GIS SPECIALIST

DEFINITION

A GIS Specialist performs Geographic Information Systems (GIS) related duties and participates in the design, development, maintenance, and deployment of complex geographical spatial datasets, databases, special map exhibits, software applications, and associated technical documentation.

TYPICAL DUTIES

Develops, verifies, administers, and modifies complex geographic-spatial datasets, databases, and map exhibits using current ESRI Geographic Information Systems software (ArcGIS), related ArcGIS desktop applications, and SQL Server and Oracle database platforms.

Conducts geographic data development, verification, management, quality control, and quality assurance.

Maintains GIS datasets and databases provided by third-party vendors and outside agencies.

Provides technical support to personnel in other governmental agencies in the exchange of shared GIS data.

Interacts with appropriate City, County, State and federal agencies to obtain GIS spatial datasets and databases.

Responds to inquiries related to District GIS datasets and GIS issues from District personnel.

Prints, mounts, and laminates PDF, JPEG, and other digital formats.

Attends seminars, workshops, and conferences to identify and evaluate developments and trends related to GIS.

Develops documentation related to GIS processes and procedures.

May represent the department at meetings with District administrators and public agencies as required.

Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

A GIS Specialist performs Geographic Information Systems (GIS) duties and may assist higher-level personnel in performing the more complex GIS related assignments by applying knowledge and skills of Geographic Information Systems (GIS) data development, data management, and cartographic mapping.

A Masterplan Coordinator has responsibility for the analysis of projected need for school facilities and equipment and supervising the gathering and analysis of data on school utilization and operating capacities.

A Demographic Research and Planning Analyst I applies basic knowledge and skills of demographic research and planning in the progression of duties and responsibilities leading to qualification as a Demographic Research and Planning Analyst II and receives on-the-job training.

SUPERVISION

General supervision is received from a supervisory or administrative employee. No supervision is exercised.

CLASS QUALIFICATIONS

Knowledge of:

Current versions of Geographic Information Systems (GIS) and related computer software such as ArcGIS, Arcinfo, ArcEditor, ArcMap, ArcReader, ArcGIS Spatial Analysis, Maplex, ArcGIS Explorer, Geostatistical Analyst, ArcIMS, and ArcServer
Advanced mapping concepts and technology trends in GIS cartographic mapping
Principles of research, data development, and geoprocessing techniques and procedures
Microsoft Word, Excel, Access, Visio, Adobe Acrobat, Adobe Photoshop, and Illustrator, Oracle, SQL server, VB, and VB.NET
Sources of geographic spatial datasets and coordinate systems
Advance techniques for labeling and creating feature link annotation layers
Terminology, best practices, and technology in the field of Geographic Information Systems (GIS) and cartographic mapping
Development and maintenance of a geodatabase

Ability to:

Use current ArcGIS and related GIS software to develop complex datasets, map exhibits, and solve problems associated with symbol conflicts, generalization, and scales
Perform geoprocessing techniques
Create and edit data stored in a multi-user geodatabase
Import, export, and query data tables within current versions of ArcGIS
Document technical procedures and workflow processes
Create maps and data sets to supplement analysis
Communicate effectively, both orally and in writing
Establish and maintain rapport with District personnel and the public
Plan and organize work to meet deadlines and accuracy
Work effectively under pressure in a fast-paced environment and multi-task
Work effectively as a member of a team
Convert data stored in varying formats into a geodatabase format
Develop desktop, client-server, and web-enabled applications and portals and participate in joint application

ENTRANCE QUALIFICATIONS

Education:

Graduation from a recognized college or university with a bachelor's degree in Geography, Computer Science, Mathematics, or a related field. Additional qualifying experience may be substituted for the required education on the basis of two years of experience for one year of education, if proof of graduation from high school or evidence of equivalent educational proficiency is provided.

<u>Experience</u>:

Three years of professional work experience using current versions of ArcGIS in a GIS or cartographic setting in geography, education, engineering, or urban planning field which included developing and maintaining a geodatabase platform.

<u>Special</u>:

A valid California Driver License.
Use of an automobile.

This class description is not a complete statement of essential functions, responsibilities, or requirements. Entrance requirements are representative of the minimum level of knowledge, skill, and/or abilities. To the extent permitted by law, management retains the discretion to add or change typical duties of a position at any time, as long as such addition or change is reasonably related to existing duties.

Title change
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