

GEOGRAPHIC INFORMATION SYSTEM (GIS) SPECIALIST

DEFINITION

Under general supervision, performs advanced technical work related to the analysis, use, development and maintenance of Geographic Information Systems (GIS).

SUPERVISION RECEIVED/EXERCISED

Receives supervision from a Manager or designee. Does not exercise supervision.

DISTINGUISHING CHARACTERISTICS

Geographic Information System (GIS) Specialist is an advanced/working level class. Incumbents perform a variety of complex GIS related work; including, GIS technical support, spatial data analysis, updating data and maps, and providing general mapping expertise.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

May include, but are not limited to, the following:

Coordinates with staff in various departments to perform data analysis, update data and maps and provide general mapping expertise.

Conducts complex spatial analysis, which may involve a major policy area or concern; utilizes multiple databases, modules and GIS software.

Maintains and enhances GIS data sets, to ensure usability and accuracy of all data entering the system.

Produces reports of geographic data utilizing data visualizations.

Assists in preparing and coordinating project scopes, procedure flow-charts, and schedules with internal customers and City departments.

Conducts end-user training, on new and existing GIS and ESRI products.

Determines if business work systems are adaptable to computerized data processing and makes recommendations for business process reengineering.

Writes and maintains reports; programs database reports, forms and queries.

Develops, updates, and publishes maps, including utility, zoning, reference, topographic, political boundary, and parcel maps to ensure maps are current.

Develops mapping applications and maintains associated base map control for user departments.

Coordinates or performs different aspects of the addressing process such as assigning and tracking valid addresses, maintains address database and distributes addresses to other City departments.

Validates and corrects physical addressing issues.

Reviews and researches legal descriptions, deeds, subdivision maps, assessor maps, plat maps, and records of survey.

Troubleshoots technical problems as they relate to GIS and provides or recommends appropriate solutions.

Maintains confidential information in accordance with legal standards and/or City regulations.

Performs related duties as required.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Principles and methods used to develop GIS mapping and relational databases and data conversion techniques.

ESRI software including ArcGIS Desktop, ArcGIS Server, ArcGIS Online and AutoDesk applications including AutoCAD.

Capabilities of automated mapping and geographic information processing systems.

Cartographic principles, automated mapping, GIS database design and structure.

Database analysis and design.

Complex GIS analysis techniques.

Principles and methods of technical problem solving.

Local, County, State and Federal statutes, laws, ordinances and rules as they apply mapping requirements.

Skill to:

Effectively utilize GIS technology.

Compute rates, ratios and percentages.

Analyze, identify and interpret technical and numerical information.

Develop, implement, and document computer systems and procedures in accordance with City standards.

Safely operate a motor vehicle.

Ability to:

Prepare a variety of correspondence and complex reports.

Communicate effectively both orally and in writing.

Establish and maintain effective working relationships with others in the performance of assigned duties.

Interpret and explain technical policies and procedures associated with GIS operations.

Handle multiple projects and responsibilities simultaneously while meeting deadlines.

MINIMUM QUALIFICATIONS

Education:

Bachelor's degree from an accredited college or university with major course work in geography, engineering, land surveying or a closely related field.

AND

Experience:

Three years, increasingly responsible experience operating, implementing and maintaining automated mapping and/or Geographic Information Systems (GIS).

Special Requirement(s):

Possession and maintenance of a valid California Driver's License is required during the entire term of employment in this classification.

APPROVED: (Signature on file)
Director of Personnel Services

DATE: 01/21/2020