preferred/Desirable Qualifications. Experience on AutoCAD/ArcGIS software related to water, sewer, storm drain, and/or gas utilities graphic/data inputs (*Planning GIS Section Assignment*). Experience in using Microsoft Access, Microsoft Excel, MSSQL is highly desirable. Experience in Visual Studio, C#, MapObjects, ArcFM, ArcSDE, Model Builder, Spatial Analyst, Network Analyst, 3D Analyst, Python, Computerized Maintenance Management System (CMMS), or Data Interoperability is desirable (*Engineering Assignment*).

ESSENTIAL FUNCTIONS

Communication: Communicates with management, the general public, other City employees, and vendors in order to identify GIS work efforts, progress, and concepts and their application. Communicates with supervisor to provide feedback on work processes, work in progress, training, and/or skills and abilities of staff. Instructs and trains subordinates regarding GIS concepts and applications. Prepares written documents with clearly organized thoughts and using proper sentence structure, punctuation, and grammar, in order to document work completed, problems inputting data, and status reports. Graphically communicates through maps and other visual presentation formats. Presents facts clearly and accurately.

Manual/Physical: Reviews the work products of others to ensure compliance with standard operating procedures or departmental standards and procedures. Inspects, monitors, and evaluates information to determine compliance with prescribed operating, safety, or GIS standards and procedures. Distinguishes colors to determine proper graphic characteristics of mapping data. Enters data or information into a personal computer (PC) in order to access GIS, enters data into GIS databases, and creates specifications and reports. Prepares and updates maps, schedules, graphs, or work and/or data flow charts to identify and report work flows, progress, and status. Moves objects of up to 50 pounds such as roll paper, paper cartons, digitizing tablets, etc., for distances of up to 150 feet. Operates a motor vehicle requiring a valid Class D Arizona Driver's License to make field inspections and field checks on completed work. Creates charts, schedules, graphs, maps, presentation graphics, etc. Works with staff in training on workstation operation and use of digitizing equipment, PC monitors, displays, and plotters. Operates a variety of office equipment, such as a PC, printer, etc., to enter data or information for studies, projects, and work assignments. Prepares reports, plans, and maps for distribution to consultants, contractors, and other City employees. Meets scheduling and attendance requirements.

Mental: Prioritizes and assigns work to personnel and prioritizes own work. Resolves procedural and operational problems by interpreting or clarifying procedures or processes. Develops section policies

and procedures, short- and long-term objectives, or special tasks. Conducts research and analyzes GIS data problems, analyzes exception reports, and resolves menu key malfunctions and other GIS concerns. Comprehends and makes inferences from written procedures and specifications. Performs mathematical calculations; statistical computations; and applies fractions, percentages, ratios and proportions, algebra, geometric constructions, and the essentials of trigonometry. Assists in preparing the section budget. Reviews area needs and hardware concerns.

Knowledge and Abilities:

Knowledge of:

GIS software, such as AutoCAD, ArcView, ArcInfo, etc.;;
testing procedures and backup and recovery procedures;
data manipulation procedures for GIS;
efficient use of software/hardware resources;
safeguards and security procedures for data file access;
modern supervisory practices and methods; and
industry specific (such as transportation, utilities, or planning) symbols and terminology.

Ability to:

supervise the work of subordinate professional and technical staff, for compliance to instructions given and conformity to GIS standards and procedures;
recommend personnel actions related to selection, disciplinary procedures, performance appraisals, leaves of absence, grievances, work schedules, and assignments;
administer personnel related policies and procedures;
explain technical data processing problems in non-technical terms;
solve operational and procedural problems related to the application of the GIS by improving techniques and isolating technician or specialist errors;
devise a schedule for the completion of training or work projects by considering such factors as the impact of other work, probable work completion dates by work sections, time required for coordination and/or review, and number and duration of probable interruptions;
provide training for new or modified software; and
perform audits on existing application systems and those in the development phase to assure accuracy, quality, and integrity.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

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EEO-Prof

JOB FCTN-TEC

INCREMENTS 50-200

PAY GRADE: 56

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