

**CLASS SPECIFICATION**

**SAN DIEGO CITY CIVIL SERVICE COMMISSION**

**GEOGRAPHIC INFORMATION SYSTEMS ANALYST III - 1143**

**DEFINITION:**

Under direction, to provide technical support to end users in the day-to-day operation of geographic information systems (GIS); to perform a variety of complex technical and analytical duties relating to the development, testing, implementation, integration, and modification of GIS datasets and GIS related applications; to lead the activities of other professional and subprofessional GIS personnel; and to perform related work.

**DISTINGUISHING CHARACTERISTICS:**

This is the super-journey/lead classification in the Geographic Information Systems Analyst series. This class is distinguished from Geographic Information Systems Analyst II and Geographic Information Systems Analyst I in that Geographic Information Systems Analyst III positions are responsible for performing the most complex and responsible GIS work, and/or leading the activities of professional GIS staff. Positions not performing lead duties are expected to be technical specialists in a range of complex projects and applications involving multiple divisions and departments. Reliance on outside technical expertise or resources is more limited than at the journey-level.

**\* EXAMPLES OF DUTIES:**

- Plans, implements, and manages multiple projects including the coordination of work, establishing priorities, and managing project status;
- Designs, tests, and integrates GIS databases into City workflows and applications;
- Coordinates applications training programs;
- Prepares budgets and budget estimates for GIS software, hardware, and related equipment by researching item specifications, costs, and delivery requirements and makes recommendations for purchase;
- Performs complex spatial analysis including three-dimensional rendering/modeling;
- Updates GIS programming and related technologies (Internet/Intranet mapping, databases/SDE);
- Provides technical guidance to staff involved in interpreting satellite photos, cartography, data analysis, experimental design, and capturing data for conversion into GIS usable formats;
- Coordinates data acquisition and exchanges and project scheduling with outside agencies;
- Uses demographic information to develop reports, maps, and other analyses and create visual or graphic representation of information and ideas;
- Uses forecasting models to analyze a variety of interdependent variables such as geospatial data;
- Creates customized tools and menus for new and existing applications;
- Develops logic and writes programs using development tools and programming languages;

**\* EXAMPLES OF DUTIES performed by employees in this class. The class may not include all required duties, nor are all listed tasks necessarily performed by everyone in this class.**

- Researches and analyzes trends and patterns and develops testing methods to implement solutions;
- Presents results of analysis in chart, table, map, and/or narrative format;
- Performs complex data analysis in support of data development and maintenance and develops and maintains appropriate datasets for the purpose of analysis;
- Maintains quality control of large datasets/warehouses and converts and loads data in GIS data repositories;
- Constructs or develops scientific/statistical experiments and analytical computer models to support decision-making;
- Conducts presentations;
- Participates in the establishment of GIS strategies, plans, and procedures;
- Reviews new technology to determine suitability for department use;
- Represents the department on a variety of committees;
- Recommends database design needed to accommodate converted/imported data and replicates, enhances, and restructures data to fit department needs;
- Leads the work of professional staff and may supervise subprofessional staff in a variety of GIS activities;
- Prepares and presents technical and/or management reports;
- Researches and directs major conversion/maintenance projects involving multiple divisions and/or departments;
- Performs project and contract management and coordination;
- Evaluates contracts;
- Leads problem and/or process identification and recommends improvements and modifications.

**MINIMUM QUALIFICATIONS:**

Please note: the minimum qualifications stated below are a guide for determining the education, training, experience, special skills, and/or license which may be required for employment in the class. These are re-evaluated each time the position is opened for recruitment. Please refer to the most recent Job Announcement for updated minimum qualifications.

A Bachelor's degree or equivalent education (i.e., minimum completed units equal to 120 semester/180 quarter units); **AND** three years of full-time professional geographic information systems experience (within the last 6 years), one year of which must have been equivalent to the City of San Diego's classification of Geographic Information Systems Analyst II.