



Departmental GIS Application Specialist

Category: Classified/Excluded
Pay Grade: C25
Job Code: 11226

To perform this job successfully, an individual must be able to perform the essential job functions satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the primary job functions herein described. Since every duty associated with this position may not be described herein, employees may be required to perform duties not specifically spelled out in the job description, but which may be reasonably considered to be incidental in the performing of their duties just as though they were actually written out in this job description.

JOB SUMMARY

This is responsible technical work performing such duties as database development, database enhancement, creating and maintaining CD libraries, data transfer and usage standards and procedures for a department's Geographic Information System (GIS). An employee in this classification solves a variety of complex problems in the absence of technical guidelines or precedents, composes moderately complex documentation of a routine nature, and interviews or discusses detailed information. One of the major purposes of the position is to work to improve existing systems or procedures, which periodically result in new ideas or approaches of considerable significance. Planning and scheduling is moderate where the employee plans their own work or other's activities. Work consists of complex, varied, non-standardized tasks, requiring application of numerous laws, rules, regulations, and procedures. Work includes supervising the permanent technical staff that supports the Department's GIS and its applications. Work is assigned by supervisor who provides general guidance allowing for employee planning of procedures and methods to attain objective. Errors in work may cause inaccuracies in reports, records, or technical data resulting in inaccurate or incomplete information.

ESSENTIAL JOB FUNCTIONS (examples, not all inclusive)

- Plans, analyzes and maintains a departmental GIS database;
- Analyzes and establishes GIS maintenance and user needs;
- Creates and maintains accuracy of GIS metadata to conform to Federal Geographic Data Committee standards;
- Prepares documentation and procedures for using applications;
- Develops departmental standards, guidelines and procedures for receiving and implementing GIS data;
- Creates, edits, processes and corrects geographic data as needed;
- Researches, evaluates, and translates incoming and outgoing GIS data;
- Processes and prepares imported data for use in database; acquires or processes, geo-references, mosaics, and catalogs, current and historic, digital aerial photography and satellite data;
- Coordinates and serves as liaison with other departments and outside agencies regarding GIS data;
- Prepares official maps; updates data for such purposes; provides GIS data and products to Division, Department, other County Departments, outside agencies, and the public;
- Troubleshoots, tests, evaluates, analyzes and assists with the resolution of problems with GIS software and plotters; acts as primary contact for vendor support; researches new GIS technologies, including evaluation and testing; makes recommendations for upgrades and new purchases; coordinates the installation of new and updated versions of GIS software and hardware;
- Assists in processing, preparation and analysis of GIS data collected by staff; trains and provides technical assistance to GIS users within the department;
- Prepares GIS map products for departmental graphics publications;
- Designs and develops maps to illustrate reports, presentations, charts, posters, brochures, programs and ideas for publication, exhibition and technical use within the department and for other County Departments;
- Notarizes documents for the department as needed;

- Performs manual search and review of historic annexations on file from municipalities for other departments, and county legal for court cases as needed;
- Supervises technical employees in support of the Department's GIS and its application;
- Supervises employees implementing policies and procedures accordingly;
- Performs other related job duties as assigned.

QUALIFICATIONS

Education and Experience:

Five (5) years of experience in data processing/computer graphics/GIS that includes responsible experience and principal assignments to support an organization's GIS operations; or Associate's degree or technical diploma or certification in Information Technology Surveying, Engineering, Cartography, Computer Science or related field and three (3) years of experience in data processing/computer graphics/GIS; or Bachelor's degree and one (1) year experience as described above; or an equivalent combination of education, training and/or experience.

Special Qualifications (May be required depending on area of assignment):

- Florida Driver's License or Florida Commercial Driver's License and endorsement, if any.
- Assignment to work a variety of work schedules including compulsory work periods in special, emergency, and/or disaster situations.
- Other highly desirable knowledge, skills, abilities, and credentials required for a specific position.

Knowledge, Skills and Abilities:

- Knowledge of landscape ecology, natural systems, native and non-native plants, remote sensing and aerial photo interpretation techniques, field work and research techniques, methods, and procedures;
- Knowledge of governmental purchasing, personnel and budget procedures;
- Knowledge of GIS programming languages, i.e., Avenue, Visual Basic, AML, EML; and MS Office, Word, Excel, PowerPoint;
- Knowledge of database design, data transfer and conversion processes, data formats, properties, and accuracy standards, and Federal Geographic Data Committee metadata standards;
- Knowledge of cartographic conventions and mapping standards, datums and coordinate systems, data formats and properties, and the appropriate representation of biological datasets;
- Knowledge of and expertise in GIS, GPS, and remote sensing applications and their operating characteristics, capabilities, limitations; experience in spatial analysis;
- Skill in both verbal and written communication for personal interaction and to interpret poorly defined data/information;
- Ability to work independently without close supervision as well as prioritize daily activities, and coordinate project work;
- Ability to troubleshoot GIS software and plotter problems, conduct tests, analyze results, detect errors and take corrective action on GIS data, software, and equipment;
- Ability to supervise the work of subordinate staff;
- Ability to apply computer applications and software.

PHYSICAL/MENTAL DEMANDS

The work is sedentary work and requires exerting up to 10 pounds of force occasionally and negligible amount of force constantly to move objects. Additionally, the following physical abilities are required:

- Fingering: Picking, pinching, typing, or otherwise working, primarily with fingers rather than with the whole hand as in handling.
- Grasping: Applying pressure to an object with the fingers and palm.
- Hearing: Perceiving the nature of sounds at normal speaking levels with or without correction. Ability to receive detailed information through oral communication, and to make the discrimination in sound.
- Lifting: Raising objects from a lower to a higher position or moving objects horizontally from position to position. Occurs to a considerable degree and requires substantial use of upper extremities and back muscles.

- Mental acuity: Ability to make rational decisions through sound logic and deductive processes.
- Pulling: Using upper extremities to exert force in order to draw, haul or tug objects in a sustained motion.
- Reaching: Extending hand(s) and arm(s) in any direction.
- Repetitive motion: Substantial movements (motions) of the wrist, hands, and/or fingers.
- Speaking: Expressing or exchanging ideas by means of the spoken word including the ability to convey detailed or important spoken instructions to other workers accurately and concisely.
- Standing: Particularly for sustained periods of time.
- Talking: Expressing or exchanging ideas by means of the spoken word including those activities in which they must convey detailed or important spoken instructions to other workers accurately, loudly, or quickly.
- Visual Acuity: Have close visual acuity such as color differentiation, depth perception, and adequate field vision.
- Walking: Moving about on foot to accomplish tasks, particularly for long distances or moving from one work site to another.

WORKING CONDITIONS

Work is typically performed in a dynamic environment that requires sensitivity to changing goals, priorities, and needs.