The Maryland-National Capital Park and Planning Commission

Title**:**   GIS Specialist I   Grade: G   Code: 2260
Series**:**   Information Technology   Date: 12/15/98 (rev.)

Class Definition

Under general supervision, performs entry-level professional work in Geographic Information Systems (GIS). GIS Specialists I perform technical mapping/data processing tasks such as certifying and approving accuracy of planimetric and property maps, developing analyses and map presentations using GIS, developing and modifying GIS applications, documenting and developing procedures and techniques for entering and manipulating GIS data, cartographic editing of digital data into final digital maps, and developing procedures for maintaining GIS databases. An employee in this class typically receives detailed instructions/specifications and deadlines for assignments and proceeds to complete the work independently, reporting regularly to a supervisor or team leader concerning progress and problems encountered in the work.

Examples of Important Duties

1.   Creates, updates, and maintains software applications; interviews users to assess their software application needs; writes computer programs using higher level computer languages such as Visual Basic to customize GIS applications, including, user menus, database design, data entry forms, and data conversion; tests programs for accuracy and compatibility with other programs; analyzes the results of tests and revises programs to correct errors; prepares complete software documentation in accordance with established industry and departmental standards.

2.   Assists in monitoring performance of data bases; performs database maintenance and quality control procedures to eliminate errors and to delete obsolete data; reviews data to ensure data base contains current information and primary fields are being updated; maintains database documentation including number and names of tables and fields in database as well as coding requirements and interrelationships among tables.

3.   Completes report requests; produces map products and reports using GIS software; analyzes GIS databases as requested.

4.   Provides GIS technical support and services; communicates users' needs to contractors and coordinates contractors' work; reviews and comments on consultant specifications and practices for GIS contract work; resolves GIS hardware, software and application problems, and informs users of changes and potential problems.

5.   Assists with training of technical staff and users; identifies training needs; conducts training and provides technical assistance; responds to users' inquiries concerning GIS software and the Unix system.

6.   Supports GIS applications by researching, collecting, verifying and preparing data for inclusion in GIS databases; performs cartographic editing of digital data into final digital maps; performs coordinate transformation and reduces land surveying or engineering data;

7.   Keeps abreast of GIS related information technology changes and innovations through training programs, journals, and other sources of information.

Important Worker Characteristics

Basic knowledge of: 1) cartography, surveying, or mapping; 2) database concepts and practical applications; 3) software tools and concepts, methods and techniques used in maintaining GIS applications and data; 4) uses and capabilities of computer hardware and software; 5) Commission organization and functions.

Skill in: 1) writing and modifying software applications; 2) administering GIS databases.

Ability to: 1) understand technical concepts and terminology; 2) communicate effectively, both orally and in writing; 3) deal tactfully, effectively, and equitably with people.

Minimum Qualifications:

1.   Bachelor's degree with a minimum of 24 credit hours in cartography, geography, computer science, information management, GIS, engineering, photogrammetry or related field;

2.   An Associates degree or (nationally recognized certification in GIS) including work in cartography, geography, computer science, information management, GIS, engineering, photogrammetry or related field with two years experience in GIS operating on UNIX, DOS, and Windows platforms may be substituted for the Bachelor's degree.

3.   An equivalent combination of education and experience.

Working Conditions

Work is performed in an office setting.

HRSG 9/98