GENERAL DESCRIPTION

Performs routine (journey-level) geographic information system work. Work involves input and manipulation of geographic information to create, maintain, display, update, and produce accurate maps and other representation of data. Works under moderate supervision, with limited latitude for the use of initiative and independent judgment.

EXAMPLES OF WORK PERFORMED

Creates and modifies maps, graphs, 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.

Assists in writing programs and developing user interfaces, menus, and macro-level commands to meet user needs.

Assists in providing consulting services in fields such as resource development and management, environmental hazards, regional cultural history, and urban social planning.

Assists with the entering, correcting, and debugging of database records.

Assists with evaluating data from outside sources to determine the quality of the data and to resolve record or mapping discrepancies.

Performs related work as assigned.
GENERAL QUALIFICATION GUIDELINES

EXPERIENCE AND EDUCATION

Experience in geographic information systems analysis and design work. Graduation from an accredited four-year college or university with major coursework in computer science, computer information systems, geography, geographic information systems technology, management information systems, or a related field is generally preferred. Education and experience may be substituted for one another.

KNOWLEDGE, SKILLS, AND ABILITIES

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.