#### GEOGRAPHIC INFORMATION SYSTEM TECHNICIAN

#### Nature of Work

Under general supervision, usually by a GIS Manager or senior GIS technical staff, this position involves entry-level technical work in multi-tier Geographic Information System (GIS) operations and services for a state agency or department. Duties include digital data entry and maintenance, executing applications, and producing maps and related graphic output and reports. Performs related work as required.

# Distinguishing Characteristics

Performs routine work in geospatial data collection, processing and analysis. This classification is regarded as beginning or training level work wherein an employee, under general supervision, is oriented to GIS work and may be trained to perform those duties through on-the-job experience.

## Examples of Work

- Performs low to mid-level GIS operations including manual data entry (e.g., digitizing, scanning, keyboard entry, etc.)
  Plot and map production, low-level GIS analysis, generating reports, and answering information requests.
- Assists with GIS hardware and software operations such as system setup and updates, installation and test, networking and peripheral device connectivity.
- Assists in investigating, evaluating and recommending new data sources, software, equipment and techniques for improving geospatial analysis and services.
- Assists in developing and following GIS database standards for content, format, design, maintenance and quality assurance procedures.

## Knowledge, Skills and Abilities

- Knowledge of basic automated mapping and geospatial processing methods, techniques and capabilities.
- Knowledge of basic GIS database structures and geographic data sources.
- Knowledge of basic cartographic principles and practices pertaining to map symbols, line work, colors and patterns, thematic content, etc.
- Knowledge of basic map scales, projections and coordinate
   systems.
- Ability to operate a computer keyboard, mouse and peripherals such as a digitizing cursor.

#### GEOGRAPHIC INFORMATION SYSTEMS TECHNICIAN (CONT'D)

## Knowledge, Skills and Abilities (cont'd)

Ability to gather and interpret basic geographic information from various data sources such as maps, graphs, charts, planimetric drawings, survey data, aerial photography and satellite imagery.

Ability to use basic automated methods and techniques for geospatial data input, processing and analysis.

Ability to understand basic geospatial technical concepts and terminology and to convey this information to supervisors, other employees, administrators and public officials.

Ability to effectively communicate orally and in writing. Ability to work in a collaborative team environment under minimal supervision.

## Minimum Qualifications

Training: Associate's degree, including six hours in computer science, computer mapping or computer aided drafting and design (CADD) or GIS from an accredited college or university with a major in geography, cartography, geology, natural or earth sciences, environmental sciences, landscape architecture, urban planning, land surveying, environmental engineering, computer science or a related field.

**Experience:** One year of full-time or equivalent part-time paid experience in computer mapping or GIS related activities, including digital map analysis, map display and digitizing procedure, and automated mapping or CADD drawing production.

**Substitution:** Bachelor's degree from an accredited college or university in the above fields may be substituted for the required training and experience on a year-for-year basis.

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