



## GIS ANALYST 2

**Classification Title: 642**  
**FLSA: Non-Exempt**  
**EEOC: 03**

### GENERAL STATEMENT OF DUTIES:

Employees at this level work under general supervision and are responsible for creating and maintaining Geographic Information System (GIS) databases, translating geographic and demographic data, programming, testing, configuring, updating, documenting, monitoring, evaluating, and/or supporting GIS systems software. Works under general / limited supervision on basic and more complicated routine GIS analytical/programming/systems projects with project deadlines. Serves as technical consultant to computing professionals, users and departmental management.

### DISTINGUISHING CHARACTERISTICS:

This classification series includes GIS Analyst 1, 2, and 3. The primary distinction between the GIS Analyst 1 and 2 is the 2 level requires an advanced level of analytical skills to determine what is needed and then develops systems and programs to meet division needs. The GIS Analyst 1 implements and maintains systems and programs. The GIS Analyst 2 works under the general supervision of a higher level professional employee who assigns work, establishes goals, and reviews work for conformance to technical standards and compliance with department goals and is considered the journey level in this series. Supervision of other employees is not a responsibility of positions in this classification, although employees in this class may serve in a project lead capacity.

### EXAMPLES OF DUTIES: (Duties may include, but are not limited to the following)

1. Identifies current and projected data processing needs, resources and system performance to plan new or modified applications; participates in research of new systems and modifications; participates in feasibility studies and cost/benefit analyses; provides technical support and training to system users.
2. Prepares detailed specifications, flow charts and diagrams from which programs will be written.
3. Assists in the creation of system prototypes; writes, modifies tests and documents programs; coordinates systems maintenance, testing and production runs; assists in devising schedules for implementation.
4. Maintains user accounts and system security.
5. Evaluates new applications/systems to determine if they meet user requirements; monitors and maintains systems.
6. Develops and programs GIS applications for internal use utilizing various programming languages including Visual Basic/ Map Objects and Avenue; creates original code, debugs application flow and design; performs documentation and testing.

7. Examines mapping products to determine and develop programs and methods of production.
8. Translates geographic and demographic data into formulas for data entry; writes programs for the creation of mapping products.
9. Maintains and updates multiple layers of information in the database that will be used to produce GIS products.
10. Provides technical assistance and formally trains users in the full use and operation of GIS; designs and evaluates GIS training classes and/or training materials
11. Installs, tests and debugs new and upgraded GIS software releases before implementation; adjusts applications for users' specific needs using simple functions, menus or AMLs; ensures compatibility with entire system; maintains and updates user documentation.
12. Coordinates with GIS Analyst 3 in assessing design of systems and multiple software applications as required by users to meet GIS needs.
13. Creates or maintains programs in various programming languages to facilitate assigned operations; generates tabular and digital reports from the GIS database; queries system to produce spatial reports.
14. Develops advanced application code using GIS methods that provide spatial analysis tools to increase productivity of customers and their products.
15. Performs related duties as required.

## **RECRUITING REQUIREMENTS**

### **KNOWLEDGE, SKILLS AND ABILITY:**

**Considerable Knowledge of:** : Applications programming techniques, systems maintenance and security; application development tools; principles and practices of data communication; computer hardware and systems software in supporting application systems; database management systems, principles and techniques; applicable computer programming languages. ARC/INFO or ArcGIS software and computer mapping techniques; data integrity control; legal descriptions pertaining to land ownership; cadastral principles; research methods to determine right of way and ownership history; principles of geographic mapping and cartography, mathematics, statistics and spatial data analysis.

**Skill and Ability to:** Establish controls and security measures; code, test and document applications; plan and coordinate program efforts to achieve data processing requirements and objectives; develop and implement data processing projects. Provide technical assistance or train others in the use of computer hardware and software; resolve user problems; communicate effectively with user divisions and technical staff; create and maintain databases; write computer programs for the creation of mapping products; digitize cartographic data. Operate and use personal computers and various other computer aided devices such as digitizers, scanners and plotters; define programming sequencing

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necessary to produce maps; interpret legal documents and translate legal descriptions into the database; distinguish gradations of color; understand and respond to mapping requests from the public; read, understand and work with a variety of mapping data; organize and write worksite instructions and procedures; code, test, debug, maintain and install computer applications and modify applications according to worksite requirements; establish and maintain effective working relationships with coworkers, the public and other agencies.

**EXPERIENCE AND TRAINING:**

1. Four-year degree from an accredited college with major course work in geography, planning, computer science, landscape architecture, or related disciplines; AND
2. Three (3) years of experience in the application of ARC/INFO or ArcGIS software; OR
3. Any satisfactory equivalent combination of education, training and/or experience relevant to the position.

Adopted: 2/99

Proposed: 2/99

Revised: 1/06