GIS TECHNICIAN

PURPOSE AND NATURE OF WORK

Position is responsible for the day-to-day operation of creating and maintaining graphical and attribute data sets using Geographical Information System (GIS) software. Work is technical and involves data management and raster imagery. Work is performed independently under the direction of an Information Services and Technology Manager or Engineering Supervisor.

ILLUSTRATIVE EXAMPLES OF WORK (Note: These examples are intended only to illustrate the various types of work performed by incumbents in this class. All of the duties performed by any one incumbent may not be listed, nor does any incumbent necessarily perform all of these duties.)

Inputs and extracts data from a central data repository and assists with data management and maintenance of data on a GIS server; including collecting data for mapping from various sources and converting it into GIS format. Performs data construction and maintenance, e.g., Coordinate Geography (COGO), data transformations, and annotation including updating various coverages such as parcels, road centerlines, subdivisions, school districts, etc. using GIS software. Preserves data integrity through quality assurance and quality control in the GIS databases, ensuring edit procedures are functioning properly. Assists in GIS production projects including preparation of various high-quality cartographic maps for presentation and performs spatial analysis for special projects and digital data requests.

Assists in designing and monitoring programs and procedures for users and provide technical assistance and training to staff in various departments in the basic steps for feature building and maintenance required for the GIS. Completes such tasks as coding, editing, and attributing maps and/or geographic feature data into various layers within the GIS. Creates and maintains metadata and/or writing documentation for user training and support. Assists in the expansion of the functionality of the GIS system to support all departments utilizing it. Assists with GIS database and application design tasks and works with project teams to define GIS application as related to individual department needs.

Performs related work as required.

NECESSARY KNOWLEDGES, ABILITIES, AND SKILLS

Considerable knowledge of personal computer operating systems.
Considerable knowledge of relevant GIS software.
Knowledge of personal computer applications and local area network and wide area network software.
Knowledge of automated mapping and spatial information processing methods and techniques.
Ability to communicate clearly and translate technical concepts and terminology in terms understandable to individuals with differing levels of expertise in computer use.
Ability to maintain effective working relationships with employees of different departments, public officials and the public.

DESIRABLE TRAINING AND EXPERIENCE

Graduation from an accredited four-year college or university with major course work in geography, computer science, planning, engineering or related field and experience working in a graphic information system environment; or an equivalent combination of training and experience.