Geographic Information Systems Technician I/II

Summary
Collect, compile, input, and analyze Geographic Information Systems (GIS) data utilizing applications, standards, and schedules.

Class Characteristics
General supervision is provided by a higher-level supervisor or manager; responsibilities may include the indirect supervision of support staff.

Geographic Information System Technician I
The entry-level class in this technical class series. Incumbents are provided with training to enable them to gather, analyze, and perform routine data maintenance for the GIS systems, and formulate recommendations based on established criteria in the area of assignment. Generally, work is observed and reviewed during performance and upon completion. Changes in procedures or exceptions to rules are explained in detail as they arise.

Geographic Information System Technician II
The journey-level class in the series, distinguished from the entry-level in that the technical work assignments for the GIS Technician II are performed more independently and incorporate previously learned practices and principles.

Both positions will be responsible for the creation and maintenance of the department or division's GIS data sources, utilizing applications, standards, and schedules developed by the GIS division.

Essential Duties, Skills, and Demands of the Position
The duties, skills, and demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with a disability to perform the essential duties, skills, and demands.

Duties:
Collection and research of data (field studies, records reviews, statistical analysis, etc.).

Compilation and input of data into GIS and related applications.

Conduct GIS queries and analysis of departmental data sources in order to develop decision-making tools critical to departmental and divisional needs.

Creation of graphical and tabular output such as maps, charts, and reports for use in project analysis, council presentation, public reference, etc.

Assist in the maintenance of map records and related documents.

Train users in the use of GIS and related software, workstations, printers and plotters, and GIS networking systems.

Operate GIS workstations, related peripherals, and communications networks.

This position may also be responsible for other systems and data related to the department or division's function, such as Computer Aided Design (CAD), web development, and other mapping related applications.

Perform related duties as assigned.

<u>Skills/Abilities:</u>
Read, analyze, and interpret common scientific and technical journals, financial reports, and legal documents.

Respond to common inquiries or complaints from customers, regulatory agencies, or members of the business community.

Work with mathematical concepts such as probability and statistical inference and fundamentals of plane and solid geometry and trigonometry.

Apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

Define problems, collect data, establish facts, and draw valid conclusions.

Interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.

Learn to effectively prepare maps using the commonly accepted practices of cartography.

Update and manage computer file systems; understand and conceptualize spatial data.

Operate office equipment including computers and supporting word processing, spreadsheet, and database applications.

Communicate clearly and concisely, both orally and in writing.

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

<u>Physical Demands and Work Environment:</u>
While performing the duties of this job, the employee is regularly required to sit, use the computer keyboard and mouse, use hands to finger, handle, or feel, reach with hands and arms, talk or hear, stand, walk, and stoop, or crouch. Occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus. Requires the ability to work in an office environment where the noise level is usually moderate.

Qualifications
<u>Knowledge of:</u>
GIS software, including Environmental Systems Research Institute (ESRI) Arc suite of software products, AutoCAD, and Microsoft Office suite and basic knowledge of web development, applications and common GIS programming languages including Python, JavaScript, HTML, and SQL.

Office procedures, methods, and equipment including computers and applicable software applications such as word processing, spreadsheets, and databases.

<u>Education and Experience</u>
Any combination equivalent to the education and experience likely to provide the required knowledge and abilities would be qualifying. A typical way to gain such knowledge and abilities would be:

Geographic Information System Technician I
Education:
Equivalent to an Associate's degree with major course work in geography, GIS, computer science, or a related field.

Geographic Information System Technician II
Education:
A Bachelor's degree from an accredited college or university with major course work in geography, GIS, computer science, or a related field is highly desirable.

Geographic Information System Technician I
Experience:
One year related experience and/or training.

Geographic Information System Technician II
Experience:
Two years related experience and/or training.

Certificates/Licenses:
Possession of a valid California Class C driver's license.

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