GEOGRAPHIC INFORMATION SYSTEMS COORDINATOR

I/II

Approved: June 2018 FLSA: Exempt

Unit: Unrepresented Management



Definition

Under general direction, plans, develops and manages activities related to the support, deployment, operation and usage of the City's geographic information system (GIS); coordinates projects related to management of interfaces, applications setup, business process review and customization; provides complex and responsible support to the Information Technology Supervisor/Manager in areas of expertise; and performs related work as required.

Supervision received and exercised

Receives direction from the Information Technology Manager or assigned manager. May provide technical and functional direction to lower-level staff, contractors, and temporary staff.

Class characteristics

This is an advanced journey-level classification which exercises independent judgment in the management of applications and assignments, within general guidelines and professional and administrative standards. Incumbents will facilitate the integration of all geographically referenced data throughout the City, including development design, operation, analysis, maintenance and modification of applications and databases; and apply technical, communication, analytical, and problem-solving skills to the processes for assigned information technology services.

This classification is distinguished from the Enterprise Applications Support Specialist in that the latter provides expert analysis, support, and coordination of various citywide business software programs.

Examples of typical job functions (illustrative only)

Management reserves the right to add, modify, change, or rescind the work assignments of different positions and to make reasonable accommodations so that qualified employees can perform the essential functions of the job.

- Plans, manages, and oversees the daily functions, operations, and activities of the GIS function, including the
 design, administration, and maintenance of citywide applications, database infrastructure, and web based and
 mobile applications.
- Recommends improvements and modifications and prepares various reports on activities and projects; recommends and assists in the implementation of goals, objectives, policies and procedures.
- Determines and recommends resource needs for assigned sections; participates in the budget preparation; prepares detailed cost estimates and appropriate justifications as required.
- Consults with other City departments regarding GIS needs and requirements, including identifying, designing and developing GIS applications, strategies, and procedures for integrating the GIS program.
- Functions as a liaison between users to ensure standards and protocols are maintained; assists in coordinating
 activities with information technology staff.
- Serves as technical lead for assigned projects, including working with vendors, contractors, information technology staff, and others.
- Provides specialized and complex technical support and assistance to staff concerning assigned databases; serves as the primary contact for and resolves related issues, conflicts, and concerns; responds to inquiries and provides information concerning system operations, malfunctions, and upgrades; identifies underlying problems causing incidents and designs, proposes, and implements resolutions.
- Assists information technology staff to develop and maintain related equipment, including custom applications and training staff of the proper use of related equipment.
- Maintains database security by reviewing permissions regularly and updating access and control policies and procedures.
- Organizes and converts data into relational tables using normalization process; analyzes access paths by identifying logical and physical indices.
- Designs and maintains relational data models as new information and table structures are added.
- Identifies table relationships and builds Structured Query Language (SQL) data manipulation scripts to extract data; troubleshoots extraction issues.
- Performs advanced database queries and develops reports using SQL.
- Develops and implements applications to extract, transform, and report data used for business process analysis and decision-making.
- Maintains accurate and detailed records, verifies accuracy of information, researches discrepancies, and records information.

- Monitors changes in technology and applications, recommends improvements and upgrades and implements changes after approval.
- Performs research activities to identify, acquire, and integrate data from other agencies and organizations into the City's data library; maintains and updates the City's information catalogue; creates and maintains government-compliant metadata; and develops procedures to share appropriate data.
- Participates in the development and evaluation of requests for proposals and qualifications for professional services; recommends project awards; participates in negotiations of contract terms and amendments; ensures contractor compliance with City standards and specifications and time and budget estimates; and assists with review of design documents to ensure technical integrity.
- Represents the City in inter-agency coordination activities related to GIS.
- Performs other duties as assigned.

Qualifications

Knowledge of

- Principles, practices, and methods of administering and coordinating a comprehensive information system/program.
- Modern procedures, principles, and commands related to GIS database design, analysis, and programming.
- Advanced data management theory, principles, and practices and their application to GIS services and programs.
- Theories and techniques of GIS applications and web mapping technology.
- Technology, hardware, software, and current applications related to GIS systems, including database management, mapping and report generation, and desktop publishing systems.
- The organization and operation of the City and of outside agencies as necessary to assume assigned responsibilities.
- Basic computer programming to generate tools or scripts to automate repetitive tasks.
- Troubleshooting, configuration, and installation techniques.
- Principles and practices of identifying technology needs and issues, researching and evaluating technology, applications and the most effective courses of action and implementing solutions.
- Applicable laws, regulatory codes, ordinances, and procedures relevant to assigned area of responsibility.
- Departmental policies and procedures.
- · Principles of record keeping.
- Modern office practices, methods, and computer equipment and applications related to the work.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for providing a high level of customer service by effectively dealing with staff, vendors, contractors, and the public.

Ability to

- Recommend and implement goals, objectives, practices, policies, and procedures for providing effective and efficient services.
- Coordinate a broad-based GIS program that includes effective database development, management and accessibility.
- Perform complex modeling, mapping, database maintenance, and other GIS professional-level tasks.
- Evaluate and develop improvements in operations, procedures, policies, or methods.
- Research and evaluate new service delivery methods, procedures, and techniques.
- Prepare clear, effective, and accurate reports, correspondence, and other written materials.
- Understand and communicate ideas in a technical but user-friendly language.
- Interpret, apply, explain, and ensure compliance with departmental policies and procedures.
- Establish and maintain a variety of filing, record keeping, and tracking systems.
- Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
- Operate modern office equipment including computer equipment and software programs.
- Use tact, initiative, prudence, and independent judgment within general policy and legal guidelines.
- Use English effectively to communicate in person, over the telephone, and in writing.
- Make accurate arithmetic, financial, and statistical computations.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and experience

Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

- Equivalent to graduation from an accredited four-year college or university with major course work in geographic information systems, computer science, business administration or a related field.
- Three (3) years of experience with Geographic Information Systems or information technology with an emphasis on municipal land management, community development and public works systems.

Licenses and certifications

None

Physical demands

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; vision to read printed materials and a computer screen; and hearing and speech to communicate in person and over the telephone. Standing in and walking between work areas is frequently required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Positions in this classification frequently bend, stoop, kneel, and reach to perform assigned duties, as well as push and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push and pull materials and objects up to 30 pounds with the use of proper equipment.

Environmental elements

Employees work in an office environment with moderate levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.