GIS ANALYST

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) or CAD software. Work is distinguished from the GIS Technician by the level of complexity of the applications created, responsibilities involving the open data portal, and sophistication of analysis performed. Position works under the direction of an Information Services and Technology Manager and may serve as a lead worker but is non-supervisory.

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.)

Conduct needs assessments with end users to evaluate data requests. Builds, customizes, and maintains web applications using ArcGIS Online software to perform spatial analysis for special projects and digital data requests. Establishes and monitors types of user and privileges. Conducts training and supports end-users, writes documentation for application use, and supports customized applications. Edits data layers and tailors their usage for the web application, the type of user, or both.

Uploads to and maintains data for Lafayette Consolidated Government’s open data portal. Provides various data collection strategies to end users for data uploads to open data portal. Performs data quality control before uploading. Creates maps for frequently requested data and posts links through the portal’s website.

Configures inputs and outputs; monitors real-time data sets for accuracy and integrity, including the collection of data for mapping from various sources and converting it into a relevant format. Preserves data integrity through quality assurance and quality control in the GIS databases, ensuring effective edit procedures are adhered to.

Performs complex spatial analysis for special projects and digital data requests and prepares various high-quality cartographic maps as needed. Researches geospatial trends and related technologies to submit recommendations to management. Performs related work as required.

NECESSARY KNOWLEDGES, ABILITIES, AND SKILLS

Considerable knowledge of personal computer operating systems.
Considerable knowledge of relevant GIS software, including online development and data management tools.
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.