Geographic Information Specialist

CLASS TITLE	CLASS CODE	SALARY GROUP	SALARY RANGE
GEOGRAPHIC INFORMATION SPECIALIST I	0270	B18	$45,521 - $71,055
GEOGRAPHIC INFORMATION SPECIALIST II	0271	B20	$51,158 - $81,351
GEOGRAPHIC INFORMATION SPECIALIST III	0272	B22	$57,614 - $93,138
GEOGRAPHIC INFORMATION SPECIALIST IV	0273	B24	$65,104 - $106,634
GEOGRAPHIC INFORMATION SPECIALIST V	0274	B26	$76,530 - $129,430

GENERAL DESCRIPTION

Performs geographic information system work involving the input and manipulation of geographic information in order to create, maintain, display, update, and produce accurate maps and other representations of data.

EXAMPLES OF WORK PERFORMED

Creates and modifies maps, graphs, and/or diagrams, using geographical information software and related equipment.

Compiles, evaluates, and interprets geographic data from various sources including censuses, field observations, satellite imagery, aerial photographs, and existing maps; enters required data into a geographic information system.

Digitizes, analyzes, and maintains spatial databases of relevant information, documents procedures, validates data for accuracy and completeness, completes approved metadata forms, and produces maps of the resulting information.

Translates data from outside sources and converts data to assist users.

Imports, creates, reformats, and processes data to produce spatial distribution maps for various studies.

Performs related work as assigned.

DESCRIPTION OF LEVELS

Examples of work and descriptions are meant to progress through the levels. For example, an employee at level V may also perform work listed within the previous levels.

***Note**: Factors that may distinguish between journey levels include the degree of independence in performing the work and the complexity of the work and may include the employee's years of related experience, education, and certifications. Employees at the journey levels may independently perform the full range of work listed in the examples or may assist others in that work.*

GEOGRAPHIC INFORMATION SPECIALIST I: Performs routine (journey-level) geographic information system work. Works under moderate supervision, with limited latitude for the use of initiative and independent judgment. Employees at this level may have limited experience or no experience and spend the majority of their time performing simple to routine work following standard procedures.

GEOGRAPHIC INFORMATION SPECIALIST II: Performs complex (journey-level) geographic information system work. Works under general supervision, with moderate latitude for the use of initiative and independent judgment. Employees at this level may work more independently than those at the previous levels and may routinely assist other staff in performing work of greater complexity. Employees may:

- Maintain and update databases using applicable geographic software, and enter, correct, and debug records.
- Write programs and develop user interfaces, menus, and macro-level commands to meet user needs.
- Resolve record or mapping discrepancies through data research and address inquiries.

Note*: A senior-level employee (levels III-V) may serve in a lead or supervisory role; however, supervisory responsibilities within this job classification series will normally be found at levels IV and V.*

A senior-level employee may perform the full range of work identified in the preceding levels and may coordinate, evaluate, or oversee that work for others. Factors that may distinguish between senior levels include the scope of responsibility and oversight, the size and complexity of geographic information system projects, and the employee's related experience, education, and certifications. Other factors may include the type, nature, scope, and complexity of the assigned project.

GEOGRAPHIC INFORMATION SPECIALIST III: Performs highly complex (senior-level) geographic information system work. Works under limited supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may:

- Conduct research to ensure accurate use of data and to resolve conflicting information.
- Provide consulting services in fields such as resource development and management, environmental hazards, transportation management, regional cultural history, and urban social planning.

GEOGRAPHIC INFORMATION SPECIALIST IV: Performs advanced (senior-level) geographic information systems work. Works under minimal supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may fully perform highly complex geographic information system projects and may:

- Oversee the entry and validation of database records and ensure that data quality and information is reliable and consistently maintained.
- Coordinate and/or perform the identification, gathering, and compiling of required geographic data from sources including censuses, field observations, satellite imagery, aerial photographs, and existing maps.

- Provide parameters for digitizing and maintaining spatial databases of relevant information, including documenting procedures, validating data for accuracy and completeness, and completing approved metadata forms.

GEOGRAPHIC INFORMATION SPECIALIST V: Performs highly advanced and/or supervisory (senior-level) geographic information system work. Works under minimal supervision, with extensive latitude for the use of initiative and independent judgment. Employees at this level may be considered technical experts in the field and may plan strategies to improve geographic information systems and consult with other entities regarding the coordination of resources.

GENERAL QUALIFICATION GUIDELINES

EXPERIENCE AND EDUCATION

Agencies have the discretion to identify the general or specialized experience, education, or certifications required for positions and may tailor qualification requirements to specifically meet the agency's business needs. Agencies may substitute experience, education, military service, apprenticeships, and relevant credentials for one another, if appropriate and allowed by statute.

KNOWLEDGE, SKILLS, AND ABILITIES

For all levels

- Knowledge of terminology related to geographic information systems, including legal descriptions, cartography, engineering, construction plans, aerial photography, and orthophotography.

- Skill in solving problems; in testing, installing, and implementing geographic information system programs; in the use of applicable software; and in troubleshooting system issues.

- Ability to analyze geographic information systems and procedures; to read and interpret surveys, legal descriptions, cartography, engineering documents, construction plans, aerial photography, and orthophotography; and to communicate effectively.

Additional for Geographic Information Specialist III - V levels

- Ability to oversee and/or supervise the work of others.