



JOB DESCRIPTION

JOB TITLE: GIS Technician/Analyst

JOB CODE: 2150

DEPARTMENT: Geographic Information Systems

FLSA STATUS: Non-Exempt

REPORTS TO: GIS Supervisor

SUMMARY OF JOB PURPOSE

Provides Geographic Information System (GIS) client services, special maps, and assistance in data structure, compilation and retrieval of computer-automated mapping data for Douglas County departments and residents.

ESSENTIAL FUNCTIONS

1. Produces cartographic products, in digital or paper format, for County departments, the public, public agencies, and/or private firms as directed; meets with users to define data needs, project requirements, required outputs, or to develop applications; determines and executes the appropriate sequence of data processing tasks; uses established GIS software programs, commands, and compilation methods to generate and utilize spatial overlays and models.
2. Creates frequently used maps of Douglas County such as zoning maps, General Plan maps, and other maps for sale to the general public and available to County departments; develops maps in accordance with technical guidelines and client needs, analyzing circumstances to select the appropriate procedure; develops routine to moderately complex command sets (scripts) using computer programming, GIS software, and hardware to produce needed digital and analog maps.
3. Interprets aerial photography, subdivision plots, land records, and engineering drawings; analyzes survey data, source maps, and other records; develops analyses and presentation of data, applying knowledge of GIS and map projections; determines effective presentation of information and selects cartographic elements needed; displays results of analyses using maps, graphs, and tabular data.
4. Reviews existing and incoming data for quality and documentation; performs quality control checks to assure integrity of GIS data and application; monitors projects and requests, and maintains the project log to assure completion of projects on schedule.
5. Compiles geographic data from a variety of sources including censuses, field observation, satellite imagery, aerial photographs, and existing maps; scans, rectifies, and digitizes data; determines methods to analyze spatial relationships, including adjacency, containment, and proximity; builds topology, enters data attributes, checks for errors, and verifies accuracy; makes required corrections and edits/refines GIS data as necessary.
6. Processes land transfers and divisions; identifies location, assigns new parcel numbers, obtains addresses, and computes acreage according to accepted assessment practices; produces preliminary assessment maps on the GIS for review and approval, and prepares final map as assigned.

This job description indicates, in general, the nature and levels of work, knowledge, skills, abilities and other essential functions (as covered under the Americans with Disabilities Act) expected of the incumbent. It is not designed to cover or contain a comprehensive listing of activities, duties or responsibilities required of the incumbent. Incumbent may be asked to perform other duties as required.



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7. Updates and builds system data; catalogs and maintains data entry and map update procedures; enters data into database using application of coordinate geometry, keyboard entry of tabular data, manual digitizing of maps, scanning, and conversion of digital data sources, including automatic conversion to vectors.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

EDUCATION and/or EXPERIENCE

Bachelor's Degree in Geography, GIS, Computer Science, or other closely related field and two (2) years experience in GIS, preferably within a government organization; OR an equivalent combination of education and experience.

LANGUAGE SKILLS

Ability to read, analyze, and interpret common scientific and technical journals, operating and maintenance instructions, and procedure manuals; write routine reports and correspondence; speak effectively before groups of customers and/or employees.

MATHEMATICAL SKILLS

Ability to work with mathematical concepts such as probability and statistical inference, logarithms, and geometry; ability to calculate figures such as proportions, area, circumference, and volume.

REASONING ABILITY

Ability to apply common sense understanding to carry out instructions furnished in written, oral, or diagram form; deal with problems involving several concrete variables in standardized situations.

OTHER KNOWLEDGE, SKILLS, & ABILITIES

Knowledge of principles of surveying, mapping, global positioning systems and usage of aerial photography and satellite imaging; principles of cartographic technology and GIS application software; theory, principles and practices of geographic information systems, including computerized data compilation and conversion techniques, database management systems, graphics applications and overlays, and spatial models for computer analysis; principles and capabilities of computer systems, including networked environments and peripheral devices; GIS application software, structured query language, spatial and tabular databases, and Linux file structures and commands; business and personal computers, and specialized software applications. Ability to read, understand, develop, manipulate, and analyze geographic information in a variety of data formats and projections, including raster and vector data; perform accurate data entry and mathematical calculations. Skills in computer cartographic design, layout, and production for a variety of different subject matter; understanding and working with data from multiple public and private sources; maintaining accurate and interrelated database records, and identifying and reconciling errors; working within deadlines to complete projects and assignments; assessing, analyzing, identifying and recommending solutions to problems; establishing and maintaining effective working relations with co-workers.

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CERTIFICATES, LICENSES, REGISTRATIONS

Typing certificate, with speed and accuracy at the rate of 45 words per minute.

PHYSICAL DEMANDS

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

While performing the duties of this job, the employee is regularly required to stand, walk, sit, and drive; use hands to finger, handle, or feel; reach with hands and arms; talk and hear. The employee occasionally is required to climb, balance and stoop, kneel, crouch, or crawl and must occasionally lift and/or carry up to 100 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

WORKING ENVIRONMENT

Work is performed in an office environment where the physical demands require sitting for extended periods of time; frequent use of computers and standard office equipment; may work under stress of deadlines.

I have read and understand the contents of this Job Description, and I have received a copy of this Job Description for my records.

PRINT NAME: _____

SIGNATURE: _____ **DATE:** _____

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