



Career Service Authority

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Geographic Information Systems Data Administrator

GENERAL STATEMENT OF CLASS DUTIES

Performs full performance professional work functioning as a technical expert by developing and implementing industry accepted standards and procedures for Geographic Information Systems (GIS) applications and services used in data modeling and data distribution activities and directing and leading GIS project activities including map production, GIS data analysis, and data layer development.

DISTINGUISHING CHARACTERISTICS

The GIS Data Administrator is distinguished from the *GIS Technician*, which performs standard level paraprofessional work compiling, verifying, maintaining and inputting information into multiple databases; utilizes Geographic Information System (GIS) software and hardware to digitize and enter data; and generates schematics, maps and plats from data in order to provide information regarding different infrastructure systems.

The GIS Data Administrator is also distinguished from the *GIS Analyst*, which performs standard level statistical and spatial analysis, creates GIS maps, and produces relevant text and presentation graphics utilizing multiple GIS software packages and modules. The GIS Data Administrator is also distinguished from the *Senior GIS Analyst*, which performs complex full performance statistical and spatial analysis, creates GIS maps, produces and presents relevant text and graphics, and makes recommendations utilizing multiple GIS software packages and modules.

The GIS Data Administrator is also distinguished from the *GIS Photogrammetry Administrator*, which performs professional and supervisory work over professional and technical staff involved in field investigations, data collection, GIS applications development, and GIS data analysis and support for Public Works Wastewater operations.

Guidelines, Difficulty and Decision Making Level:

Guidelines are generally but not always clearly applicable, requiring the employee to exercise judgment in selecting the most pertinent guideline, interpret precedents, adapt standard practices to differing situations, and recommend alternative actions in situations without precedent.

Duties assigned are generally complex and may be of substantial intricacy. Work assignment is performed within an established framework under general instructions but requires simultaneous coordination of assigned functions or projects in various stages of completion.

Employee is responsible for determining time, place, and sequence of actions to be taken. Unusual problems or proposed deviations from guidelines, practices, or precedents may be discussed with the supervisor before being initiated.

Level of Supervision Received and Quality Review:

Under administrative supervision, the employee has personal accountability for carrying out an assigned function, program, or project within the scope of established guidelines and objectives and is expected to resolve problems that arise in the normal course of the work. Completed work is generally reviewed for soundness of judgment, conclusion, adequacy, and conformance to policy.

Interpersonal Communications and Purpose:

Contacts with the public or employees where explanatory or interpretive information is exchanged, defended, and gathered and discretion and judgment are required within the parameters of the job function.

Level of Supervision Exercised:

May perform lead work or supervision over professional and technical staff engaged in the development, maintenance, and analysis of GIS data.

ESSENTIAL DUTIES

Serves as a GIS technical expert by developing and implementing industry accepted standards and procedures for use of GIS applications and services and promoting the adoption of these standards and procedures throughout the city for GIS professionals and users.

Consults with GIS users to evaluate needs, provide technical guidance on GIS applications and services, and develop solutions to meet user needs for GIS data and analysis.

Directs and leads GIS project activities to develop and implement GIS technology (e.g. map production, GIS analysis, and data layer development) by proposing budget requests, solving technical field implementation problems, providing GIS support to users, which includes training users in GIS concepts.

Develops and directs the technical operations related to the implementation and maintenance of GIS data layers used in data modeling and data distribution activities, which includes coordinating the maintenance of GIS data life cycles and related business processes.

Leads GIS professionals and users through the process of determining requirements and assessing alternative data models for the future design of GIS data sets then leads the design, testing, modification, and implementation of any new data models.

By position, assists in the development and implementation of the budget and approves expenditures.

By position, performs lead work including assigning, distributing, and reviewing work; providing instruction to lower level GIS staff; handling informal grievances; and documenting and providing input on employee performance.

Performs other related duties as assigned or requested.

Any one position may not include all of the duties listed. However, the allocation of positions will be determined by the amount of time spent in performing the essential duties listed above.

MINIMUM QUALIFICATIONS

Competencies, Knowledges & Skills:

Integrity/Honesty – Contributes to maintaining the integrity of the organization; displays high standards of ethical conduct and understands the impact of violating these standards on an organization, self, and others; is trustworthy.

Technical Competence – Uses knowledge that is acquired through formal training or extensive on the job experience to perform one's job; works with, understands, and evaluates technical information related to the job; advises others on technical issues.

Attention to Detail – Is thorough when performing work and conscientious about attending to detail.

Customer Service – Works with clients and customers (that is, any individuals who use or receive the service or products that your work unit produces, including general public, individuals who work in the agency, other agencies, or organizations outside the Government) to assess their needs, provide information or assistance, resolve their problems, or satisfy their expectations; knows about available products and services; is committed to provided quality products and services.

Interpersonal Skills – Shows understanding, friendliness, courtesy, tact, empathy, concern, and politeness to others; develops and maintains effective relationships with others; may include effectively dealing with individuals who are difficult, hostile, or distressed; related well to people from varied backgrounds and different situations; is sensitive to cultural diversity, race, gender, disabilities, and other individual differences.

Leadership – Inspires, motivates, and guides others toward goals, coaches, mentors, and challenges staff, adapts leadership styles to various situations, and models high standards of honesty, integrity, trust, openness, and respect for individuals by applying these values daily.

Decision Making – Makes sound, well informed, and objective decisions; perceives the impact and implications of decisions; commits to action, even in uncertain situations, to accomplish organizational goals; causes change.

Self Management – Sets well defined and realistic personal goals; displays a high level of initiative, effort, and commitment towards completing assignments in a timely manner; works with minimal supervision; is motivated to achieve; demonstrates responsible behavior.

Reading – Understands and interprets written material, including technical material, rules, regulations, instructions, reports, charts, graphs, or tables; applies what is learned from written material to specific situations.

Problem Solving – Identifies problems; determine accuracy and relevance of information; uses sound judgment to generate and evaluate alternatives, and to make recommendations.

Flexibility – Is open to change and new information; adapts behavior or work methods in response to new information, changing conditions, or unexpected obstacles; effectively deal with ambiguity.

Teamwork – Encourages and facilitates cooperation, pride, trust, and group identity; fosters commitment and team spirit; works with others to achieve goals.

Technology Applications – Uses machines, tools, or equipment effectively; uses computers and computer applications to analyze and communicate information in the appropriate format.

Reasoning – Identifies rules, principles, or relationships that explain facts, data, or other information; analyzes information and makes correct inferences or draws accurate conclusions.

Creative Thinking – Uses imagination to develop new insights into situations and applies innovative solutions to problems; designs new methods where established methods and procedures are inapplicable or are unavailable.

Knowledge of geographic information systems sufficient to be able to perform a variety of duties related to the work assignment.

Skill in using geographical databases and performing database backups.

Skill in reading and interpreting detailed geographical maps.

Skill in computing geometric areas.

Knowledge of computer hardware and software sufficient to be able to perform a variety of duties as needed.

Knowledge of information technology systems analysis, including system design, sufficient to be able to maintain current systems.

Knowledge of training techniques sufficient to be able to train others to perform the duties of the work assignment.

Skill in evaluating existing policies, procedures, and objectives and recommending changes for improvement.

Skill in independently adapting, interpreting and applying written guidelines, precedents and standardized work practices to a variety of unprecedented or problematic situations.

Physical Demands:

Sitting: remaining in the normal seated position.

Reaching: extending the hand(s) and arm(s) in any direction.

Handling: seizing, holding, grasping, or otherwise working with hands.

Fingering: picking, pinching, or otherwise working with fingers.

Talking: expressing or exchanging ideas by means of spoken words.

Hearing: perceiving the nature of sounds by the ear.

Near acuity: ability to see clearly at 20 inches or less.

Accommodation: ability to adjust vision to bring object into focus.

Working Environment:

Work is primarily performed in an office setting and frequently at other locations for meetings.

Work involves pressure due to multiple calls and inquiries and is subject to interruption.

Education Requirement:

Bachelor degree in Geography, Planning, Computer Science, Engineering or a directly related field.

Experience Requirement:

Three years of experience at the type and level of the Senior GIS Analyst, including one year of experience completing complex, multi-disciplinary GIS projects.

Education/Experience Equivalency:

Additional appropriate type and level of experience may be substituted for the minimum education requirement on a one year for one year basis.

Additional appropriate type and level of education may be substituted for the minimum experience requirement on a one year for one year basis.

Licensure and/or Certification:

By position, requires a valid driver's license.

CLASS DETAIL

FLSA CODE: Exempt

ESTABLISHED DATE: 09/16/1995

ESTABLISHED BY: Don Braden

REVISED DATE: 02/15/2009

REVISED BY: Melissa Palmer

CLASS HISTORY: 2/2009: The class spec was put into new format; the General Statement of Duties, Essential Duties, and Minimum Qualifications were revised and updated.