

**CLASS SPECIFICATION**  
**County of Fairfax, Virginia**

**CLASS CODE:** 1821

**TITLE:** GIS SPATIAL ANALYST II

**GRADE:** S-25

**DEFINITION:**

Under general supervision, develops user applications using the GIS and other databases; defines requirements for new layers of the Geographic Information System and ensures their compatibility with the existing database; interfaces with departments to determine GIS requirements, provide technical support and training; and performs complex spatial analysis to support business or project needs. Responds to requests for specific information by using existing or constructing new layers for the Geographic Information System; analyzes results and produces reports, maps and supporting documentation; and performs related work as required.

**DISTINGUISHING CHARACTERISTICS:**

This is journey or full performance level GIS programmer/analyst work. The GIS Spatial Analyst II is distinguished from the GIS Spatial Analyst I by at least one of these factors: developing applications to facilitate spatial analysis; conducting a wide range of spatial analysis; recommending GIS/spatial database enhancements; and/or preparing SDLCS documentation. The GIS Spatial Analyst II is distinguished from the GIS Spatial Analyst III in that the GIS Spatial Analyst II is not fully proficient in data modeling techniques, quality assurance procedures, user requirements analysis, or project management. Therefore employees in this class would not be the primary individuals to provide countywide guidance and direction in GIS initiatives.

**ILLUSTRATIVE DUTIES:**

Performs spatial analysis;  
Analyzes, enhances and maintains project specific GIS/Spatial applications;  
Contributes to development of application/data on usage standards;  
Meets with users to identify GIS requirements (application, business database, business process);  
Prepares training classes;  
Prepares necessary technical document such as SDLCS docs for spatial systems;  
Recommends or develops database enhancements for GIS data layers;  
Develops acceptance test for individual GIS hardware and software products;  
Develops and writes GIS training materials;  
Teaches full range of GIS courses;  
Loads data into the GIS database using documented processes and tools;  
Creates or oversees database updates;  
Writes basic database queries;  
Provides technical support for complex hardware/application problems;  
Provides training, guidance and assistance to lower level analysts;  
Analyzes, develops, enhances, and maintains GIS software;  
Codes, tests, debugs, and documents basic GIS applications;

Prepares data, system, or process flow charts;  
Prepares user documentation and trains users on the use of customized applications;  
Designs and manages application implementation plans;  
Serves as liaison between users and vendor technical support staff on complex GIS issues;  
Attends meetings and conferences related to GIS;  
Performs any of the illustrative duties in support of the Emergency Operations Center (EOC);

**REQUIRED KNOWLEDGE, SKILLS AND ABILITIES :**

Knowledge of principles, practices, and methods related to GIS;  
Knowledge of functional and technical requirements for GIS hardware and software;  
Knowledge of GIS applications such as County Standard GIS software, Microsoft Office Suite, etc.;  
Knowledge of languages such as Visual Basic, .Net, and C++;  
Knowledge of and experience with techniques for spatial analysis, geocoding, etc.;  
Knowledge of GIS spatial application development techniques;  
Ability to analyze user needs, processes and procedures for GIS applications;  
Ability to document system modifications and enhancements;  
Ability to assist users in solving systems and programming problems;  
Ability to translate technical terminology into terms understandable to management and employees;  
Ability to establish and maintain effective business relationships;

**EMPLOYMENT STANDARDS:**

Any combination of education, experience and training equivalent to the following:  
Bachelor's degree in computer science, geography or related field,; PLUS one year of experience working with and developing systems utilizing GIS platforms such as ESRI's ArcGIS Desktop or Server software suites; or performing GIS modeling (e.g., feature classes), and spatial analysis (e.g., such as proximity analysis, image analysis, routing analysis).

**CERTIFICATES AND LICENSES REQUIRED:**

None.

REVISED: November 18, 2011  
REVISED: August 19, 2005  
ESTABLISHED: May 24, 1999