

# SNOHOMISH COUNTY JOB DESCRIPTION

## GIS ANALYST, PRINCIPAL

Spec No. 3410

### BASIC FUNCTION

Performs highly complex duties in support of County and departmental Geographic Information Systems (GIS) databases and services. Serves as project lead in design, testing, implementation and maintenance of large-scale GIS applications, tools, and associated databases. Evaluates and formulates GIS technologies, solutions, policies, standards, and procedures. Takes a leadership role in establishing workflows between departments, working in coordination with the Department of Information Technology (DoIT).

### STATEMENT OF ESSENTIAL JOB DUTIES

1. Meets with customers to define business and functional requirements to ensure applications and work products meet customer needs; works with customers, consultants, and DoIT on planning, design, development, configuration, testing, implementation, and maintenance of large-scale GIS applications, web portals, and backend processing modules.
2. Performs advanced programming and development of large, multi-function, cross-platform applications involving one or more interfaces with multiple end users.
3. Performs highly complex duties focused on data analysis and visualization; writes reports, prepares complex maps, and produces GIS products.
4. Develops department and county-wide spatial database directory structure, schema, and configuration per county specifications.
5. Lead responsibility and technical expert for enterprise-level GIS services, technology, policies, standards, and procedures with other County professionals in coordination with DoIT.
6. Configures, monitors, and optimizes the spatial database integration processes, versioning, data backup, security, and archiving of enterprise-wide GIS datasets.
7. Assigns, schedules, and coordinates workloads among departmental GIS staff; plans and manages multiple projects and provides guidance to project teams.
8. Evaluates industry trends, emerging technologies, and scientific principles for application to County GIS systems.
9. Reviews cartographic products and geographic analyses to ensure accuracy and completeness; provides quality assurance and quality control for projects.
10. Promotes GIS services to clients; manages customer relationships.
11. Develops and provides GIS training.

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### STATEMENT OF ESSENTIAL JOB DUTIES (Continued)

12. Assists with interpreting, updating, revising, design, and maintenance of maps, surveys, plats, legal descriptions, codes, decisions, and reports; supports and manages the interpretation, acquisition, processing, and workflows of remotely sensed data, aerial photography, and satellite imagery.
13. Researches and collects data from county and non-county sources for applications, products, and services.

### STATEMENT OF OTHER DUTIES

14. May be required to perform all the duties of subordinate classifications.
15. Performs other duties as assigned.

### MINIMUM QUALIFICATIONS

Bachelor's Degree in GIS, geography, computer science, engineering, planning, natural resources or related field; AND four (4) years of progressively responsible experience in GIS project management in a lead position, developing, conducting, or supporting GIS applications in engineering, planning, or natural resource fields; OR any equivalent combination of training and/or experience that provides the required knowledge and abilities. Must pass job related tests.

### PREFERRED QUALIFICATIONS

Master's Degree preferred.

### SPECIAL REQUIREMENTS

A valid Washington State Driver's license may be required in some divisions for employment.

### KNOWLEDGE AND ABILITIES

Knowledge of:

- current GIS technologies and industry trends
- analytical, problem-solving, and troubleshooting skills
- visual communication and data mapping theories
- GIS application development, programming, and/or GIS related technologies
- GIS production of complex cartographic and other spatial data displays
- GIS web-mapping applications served to internal and external users
- project management, planning, organization, and customer service skills
- database techniques to process and analyze geo-spatial datasets

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### KNOWLEDGE AND ABILITIES (Continued)

- scientific research and data collection techniques
- User Acceptance Testing, metadata, hardware/software configurations, and GIS standards

Ability to:

- provide expert technical skills in the application of current GIS technologies
- communicate effectively by oral, written, and other graphical means
- read, understand, and apply technical manuals and procedures
- maintain required records and prepare necessary reports
- independently analyze problems and assist others in GIS analysis
- apply critical thinking and problem solving skills to business needs
- learn new programs, platforms, and tools to finish specific analysis and tasks
- complete multiple competing projects and meet deadlines
- effectively function as a team member
- analyze customer needs and business systems
- convey technical information to non-technical users
- train users in GIS products and promote GIS solutions
- work with a variety of individuals from diverse backgrounds
- understand disciplines of the assigned department and its divisions
- lead, plan, and supervise the work of GIS staff for the needs of the department

### SUPERVISION

Employees receive supervision from a Division Manager or Supervisor. The employee carries out assignments on his/her own initiative and receives additional, specific instructions when relevant. Work is performed with a high degree of independence and is reviewed periodically for conformance with established departmental policies, procedures, and quality assurance standards.

### WORKING CONDITIONS

The work is performed in an office environment with some field trips to locations throughout the county for the purpose of data collection, quality control, and to increase understanding of projects. Prepares for and provides GIS support during emergency situations including floods, earthquakes, and storms. When on call, employees may be required to carry a County mobile phone, have connectivity and be available to work evenings, weekends, and holidays.

Snohomish County is an Equal Employment Opportunity (EEO) employer. Accommodations for individuals with disabilities are provided upon request.

[EEO policy and ADA notice](#)

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Class Established: February 2017  
Previous Spec No. 3300, 3280  
EEO Category: 2 - Professionals  
Pay Grade: 245 - Classified Pay Plan  
Workers Comp: 5306 Non-Hazardous