

JOB TITLE: GEOGRAPHIC INFORMATION SYSTEM (GIS) SUPERVISOR

GENERAL STATEMENT OF JOB

Under general supervision, performs analysis, researching, coding, and compiling of information for the City of West Columbia. Work involves surveying, compiling, organizing, collecting, processing, verifying, correcting, analyzing, maintaining, and updating point, line and polygon data associated with city GIS by utilizing Global Positioning System (GPS) technology, laser range finders, GPS receivers, GPS data collectors, handheld computers; developing, using, manipulating, creating, preparing, organizing, processing, analyzing, and maintaining custom digital map projects and related geographic database projects for various city departments and other related agencies; preparing, organizing, training, and assisting city personnel in GIS and GPS processes; promoting the use of GIS and GPS related hardware and software; ensuring compatibility with existing GIS data sets and layers; assisting to create custom digital map projects, GIS and GPS data collection, GIS and GPS data processing, software, and hardware functionality; creating, preparing, organizing, processing, maintaining, plotting and printing custom map applications and projects utilizing computers, plotters, printers, GPS hardware, GPS software, and GIS software for all relevant city departments as well as other governmental agencies and the public; training, preparing, and helping city departments and the public in the use of pertinent areas of the city's online maps; helping to create custom graphic projects, animations, signs, charts, logos, posters, presentations, etc.; and maintaining a high level of proficiency with GIS, GPS, digital image, and digital graphics software and hardware developments and improvements. Exercises initiative and independent judgment in monitoring projects and testing programs, and determining proper corrective actions when necessary. Reports to the Director of Planning and Zoning.

SPECIFIC DUTIES AND RESPONSIBILITIES

ESSENTIAL JOB FUNCTIONS

Collects GPS data to support city activities and services.

Posts and processes GPS field data for accuracy; makes corrections; populate data; verifies for accuracy.

Creates, prints, and installs various projects such as custom map projects, custom map datasets, data layers, print projects, etc.

Creates and prints custom maps requested by city departments and others.

Develops custom map applications using ArcGIS, ArcPublisher, ArcGIS Online, and ArcReader for specific city requests.

GEOGRAPHIC INFORMATION SYSTEM (GIS) SUPERVISOR

ESSENTIAL JOB FUNCTIONS (CONTINUED)

Notifies relevant departments concerning updated data for specific custom map applications; supplies datasets when requested; assists with production and installation when needed.

Verifies information by field survey; corrects GIS data from field research.

Utilizes compass, protractor, planimeter, digital camera, utility knives, computer supplies and general office supplies.

Uses computer software such as ESRI ArcMap, ArcInfo, ArcEdit, ArcIMS, Access, MS Excel, MS Word, ArcGIS, Trimble GIS, Laser Range Finder software, ArcPAD, etc.

Interacts and communicates with co-workers from other departments; department heads and administrators; municipal employees; developers, engineers, surveyors and immediate supervisor.

ADDITIONAL JOB FUNCTIONS

Creates custom graphic designs, animations, photographs and presentations.

Performs other related duties as assigned.

MINIMUM TRAINING AND EXPERIENCE

Bachelor's degree, and two to three years of experience, including some contact with computer programming work and GIS experience; or any equivalent combination of training and experience which provides the required skills, knowledge and abilities.

MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS.

Physical Requirements: Must be physically able to operate a variety of machinery and equipment including computers and peripheral equipment. Must be able to exert a negligible amount of force constantly to move objects. Physical demand requirements are in excess of those for Sedentary Work. Light Work usually requires walking or standing to a significant degree. However, if the use of arm and/or leg controls requires exertion of forces greater than that for Sedentary Work and the worker sits most of the time, the job is rate for Light Work.

Data Conception: Requires the ability to compare and/or judge the readily observable functional, structural or compositional characteristics (whether similar to or divergent from obvious standards) of data, people or things.

GEOGRAPHIC INFORMATION SYSTEM (GIS) SUPERVISOR**MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED
TO PERFORM ESSENTIAL JOB FUNCTIONS (CONTINUED).**

Interpersonal Communication: Requires the ability of speaking and/or signaling people to convey or exchange information. Includes the receiving of information and instructions from supervisors.

Language Ability: Requires the ability to read a variety of reports, correspondence, technical manuals, forms, logs, etc. Requires the ability to prepare correspondence, reports, forms, etc., using prescribed formats and conforming to all rules of punctuation, grammar, diction, and style. Requires the ability to communicate and interact with other co-workers, supervisor, salesmen, etc. with poise, voice control and confidence.

Intelligence: Requires the ability to apply principals of logical or scientific thinking to define problems, collect data, establish facts, and draw valid conclusions; to interpret an extensive variety of technical instructions in mathematical or diagrammatic form; and to deal with several abstract and concrete variables.

Verbal Aptitude: Requires the ability to record and deliver information, to explain procedures, to follow verbal and written instructions. Must be able to communicate effectively and efficiently in Standard English and computer terminology.

Numerical Aptitude: Requires the ability to add and subtract totals, to multiply and divide, to utilize mathematical formulas, to determine percentages and decimals and to determine time. Must be able to use practical applications of fractions, percentages, ratio and proportion. Must be able to use advanced applications of algebra, statistics, geometry and linear programming.

Form/Spatial Aptitude: Requires the ability to inspect items for proper length, width and shape.

Motor Coordination: Requires the ability to coordinate hands and eyes rapidly and accurately in using computer equipment.

Manual Dexterity: Requires the ability to handle a variety of items, such as computer equipment. Must have minimal levels of eye/hand/foot coordination.

Color Discrimination and Visual Acuity: Requires the ability to differentiate colors and shades of color; requires the visual acuity to determine depth perception, night vision, peripheral vision, inspection for small parts; preparing and analyzing written or computer data, etc.

Interpersonal Temperament: Requires the ability to deal with people beyond giving and receiving instructions. Must be adaptable to performing work under some stress when confronted with persons acting under stress.

Physical Communication: Requires the ability to talk and hear (talking: expressing or exchanging ideas by means of spoken words; hearing: perceiving nature of sounds by ear). Must be able to communicate via a telephone.

GEOGRAPHIC INFORMATION SYSTEM (GIS) SUPERVISOR

PERFORMANCE INDICATORS

Knowledge of Job: Has knowledge of the methods, procedures, and policies of Planning/GIS as they pertain to the performance of duties of the ArcGIS Supervisor. Has thorough knowledge of the theories, concepts, principles and practices of GIS. Has thorough knowledge of the design, implementation, and maintenance of informational infrastructures. Has thorough knowledge of new technologies and is able to recommend changes to improve the current system. Has considerable knowledge of office methods, practices and procedures. Has knowledge of the laws, ordinances, standards and regulations pertaining to the specific duties and responsibilities of the position. Has considerable knowledge of the operation of an electronic computer and all peripheral equipment. Has considerable knowledge of the various types of input and output media. Has considerable knowledge of data processing terminology, processes and procedures. Has general knowledge of programming techniques, programming languages, operating systems, capabilities and limitations, and service requirements of electronic computers and auxiliary equipment employed in the current operations environment. Has general knowledge of computer programming techniques and multi-programming techniques as they relate to computer operation. Has general knowledge of the organization and functions of city government. Has considerable knowledge of computer system design and programming, including geographical information system design, programming and implementation. Has working knowledge of the techniques used in systems analysis and design. Has some knowledge of the current literature, trends, and developments in the field of computer operations. Is skilled in establishing and revising production and testing schedules for the achievement of maximum computer time utilization. Is skilled in data entry and the operation of computers and peripheral equipment. Is able to recognize, analyze and provide solutions to data processing problems. Is able to analyze operations and to organize their component parts into logical systems. Is able to take the initiative to complete the duties of the position without the need of direct supervision. Is able to learn and utilize new skills and information to improve job performance and efficiency. Has knowledge of proper English usage, punctuation, spelling and grammar. Has knowledge of modern office practices and technology. Is skilled in the use of computers for GIS applications, records management, data and word processing. Is able to exercise independent judgment and initiative in independently performing assigned projects. Is able to prepare clear and concise instructions, and convey them orally and in writing. Is able to establish and maintain working relationships as necessitated by work assignments.

Quality of Work: Maintains high standards of accuracy in exercising duties and responsibilities. Exercises immediate remedial action to correct any quality deficiencies that occur in areas of responsibility. Maintains high quality communication and interacts with all city departments and divisions, co-workers and the general public.

Quantity of Work: Maintains effective and efficient output of all duties and responsibilities as described under "Specific Duties and Responsibilities."

Dependability: Assumes responsibility for doing assigned work and meeting deadlines. Completes assigned work on or before deadlines in accordance with directives, city policy, standards and prescribed procedures. Accepts accountability for meeting assigned responsibilities in the technical, human and conceptual areas.

GEOGRAPHIC INFORMATION SYSTEM (GIS) SUPERVISOR

PERFORMANCE INDICATORS (CONTINUED)

Attendance: Attends work regularly and adheres to city policies and procedures regarding absences and tardiness. Provides adequate notice to higher management with respect to vacation time and time-off requests.

Initiative and Enthusiasm: Maintains an enthusiastic, self-reliant and self-starting approach to meet job responsibilities and accountabilities. Strives to anticipate work to be done and initiates proper and acceptable direction for the completion of work with a minimum of supervision and instruction.

Judgment: Exercises analytical judgment in areas of responsibility. Identifies problems or situations as they occur and specifies decision objectives. Identifies or assists in identifying alternate solutions to problems or situations. Implements decisions in accordance with prescribed and effective policies and procedures and with a minimum of errors. Seeks expert or experienced advice and researches problems, situations and alternatives before exercising judgment.

Cooperation: Accepts supervisory instruction and direction and strives to meet the goals and objectives of same. Questions such instruction and direction when clarification of results or consequences are justified, i.e., poor communications, variance with city policy or procedures, etc. Offers suggestions and recommendations to encourage and improve cooperation between all staff persons and departments within the city.

Relationships with Others: Shares knowledge with managers, supervisors and staff for mutual and city benefit. Contributes to maintaining high morale among all city employees. Develops and maintains cooperative and courteous relationships with department employees, staffers and managers in other departments, representatives from organizations, and the general public so as to maintain good will toward the city and to project a good city image. Tactfully and effectively handles requests, suggestions and complaints from other departments and persons in order to maintain good will within the city. Emphasizes the importance of maintaining a positive image within the city. Interacts effectively with higher management, city administrator, professionals and the general public.

Coordination of Work: Plans and organizes daily work routine. Establishes priorities for the completion of work in accordance with sound time-management methodology. Avoids duplication of effort. Estimates the expected time of completion of elements of work and establishes a personal schedule accordingly. Attends meetings, planning sessions and discussions on time. Implements work activity in accordance with priorities and estimated schedules. Maintains a calendar for meetings, deadlines and events.

Safety and Housekeeping: Adheres to all safety and housekeeping standards established by the city and various regulatory agencies. Sees that the standards are not violated. Maintains a clean and orderly workplace.

DISCLAIMER: This job description is not an employment agreement or contract. Management has the exclusive right to alter this job description at any time without notice.