

SENIOR GEOGRAPHIC INFORMATION SYSTEM ANALYST

DEFINITION

To plan, organize, direct and supervise professional and technical level work as it relates to Geographic Information Systems (GIS) management and analysis; and to perform a variety of complex and difficult spatial problem solving, analytics, and decision support tasks relative to assigned area of responsibility.

DISTINGUISHING CHARACTERISTICS

The Senior Geographic Information Systems Analyst class recognizes positions that perform advanced journey level duties, including first-line supervisory responsibilities over professional and technical staff and are responsible for significant projects and/or program area(s) within a work unit or department.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from assigned management personnel.

Exercises direct supervision over professional and technical staff.

EXAMPLES OF ESSENTIAL DUTIES - Duties may include, but are not limited to, the following:

Recommend and assist in the implementation of goals and objectives; establish schedules and methods for analyzing a variety of GIS data and preparing associated reports for use by assigned department.

Plan, prioritize, assign, supervise and review the work of staff involved in a variety of analyses, review, mapping and related data preparation.

Design and/or modify GIS scripts as necessary to accommodate the needs of a variety of users; verify accuracy of digitized data to ensure accuracy and quality of automated information.

Participate in budget preparation and administration; prepare cost estimates for budget recommendations; submit justifications for services, materials and supplies; monitor and control expenditures.

Participate in the selection of staff; provide or coordinate staff training; evaluate employee work performance; work with employees to correct deficiencies; implement discipline procedures.

Apply understanding of geodatabase design and creation; create feature datasets, feature classes, and tables in a geodatabase; create and use subtypes and domains.

Coordinate GIS functions and uses with other departments, other agencies/jurisdictions, engineers,

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developers, and the general public; provide support to departments, agencies, and the public regarding GIS and identify and resolve related concerns.

Supervise and participate in emergency preparedness planning and implementation activities to facilitate the work of City departments, other public and social service agencies; provide information and training regarding GIS functions related to emergency situations.

Participate, as assigned, in City committees and teams to provide input to GIS planning and implementation strategies and work plans; provide technical assistance as needed.

Perform project management including the development and monitoring of project timelines project objectives.

Determine and evaluate the positional accuracy, attribute accuracy, logical consistency, and completeness of data.

Perform data exploration, geostatistics, and data mining; identify spatial relationships and patterns and then display those using maps, graphics, or tabular data.

Build and analyze business cases; design and facilitate productive meetings with stakeholders to elicit requirements and use cases; create visual representations of complex business processes.

Review, analyze and evaluate business applications and users' needs.

Provide technical advice and expertise to staff and other departments regarding GIS.

Assist in development of policies and procedures; oversee implementation and enforcement of policies and procedures.

Build and maintain positive working relationships with co-workers, other City employees and the public using principles of good customer service.

Perform related duties as assigned.

MINIMUM QUALIFICATIONS

Knowledge of:

Advanced principles and practices of Geographic Information Systems (GIS) including analytical methods applied in spatial problem solving, design of analyses, techniques for graphical representation, and geodatabase design.

Algebra, geometry and trigonometry, especially as related to computation of distances, angles and areas.

Methods of advanced research, analysis, and management related to GIS applications and databases.

Use of ESRI-based ArcGIS suite of software and related applications.

Principles and practices of supervision, training and performance evaluation.

Principles and practices of project management and business analysis.

Records storage and handling techniques.

Customer service principles.

Ability to:

Organize, implement, supervise and perform the more complex professional level GIS work.

On a continuous basis, know and understand all aspects of the job; frequently analyze work papers, reports and special projects; identify and interpret technical and numerical information; observe and problem solve operational and technical policy and procedures.

On a continuous basis, sit at desk for long periods of time; may intermittently walk or bend to observe field sites; intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone, and write or use a keyboard to communicate through written means; and lift or carry weight of 10 pounds or less.

Prepare written protocols for difficult and complex GIS usage.

Solve complicated procedural issues by identifying alternatives and making recommendations.

Design and develop sequential processing of tasks to solve spatial problems, visualize spatial relationships, and perform spatial analysis.

Use key components of project management such as timelines, milestones, scope, resource scheduling, and risk analysis.

Analyze, diagnose, and troubleshoot GIS application problems.

Train, instruct and provide technical assistance to users in access to and use of the GIS.

Develop and implement processes to grow and develop team capabilities; effectively lead cross-functional and project teams.

Develop and manage technical projects related to GIS implementation, analysis, decision support, and data collection.

Perform business analysis functions such as creating business cases, eliciting requirements, and diagramming business processes.

Work weekends or evenings, as required.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Experience and Training

Experience:

Two years of responsible experience performing duties similar to that of a Geographic Information System Analyst II with the City of Roseville.

AND

Training:

A Bachelor's degree from an accredited college or university in geographic information systems, computer science, information systems, engineering or a related field.

License or Certificate

Possession of a valid California drivers' license by date of appointment.

11-25-17 Senior Geographical Information Systems Analyst