



June 2008

## **GEOGRAPHIC INFORMATION SYSTEMS COORDINATOR**

### **DEFINITION**

Under general direction, plans, implements, coordinates, and administers the City-wide Geographic Information Systems (GIS) program; evaluates and personally participates in the functions necessary to implement and sustain the creation, maintenance, and use of the GIS databases and applications; oversees all aspects of the program's structure and design for effective use, both within the City and in coordination with outside public, regulatory, and public safety agencies, and business organizations; ensures the expansion and maximization of GIS technology throughout many City departments; performs related work as required.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general direction from the Information Technology Manager. Exercises direct and general supervision over assigned staff and contract consultants on a program and project basis.

### **CLASS CHARACTERISTICS**

This single-position class manages all Geographic Information Systems for the City within general policy and procedural guidelines and has the ability to adapt specific program procedures and activities to meet the needs of the City, other agencies and technological advances. This class is considered an enterprise position and serves as a member of the City's administrative team in the formulation and implementation of management policies as they relate to the compilation of information and coordination of data integration through the City's GIS program. The incumbent interfaces with elected officials and executive-level staff in the formulation and implementation of GIS policies, including legislative activities, budgeting priorities, and the day-to-day operations and staffing needs within each of the City's departments. This class is distinguished from other information technology classes by the level of specialized technical knowledge of and emphasis on GIS hardware and software applications.

### **EXAMPLES OF ESSENTIAL 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, organizes, coordinates and administers the development and implementation of goals, objectives, policies, and procedures related to the City's Geographic Information System (GIS) program.
- Works with elected officials and executive-level staff in the formulation of management policies concerning the compilation of information and coordination of data through the City's GIS program; coordinates and oversees the implementation of such policies.
- Coordinates with City department GIS representatives to identify, develop, and plan GIS projects and staffing needs, including coordinating and facilitating monthly GIS committee meetings.

- Researches, plans, and prepares City-wide and department GIS implementation plans, including researching and determining equipment and technology costs, reviewing GIS and IT technology for implementation, reviewing industry GIS implementations and projects for comparison and possible integration into a City GIS plan, and acting as City representative in various County and regional GIS coordinating meetings.
- Develops and designs standards and technical specifications for City-wide GIS systems; coordinates with other IT staff to develop information system solutions; designs technical GIS and data structures; programs automated applications for GIS users.
- Performs a variety of professional-level work, including modeling applications, creating maps, preparing database environments, building applications, and developing graphic and related materials for internal and external clients.
- Serves as a technical resource to all City departments, including providing assistance and training in the proper use of GIS data and systems, and recommending, troubleshooting and providing support for GIS software, databases and other related applications.
- Attends meetings, conferences, workshops, and training sessions to become and remain current on principles, practices, and new developments in assigned work areas.
- Monitors changes in GIS technology and applications, recommends improvements and upgrades and implements changes after approval.
- Responds inquiries from the public in a timely manner.
- Prepares a variety of written correspondence, reports, procedures and other materials.
- Maintains accurate records and files related to the GIS function.
- Coordinates regularly with appropriate others to maximize efficiency of interdepartmental operations and activities.
- Assists Information Technology Manager with City-wide GIS budget.
- Performs other duties as assigned.

## **QUALIFICATIONS**

### **Knowledge of:**

- Principles, theories, and methods of GIS technology.
- The function and role of the City in developing and coordinating a broad-based GIS program with applications for City departments, public agencies, private clients, and the general public.
- Technology, hardware and software, and current applications related to GIS systems, including database management, mapping, and report generation and desktop publishing systems.
- Principles and practices of identifying technology needs and issues, researching and evaluating technology, applications, and the most effective courses of action, and implementing solutions.
- The capabilities, methods, technical standards, and programming languages of GIS technology.
- GIS data management theory and applications of GIS.
- Current developments, trends, and technologies within the GIS field.
- Applicable Federal, State, and local laws, codes and regulations.
- Mapping, cartography, graphic design, and imaging techniques.
- Data management concepts and structures.
- Basic budgetary and contract administration principles and practices in a public agency.
- Record keeping principles and procedures.
- Modern office practices, methods and computer equipment.
- Computer applications related to the work.
- English usage, grammar, spelling, vocabulary, and punctuation.
- Techniques for dealing effectively with the public, vendors, contractors and City staff, in person and over the telephone.

- Techniques for effectively representing the City in contacts with governmental agencies, community groups and various business, professional, educational, regulatory and legislative organizations.
- Techniques for providing a high level of customer service to public and City staff, in person and over the telephone.

**Ability to:**

- Develop and implement goals, objectives, policies, and procedures related to the City's GIS program.
- Develop and administer a broad-based GIS program that includes effective database development, management and accessibility through internal local area network and the City's GIS website for a variety of City departments and public and private clients.
- Assess user needs and recommend appropriate hardware, software, and systems to meet these needs.
- Perform complex modeling, mapping, database maintenance, and other GIS professional-level tasks.
- Design and create GIS data, programs, and tabular data systems.
- Apply knowledge of GIS technology to meet user's needs.
- Develop documentation and informational materials and train users in GIS applications.
- Interpret, apply, and explain technical materials to non-technical users.
- Interpret, apply, and explain Federal, State, and local laws, codes, regulations.
- Understand the organization and operation of the assigned department and of outside agencies as necessary to assume assigned responsibilities.
- Prepare clear and effective reports, correspondence, policies, procedures and other written material.
- Make accurate arithmetic, financial and statistical computations.
- Effectively conduct meetings and make presentations to various groups.
- Analyze situations and identify pertinent problems/issues; collect relevant information; evaluate realistic options; and recommend/implement appropriate course of action.
- 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 specialized software applications programs.
- Comprehend and use English effectively including producing all forms of communication in a clear, concise, and understandable manner to intended audiences.
- Use tact, initiative, prudence and independent judgment within general policy, procedural and legal guidelines.
- Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.

**Education and Experience:**

*Any combination of training and experience which 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 coursework in geographic information systems, computer science, geography, public or business administration, or a related field, and three (3) years of professional experience in the development of geographic information systems, including responsibility for systems analysis and database development, with one (1) year in a public agency.

**Licenses and Certifications:**

- Possession of a valid driver's license with satisfactory driving record.

### **PHYSICAL DEMANDS**

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle and to visit various City and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups and over the telephone. This is primarily a sedentary office classification although standing in work areas and walking between work areas may be 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 occasionally bend, stoop, kneel, reach, 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 weighing up to 40 pounds.

### **ENVIRONMENTAL ELEMENTS**

Employees work in an office environment with moderate noise 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.