



Geographic Information Systems (GIS) & Information Systems (IS) Administrative Analyst

Department/Division:	Administrative Services
Reports To:	Information Systems Administrator

GENERAL PURPOSE

Under general direction from the Information Systems Administrator, performs technical and professional duties in developing, maintaining and administering the geographic information system (GIS) database and integration of other applications with the GIS systems; and performs related work as required. The position would also maintain and develop software systems that integrate with the Cities GIS program such as Asset Management and My San Dimas platforms.

DISTINGUISHING CHARACTERISTICS

A GIS Analyst performs a wide range of difficult and responsible assignments in maintaining the accuracy and quality of GIS database information and providing products and services to support a wide variety of City or departmental functions, processes and analytical requirements. Work requires a professional knowledge of the theory and principles of GIS software and database manipulation and product/output development. Assignments are made in terms of applying established GIS technology principles, methods, procedures and tools to the completion of well defined, moderately difficult GIS functions and projects.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The following functions are typical for this classification and from the City's position the following duties are essential of the GIS Analyst. Incumbents may not perform all of the listed functions and/or may be required to perform additional or different functions from those set forth below to address business needs and changing business practices.

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this class.

1. Formats and generates a variety of GIS products including standard and custom maps and map series, standard map templates, shape files, graphics, tables and reports; performs data searches and retrievals, extracts and organizes data and performs quality-control operations to ensure the accuracy and completeness of all

data; researches source documents and/or coordinates with others to resolve missing or conflicting data, discrepancies and other anomalies; establishes map area and develops symbology, including thematic and category symbols; uses cartographic and design principles to include legends, insets and reference information; overlays maps over aerial imagery to produce custom products and verify and correct geospatial data; performs standard spatial analyses using established methods and procedures.

2. Maintains and updates geospatial databases; extracts, cleans, adjusts and converts data and information from non-GIS systems into GIS formats; converts addresses into GIS formats using geo-coding routines; researches and corrects problems with data using spatial and logical analyses; researches and verifies legal descriptions and boundaries; uses scripts, queries and other tools to obtain and/or correct missing or incorrect spatial and attribute data; geo-references digital maps to align with real ground locations, using survey monument, GPS and other data as controls; processes, loads, reviews and updates data in GIS database layers; imports database updates.

3. Participates in developing and implementing queries, scripts, tools, utilities and/or instructions of moderate difficulty; participates in the design, development, testing and implementation of GIS applications of routine to moderate difficulty to meet customer needs and enterprise requirements; participates in analyzing and testing new releases/updates of enterprise GIS and software applications; diagnoses and troubleshoots software problems.

4. Develops and standardizes procedures and methods to improve and continuously monitors the efficiency and effectiveness of assigned programs, service delivery methods, and procedures; assesses and monitors workload, administrative and support systems, and internal reporting relationships; identifies opportunities for improvement and recommends to the Administrative Services Director.

5. Provides system administrator support in connection with citywide applications, and performs some technical functions related to network infrastructure and associated systems and equipment.

6. Provides technical support and training to GIS users; develops training materials and documentation.

7. Provides support for Information Technology systems citywide, including computer replacements, technical support and other services typically provided in a local government setting.

8. May collect field data using GPS or other equipment as needed; may assist in training city staff members.

9. Maintains and develops integrated software programs such as Asset Management and My San Dimas programs.

10. Performs related duties as assigned.

11. Serves on committees and task forces as required

12. Attend a variety of meetings, training sessions, conferences and seminars as required.

QUALIFICATIONS GUIDELINES

Knowledge of:

1. Geographic information system concepts, principles, development tools and analytical techniques, including computerized mapping and attribute-data conversion, manipulation and analysis.
2. Applicable programming languages and tools.
3. Relational database systems principles, practices and tools.
4. Principles, practices and techniques of mapping and computer-aided design and drafting.
5. Basic engineering design concepts, methods and terminology applicable to the display of spatial relationships of facilities data.
6. Analytical techniques using computer science and GIS technology.
7. GPS system concepts and analytical techniques.

Ability to:

1. Identify geo-data and information management issues and opportunities and collect, interpret and integrate relevant data from multiple sources.
2. Analyze problems and alternatives and develop sound conclusions and recommendations.
3. Set priorities and carry out assigned projects to most effectively meet needs in a timely manner.
4. Assess GIS staff needs and develop sound, professional GIS products and services.
5. Prepare clear, concise and accurate documentation, project reports and other written materials.
6. Exercise sound independent judgment within established guidelines.
7. Communicate effectively, both orally and in writing.
8. Understand and follow written and oral instructions.
9. Operate a computer and standard business software
10. Establish and maintain effective working relationships with all those encountered

in the course of work

Experience /Training/ Education

Education: Equivalent to a Bachelor's degree from an accredited college or university with major course work in information technology, GIS, computer science, urban planning, or related field. A Master's degree is desirable.

Experience: five years of increasingly responsible professional planning experience, with supervision experience being desirable; or an equivalent combination of training and experience.

Licenses and Certificates

Possession of a valid Class C California driver's license and a satisfactory driving record. AICP (American Institute of Certified Planners) certification is highly desirable.

PHYSICAL AND MENTAL DEMANDS

The physical and mental demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

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. 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 up to 25 pounds.

Specific vision abilities required by this job include close vision and the ability to adjust focus.

Mental Demands

While performing the duties of this class, the employee is regularly required to use oral and written communication skills; read and interpret data, information and documents; analyze and solve problems; observe and interpret data and situations; use math and mathematical reasoning; learn and apply new skills or information; perform highly detailed work on multiple concurrent tasks; work under changing and intensive deadlines with frequent interruptions; and interact with City officials, media, citizens

groups, employees and others encountered in the course of work.

WORK ENVIRONMENT

Employees work under typical office conditions and the noise level is usually moderately quiet. The position may periodically require visiting other worksites, which include but are not limited to, the municipal yard, parks and recreation facilities, and other training sites. Such other worksites may include varying conditions and require effectively navigating uneven surfaces, surfaces of differing types, obstructions, and may incur during inclement weather. Noise level of such other worksites may include typical levels for an outdoor environment and the type found in municipal yards and park and recreation facilities.

FLSA Status: Exempt
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