#### GEOGRAPHIC INFORMATION SYSTEM TECHNICAL ADMINISTRATOR 2

#### Nature of Work

Under general supervision, performs full-performance level administrative and technical work in operating and managing GIS hardware and software resources. Work involves design, operation, and management of GIS hardware and software resources within the context of programs and policy directives. Work includes coordination of GIS hardware and software activities; assistance in managing GIS hardware, software, and service vendor contracts; participation in planning and organizing system development activities; and other GIS hardware and software-related activities. Supervision is exercised over a staff of subordinate GIS staff positions. Work is performed independently within established policies, procedures, and guidelines and is reviewed through reports, conferences, and system performance. Performs related work as required.

### Distinguishing Characteristics

This is full-performance level work where the incumbent is given more complex assignments. At this level, the incumbent supervises a staff of subordinate GIS staff positions.

### Examples of Work

- Manages hardware and software resources of GIS; confers and coordinates with GIS Manager, user organizations, and GIS personnel to determine user needs.
- Oversees all GIS hardware and software operations; supervises directly or through GIS staff and groups all activity associated with implementation, operation, and enhancement of GIS hardware and software.
- Assists in coordinating contracts with GIS hardware, software, and related service vendors.
- Oversees installation, testing, and acceptance of hardware and software.
- Responsible for adherence to applicable standards for computer hardware, software, and communication networks.
- Coordinates maintenance and service contracts with hardware and software vendors.
- Develops procedures for system backup and overseeing backup operations.
- Monitors performance and conducts system performance evaluations.

#### GEOGRAPHIC INFORMATION SYSTEM TECHNICAL ADMINISTRATOR 2 (CONT'D)

### Examples of Work (cont'd)

Oversees and optimizes data communications and monitors network transaction flow.

Responds to user questions and resolves system operation problems.

Evaluates requirements for system upgrades and contributes to the selection and procurement of hardware, software, and related services.

Performs and assists in application design and development.

# Knowledge, Skills and Abilities

Knowledge of automated mapping and spatial information processing methods and techniques.

Knowledge of the capabilities of automated mapping and geographic information processing systems.

Knowledge of cartographic principles, automated mapping, GIS database design and structure.

Knowledge of GIS hardware and software components, data communication, and network methods and techniques.

Ability to coordinate with GIS staff and users on system hardware and software needs and issues.

Ability to supervise subordinate GIS staff.

Ability to translate technical concepts and terminology in terms understandable to management, department officials, and system users.

Ability to establish and maintain effective relationships with user departments, administrative officials, and employees. Ability to communicate effectively, orally and in writing.

### Minimum Qualifications

Training: Bachelor's degree, including six semester hours in computer science or GIS from an accredited college or university. Preference may be given to those with degrees in geography, natural or earth sciences, cartography, geology, forestry, planning, environmental sciences, engineering, engineering technology, mathematics or a related field.

**Experience:** Five years of full-time or equivalent part-time paid experience in geographic information systems activities.

# GEOGRAPHIC INFORMATION SYSTEM TECHNICAL ADMINISTRATOR 2 (CONT'D)

# Minimum Qualifications (cont'd)

Substitution: Master's degree or a doctorate from an accredited college or university in any of the above fields may be substituted for two years of the required experience.

Established: 04/18/02 Effective: 05/01/02