



Job Description

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities that are required of the employee for this job.

Job title	Senior Geographic Information Systems (GIS) Analyst
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GENERAL PURPOSE

Under direction, implements, leads, plans, trains, reviews, and participates in the work of assigned staff to ensure support of the District's GIS programs and applications; areas of responsibility include analysis and implementation of GIS tools needed to visualize complex data; establishes strong working relationships with local jurisdictions for data gathering and analysis; trains and assists end users in using new and modified systems capabilities; maintains and updates GIS-related databases; generates a diverse range of GIS exhibits, maps, and graphs; and performs related duties, as assigned.

DISTINGUISHING CHARACTERISTICS

This is the advanced-level classification in the GIS Analyst series responsible for performing the most complex work assigned to the group. Incumbents regularly work on tasks which are varied and complex, requiring considerable discretion and independent judgment. Positions in the classification rely on experience and judgment to perform assigned duties. Assignments are given with general guidelines and incumbents are responsible for establishing objectives, timelines, and methods to complete assignments. Work is typically reviewed upon completion for soundness, appropriateness, and conformity to policy and requirements.

This class is distinguished from the GIS Analyst II in that the Senior GIS Analyst performs the most complex work assigned to the series and/or provides technical and functional direction over lower-level staff.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from an assigned manager. Provides technical and functional direction and training to lower-level staff. Exercises no direct supervision over staff;

TYPICAL DUTIES AND RESPONSIBILITIES

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 position.

- Performs a wide range of professional level GIS analyses in support of planning, capital improvement projects, growth projections, environmental studies, and demographic analyses; coordinates with internal stakeholders, consultants, developers, and other local government agencies to communicate District policies and requirements for project initiation and development; compiles critical data in a variety of formats to generate and document solution alternatives; establishes strong relationships with local agencies for data development and enhancement.
- Develops, gathers, verifies, inputs, edits, maintains, and updates collected field attributes, and tabular and spatial data; edits and performs quality assurance on data entities and attributes for the Database of Proposed Projects (DOPP) as well as from other local jurisdictions.
- Creates a variety of exhibits and maps; generates reports, diagrams, and displays for District departments to present to the Board, general public, external agencies, and developers; explains technical information to non-technical system users, including assisting them in accessing and interpreting GIS information; develops quality control procedures.
- Maintains, updates, creates, and acquires all internal and external GIS data for District departments; organizes, prioritizes, monitors, and maintains GIS data; ensures data integrity during integration with other District systems and databases, and when importing, exporting, versioning, and maintaining the GIS library structure and geo-database conversions.
- Provides support for on-going and *ad-hoc* reporting requirements; confers with Information Systems and other departments to develop or modify systems to analyze and develop required data.
- Serves as a technical resource to District departments; assists in training staff on the proper use of GIS data and systems; recommends, troubleshoots, and supports GIS software and databases.
- Attends meetings with officials of other governmental agencies, businesses, community groups, and the public regarding assigned projects; responds to requests for information from the public on District programs or projects.
- May provide work direction to other analysts and support staff on a project basis.
- Prepares a variety of written correspondence, reports, procedures, files, records, and other materials.
- Monitors changes in GIS technology and applications, recommends improvements and upgrades, and implements changes after approval.
- Observes and complies with all District and mandated safety rules, regulations, and protocols.
- Performs related duties as assigned.

REQUIRED QUALIFICATIONS

Knowledge of:

- GIS concepts and analytical techniques, including computerized mapping and digital data conversion, manipulation, and analysis.
- Operational characteristics of a diverse range of GIS systems and tools.
- Database administration principles, methods, and techniques.
- Technology, hardware and software, and platforms related to GIS systems.
- Principles and practices of application development, including the tools and utilities used in GIS systems.
- Principles and practices of project management.
- Programming methods and techniques.
- Mathematical and statistical procedures commonly supported by systems applications.
- Federal, state, and local laws, codes, and regulations in assigned areas of responsibility.
- Record keeping principles and procedures.
- District and mandated safety rules, regulations, and protocols.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

Ability to:

- Provide professional level support to a diverse range of GIS-related projects and programs.
- Assess user needs and recommend appropriate GIS hardware, software, and systems to meet these needs.
- Maintain and administer GIS databases.
- Generate a variety of maps, graphs, charts, and exhibits.
- Develop documentation and informational materials and train users in GIS applications.
- Prepare custom applications to enhance efficiencies and productivity of common tasks
- Perform spatial analysis and present the results in meaningful manner that inform and direct decisions on water, wastewater and recycled water systems.
- Manipulate complex databases to assess and analyze trends in data; prepare exhibits and maps of the analysis to illustrate trends in the data.
- Test and debug applications programmed for GIS purposes.
- Prepare technical system documentation.
- Organize, plan, and complete projects and maintain software change management for GIS programs.

- Interpret, apply, and explain technical materials to non-technical users.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies, and procedures, and standards relevant to work performed.
- Effectively represent the department and the District in meetings with governmental agencies; community groups; various business, professional, and regulatory organizations; and in meetings with individuals.
- Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.
- Use tact, initiative, prudence, and independent judgment within general policy, procedural, and legal guidelines.
- Effectively use computer systems, software applications relevant to work performed, and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Experience:

Any combination of experience and education that provides the required knowledge and abilities is qualifying, along with the specific licenses/certifications as outlined below:

- Senior GIS Analyst: Eight (8) years of experience performing professional-level duties in the design and development of GIS systems and applications, or three (3) years of experience as a GIS Analyst II.

Education:

- Equivalent to a bachelor's degree from an accredited college or university in geography/geographic science, geographic information systems, or a related field.

Licenses/Certifications:

- A valid California driver's license and the ability to maintain insurability under the District's Vehicle Insurance Policy.

PHYSICAL DEMANDS

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

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; vision to read printed materials, 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, 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.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

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.

This job description has been reviewed and approved by all levels of management in cooperation with the union (if applicable):

Approved by:	<i>Board of Directors</i>
Date adopted:	<i>TBD (March 2023)</i>
Date modified:	
FLSA determination:	<i>Non-Exempt</i>

Job Description Acknowledgment

I have received, reviewed, and fully understand the job description for GIS Analyst. I further understand that I am responsible for the satisfactory execution of the essential functions described therein, under any and all conditions as described.

Employee Name (print): _____ Date: _____

Employee Number: _____

Employee Signature: _____