## GIS ANALYST I/II
Salary Ranges:  31/39 (Public Service Employees)

## DEFINITION
Under direction, applies knowledge of Geographic Information Systems (GIS) to a variety of projects for analytical purposes; designs, compiles, and analyzes data; prepares data analysis, maps, and mapping applications for various City departments and the general public.

## DISTINGUISHING CHARACTERISTICS
This is a single class with two salary levels that recognize the degree of complexity associated with the programs, systems, and project based assignments. The level at which initial appointments are made is at the discretion of the appointing authority.

### GIS Analyst I
This is the entry level class within the GIS Analyst series. Under close supervision, incumbents perform a variety of technical operational duties. As experience and knowledge are acquired, incumbents are expected to perform increasingly responsible and difficult assignments. At the discretion of the appointing authority, incumbents may advance to the higher level after demonstrating they can perform their work independently.

### GIS Analyst II
This is journey/lead worker level class within the GIS Analyst series and the targeted competency and performance level expected of all GIS Analysts. Incumbents are technically proficient in performing their assigned duties at a high level of independence under minimal direction. Incumbents may train, assign, and monitor work of GIS Analysts (Level I) and other technical, clerical, and administrative personnel.

## SUPERVISION RECEIVED AND EXERCISED
Incumbents receive direct or general supervision from the Public Services Manager, or other management level classification, and may receive technical and functional direction from professional City staff.  Incumbents may directly supervise or provide direction to technical, clerical, and administrative personnel.

## EXAMPLES OF DUTIES, KNOWLEDGE, AND ABILITIES
Duties may include, but are not limited to the following:
- Conducts complex spatial/surface analysis using a variety of modules and GIS software; utilizes multiple databases and GIS software to perform spatial analysis for more difficult special projects working with a team of users, from the City and other organizations, involving a major policy area or concern.
- Maintains and enhances GIS data sets, according to evolving needs and resources including digitizing, editing, researching, creating, calculating, and editing of attributes and merging of data from different sources; adds new data and manipulates existing data in multiple work files; performs high-level manual and/or visual review of preliminary data and final products to ensure usability and accuracy of all data entering

the system.
- Meets with users to define data needs, project requirements, project output, and/or develop applications; analyzes GIS needs of City departments and implements GIS programs, databases, and related products for City departments and outside agencies; prepares and coordinates project scopes, procedure flow-charts, and schedules with customers and programmers.
- Conducts Global Positioning Systems (GPS) surveying and data post-processing or GIS database development efforts.
- Creates and edits geospatial data, using GPS and digitizing techniques; creates and edits maps, integrating a range of data formats, and using state-of-the-art technology.
- Creates GIS software programming applications.
- Interfaces and serves as liaison with clients in the serving of special requests and operational issues; ensures that GIS products are delivered within a timeframe acceptable to the client; coordinates advanced level support and expertise for more difficult GIS applications.
- Attends training meetings and upgrades knowledge of GIS systems; applies and documents new techniques as they are implemented.
- Evaluates operations and makes recommendations about the GIS program direction and procedure modifications; develops or assists in developing policies and procedures for GIS processes.
- Performs related duties as assigned.

## EMPLOYMENT STANDARDS

### Knowledge of:
- ESRI-based GIS software and its applications, and related programming languages.
- Principles and practices of GIS, cartography, map projections and scales.
- Relational database management systems and principles.
- Data maintenance and conversion techniques.
- Complex GIS analysis techniques.
- Highly complex information technology issues.
- Principles and techniques of software and systems quality assurance and control.
- Principles and practices of technical problem solving.
- Team dynamics.
- Principles, practices and techniques of providing customer service.
- Principles and practices of producing effective project and technical documentation.
- Practices of effective communication of technical issues to user and client community.
- Pertinent local, County, State and Federal statues, laws, ordinances and rules as they apply mapping requirements.

### GIS Analyst II, in addition to above:
- Methods of advanced research, analysis, and management related to GIS system applications and databases

- Principles and practices of project management and workflow analysis.
- Principles and practices of employee supervision, including work planning, assignment review and evaluation, discipline, and the training of staff in work procedures.

**Ability to:**
- Perform complex analytical tabular and spatial queries.
- Integrate complex disparate spatial and tabular databases.
- Maintain GIS standards.
- Plan, organize, coordinate, and prioritize work.
- Effectively communicate both orally and in writing.
- Outline and systematically solve complex requests.
- Work independently and in a team environment.
- Effectively manage multiple projects and priorities.
- Integrate information technology systems.
- Recognize problems and develop recommendations and solutions.
- Promote and maintain a team environment.
- Work effectively with clients, users and senior managers.

**GIS Analyst II, in addition to above:**
- Design and develop processing of tasks and perform spatial analysis.
- Read, interpret and apply complex technical publications and documentation.

**Minimum Qualifications:**
*Any combination of training and experience which would provide the required knowledge, skills and abilities is qualifying.  A typical way to obtain the required qualifications would be:*

**GIS Analyst I**
A Bachelor's Degree from an accredited college or university in Geographic Information Systems, Geography, Cartography, Civil Engineering, Computer Science, Information Systems, or a related field
<p align="center">**AND**</p>
One year of full time experience using AutoCAD, ERSI-based GIS software applications, databases and other relevant computer software, programs, and databases.

**GIS Analyst II**
A Bachelor's Degree from an accredited college or university in Geographic Information Systems, Geography, Cartography, Civil Engineering, Computer Science, Information Systems, or a related field
<p align="center">**AND**</p>
Three (3) years of experience working in a GIS related field, including experience with a wide variety of geographic information system applications.
<p align="center">**OR**</p>
Two (2) years of experience performing duties similar to those of a Geographic Systems Analyst I with the City of Rocklin.

## GENERAL QUALIFICATIONS

**License Requirements:**
A valid California Class C driver license or higher with a satisfactory driving record is required at the time of appointment. Individuals who do not meet this requirement due to a disability will be reviewed on a case-by-case basis.

**Physical Requirements:**
Incumbents must possess the mobility to work in a standard office setting and use standard office equipment, including a computer; vision to read printed materials and a computer screen; attend off-site meetings; hearing and speech to communicate in person, and over the telephone. This is primarily a sedentary office classification although standing in work areas and walking between work areas may be required. Finger dexterity is needed to access, enter and retrieve data using a computer keyboard, typewriter keyboard or calculator and to operate standard office equipment. Positions in this classification occasionally bend, stoop, kneel, reach, push and pull drawers open and closed to retrieve and file information. Positions in this classification occasionally lift and carry files, manuals, tools and equipment weighing up to 25 pounds for distances up to 50 feet.

**Working Conditions:**
Employees work partially in an office environment with moderate noise levels and controlled temperature conditions, and partially in the field and are occasionally exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives, and contractors in interpreting and enforcing departmental policies and procedures.

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This job specification should not be construed to imply that these requirements are the exclusive standards of the position. Not all duties are necessarily performed by each incumbent. Additionally, incumbents may be required to follow any other instructions and to perform any other related duties as may be required by their supervisor.