GENERAL DESCRIPTION

Performs advanced (senior-level) geographic information systems (GIS) work. Work involves coordinating and/or performing the input and manipulation of geographic information to create, maintain, display, update, and produce accurate maps and other representation of data. May supervise the work of others. Works under minimal supervision, with considerable latitude for the use of initiative and independent judgment.

EXAMPLES OF WORK PERFORMED

Oversees and/or creates and modifies maps, graphs, or diagrams using geographical information software and related equipment including those of high complexity.

Oversees the entry and validation of database records, and ensures that data quality and information is reliable and consistently maintained.

Coordinates and/or performs the identification, gathering, and compiling of required geographic data from sources including censuses, field observations, satellite imagery, aerial photographs, and existing maps.

Creates, develops, or modifies programs, user interfaces, menus, and macro-level commands to meet user needs.

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

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

May supervise the work of others.

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; to communicate effectively; and to supervise the work of others.