

## San Diego Association of Governments

# GIS Analyst I/II/Associate

**SALARY** \$65,478.00 - \$123,427.00 Annually **LOCATION** 401 B Street, San Diego

JOB TYPE Full-Time REMOTE Flexible/Hybrid

**EMPLOYMENT** 

**DEPARTMENT** Data Science **DIVISION** Geographic Information Systems

**OPENING DATE** 06/03/2024 **CLOSING DATE** 6/21/2024 11:59 PM Pacific

FLSA Non-Exempt

## Description

#### Overview of the GIS Division

Environmental conservation, population and economic growth forecasting, land use scenario modeling, and innovative GIS database development, maintenance, analysis, and visualization. These are a few examples of the priority project areas our Regional Information Systems group is working on. As a member of this team, the intern will gain exposure to the industry-leading work SANDAG is doing in these fields.

#### Role

The GIS Analyst is responsible for creating sophisticated mapping and visualization tools to help planners, modelers, and decision-makers visualize real-world events. The GIS Analyst will prepare maps and analyses, maintain and enhance urban land inventory and transportation network datasets, and design, develop, test, maintain, and document GIS databases and applications to support planning, research, and public safety programs. This position is ideal for a GIS professional with a strong interest in furthering their expertise performing specialized mapping and analysis in a regional planning environment.

#### Salary Range

This position will be filled at the I, II, or associate level depending on qualifications and experience of the selected candidate.

**Annual Salary Ranges:** 

GIS Analyst I: \$65,478-\$101,504 GIS Analyst II: \$72,197-\$111,925

Associate GIS Analyst: \$79,622-\$123,427

## Job Responsibilities

• Perform GIS analyses, develop GIS models and databases, design and prepare maps, and create other GIS-related

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products.

- Design, develop, integrate, and maintain geographic information databases, and related tables, forms, and reports
  used to support regional planning, asset management, capital improvement projects, and public safety data and
  application workflows.
- Support the ongoing development and maintenance of SPACECORE and TNED databases and application tools; edit and code land inventory and active transportation network data in a production environment.
- Prepare, design, and produce a variety of maps and other graphic representations displaying layers and attribute data from databases; develop and maintain data layers using GIS tools and relational databases.
- Perform complex spatial analysis; interpret detailed plans, aerial imagery, maps, and legal descriptions; code and digitize spatial and non-spatial data into various GIS layers; perform quality control checks to ensure integrity.
- Perform GIS data maintenance, manipulation, analysis, extraction, and generation; perform data research, investigation, and verification.
- Consult with staff to determine product and information needs and develop effective, efficient responses to GIS-related requests.
- Develop and implement automated procedures and programs to make routine geoprocessing workflows faster and more efficient; use object-oriented programming and relational database technologies to enhance systems and add functionality to new or existing applications.
- Assist with the ongoing development and maintenance of web sites, desktop, and mobile applications; review and analyze current applications to identify opportunities for enhancement.
- Develop visualization applications and tools to enhance effective decision-making by staff and regional stakeholders.
- Prepare and maintain technical documentation of databases and geoprocessing programs and procedures; prepare and manage metadata; maintain accurate and organized records.
- Coordinate with state and local technical committees and agencies to share GIS expertise; jointly develop GIS databases, applications, and resources.
- Participate in inter-departmental, inter-agency, and binational project teams assembled for land use, demographic, and econometric modeling, analyses, and planning.
- Prepare and present written, oral, and visual reports to policy and stakeholder committees, upper management, member agencies, and working groups.

## **Typical Qualifications**

- A bachelor's degree with major course work in geography, planning, computer science, information technology, software engineering, or a related field A Master's degree is desirable. A combination of education and recent work experience may be considered in lieu of a degree.
- One to three years of recent career experience in a GIS or a research-oriented field.
- Demonstrated knowledge of GIS concepts, principles, practices, and techniques, including cartography, design principles, and map creation techniques.
- Experience with ESRI's ArcGIS Pro software; experience using ArcGIS Enterprise, Spatial Analyst, 3D Analyst, and Network Analyst extensions are desirable.
- Experience designing geodatabases with ArcGIS architecture; experience compiling and integrating data from multiple GIS sources.
- Demonstrated experience with relational database management systems such as Microsoft SQL Server; a working

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knowledge of query design using the SQL programing language and knowledge of Python is desirable.

- Working knowledge of GIS web services, ArcGIS Enterprise and/or Online (AGOL) environments, and web mapping
  and application development are desirable.
- Working knowledge of emerging GIS technologies for data management, analysis, and visualization.
- Strong computer skills and proficiency with the Windows operating system and Microsoft Office applications, especially Word, Excel, and PowerPoint.
- Demonstrated ability to maintain and effectively document GIS databases, models, programs, and applications.
- Ability to work independently and develop GIS procedures that improve process, workflow, and analytic capabilities.
- Knowledge of technologies and methods used to create digital orthorectified imagery and terrain data and basic image processing concepts is desirable.
- Experience working with end-users to determine GIS needs and developing applications, maps, and other products that best meet those needs.
- Excellent organizational skills, attention to detail, and the ability to maintain accurate records and work on concurrent projects.
- Strong interpersonal, written, and oral communication skills, including the ability to effectively communicate technical information to non-technical audiences.

#### **Benefits**

We offer a complete benefits package to full-time employees including:

- Hybrid work options
- 9/80 flexible work schedule
- Pay-for-performance merit increases
- Retirement Defined Benefit Plan with the California Public Employees' Retirement System (CalPERS)
- Retirement 457 Defined Contribution Plan with Voya
- Excellent health insurance options for employees and their eligible dependents
- Free dental and vision insurance for employees and their eligible dependents
- Education Assistance of up to \$5,250 a year for regular employees
- Free transit pass for use throughout the San Diego region, bus, Rapid Express, Trolley, and COASTER
- Paid time off including 12 paid holidays, 2 floating holiday days, generous paid time off (PTO) per year, depending on length of service

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