

ATLANTIC COUNTY GOVERNMENT

JOB ANNOUNCEMENT

PLEASE POST

Posting Date: 08/08/17

Closing Date: 08/15/17

TITLE: Geographic Information Systems Specialist 3

SALARY: \$34,000 - \$39,250

Hours: 40 35 ___

DEPARTMENT: Planning

Union: ___ Mgmt

LOCATION: Northfield

NJCSC Test Required: Yes ___ No

Grant Funded: Yes ___ No

Note: ALL applicants should be clear in showing the type and level of their degree, as well as experience with geographic information systems.

Please include college transcripts with application if substituting education for experience.

DEFINITION

Under supervision of a higher level Geographic Information System (GIS) Specialist or other supervisory official, performs professional GIS work relating to the geographic analysis of environmental parameters and or/other factors, image processing, interpretation, and application of remote sensing data; performs geographic data digitizing; operates all computer hardware and software associated with the Geographic Information System; does related duties.

REQUIREMENTS:

EDUCATION:

Graduation from an accredited college with a Bachelor's degree.

EXPERIENCE:

Two (2) years of experience with geographic information systems including computer graphics and computer hardware digitizing procedures.

NOTE: A Master's degree in Geography, or Environmental Science including or supplemented by the additional credits indicated below may be substituted for one (1) year of the indicated experience.

NOTE: Applicants who do not possess the required education may substitute experience as indicated above on a year-for-year basis.

NOTE: A specific Bachelor's degree in Geography, Environmental Science or related field with twelve (12) semester hours in computer mapping/GIS which shall have included spatial programming and digital image processing may be substituted for one (1) year of the above experience.

LICENSE:

Appointees will be required to possess a driver's license valid in New Jersey only if the operation of a vehicle, rather than employee mobility, is necessary to perform the essential duties of the position.

EXAMPLES OF WORK:

NOTE: The examples of work for this title are for illustrative purposes only. A particular position using this title may not perform all duties listed in this job specification. Conversely, all duties performed on the job may not be listed.

Performs data acquisition, data reformatting and application of GIS and image processing software (i.e. assigned classifications, feature enhancement, area calculation) for application to agency projects, activities, and issues.

Performs integration of satellite-acquired data with the agency Geographic Information System for analysis of spatial distributions and display of results as computer-generated maps and/or photographic images as required.

Performs and coordinates, as required, data base development at the technical level.

Performs data acquisition taking measures to ensure quality control of conventional data capture; designs coding conventions to ensure compatibility with geographic files; performs, and when necessary, instructs users in data entry and editing procedures; as required, coordinates the creation of SAS data bases from reformatted data files.

Based on user requirements, writes, tests, fully documents, and maintains statistical programs to perform complex statistical routines and to generate reports, which may then be input to GIS software.

Performs regular disk backups and catalogs data tapes in library.

Operates the Geographic Information System and all associated hardware and software to display the results of computer analysis (which cannot be economically prepared with conventional cartography) by applying cartographic principles in the production of finished maps.

Performs geographic analysis of the spatial distribution of environmental contaminants, which may affect the public health and traffic generations, which may affect the public.

Uses and may be required to instruct staff and other agencies on the use of image processing packages and other software on color graphics digital computer systems to interpret remote sensing data from satellites to solve problems in specific program areas.

Performs geographic data digitizing and conventional data capture for specific assignments.

Procures data, prepares data for machine coding, edits to ensure accuracy of machine-readable data, and verifies resulting data.

Uses mathematical analysis of computer color video-graphics to ensure correct and effective use of color in the production of maps and graphs. Performs application research to answer specific user needs.

Provides hardware and software support for the Geographic Information System including training and assisting system users.

May conducts data file management including editing, merging, deletion, and additions.

Designs the layout and features of all map, graph, and chart output products from the Geographic Information System using both computerized and manual cartographic techniques to produce maps.

Reorders support materials for Geographic Information System hardware.

Conducts research on modeling, computer graphic, and mathematical mapping techniques made possible by the Geographic Information System, and relates these directly to information needs.

Maintains highly specialized computer graphics and image processing hardware, software, communications system. Notifies supervisor of any problems. Performs emergency repairs to hardware and/or schedules repairs.

Coordinates with agency staff to ensure goals are met.

Prepares technical reports and correspondence in the course of official duties.

Will be required to learn to utilize various types of electronic and/or manual recording and computerized information systems used by the agency, office, or related units.

KNOWLEDGE AND ABILITIES:

Knowledge of geography and its applications to geographic information systems.

Knowledge of cartography including mathematics of scale and projection transformation.

Knowledge of and proficiency in all phases of manual map, chart, and graph preparation, including graphic display, layout and design, and various techniques such as cribbing, inking, leroy lettering, and peel coat.

Knowledge of computerized data entry and formatting, data base management, and data base utilization.

Knowledge of multivariable statistical methods.

Knowledge of specialized computer graphics hardware, such as various plotters, vector scan terminals, raster graphics displays, microcomputers, and their advantages and disadvantages for production of specific map types.

Knowledge of geographic and statistical data output methodologies and ability to interpret, explain, and apply data output.

Knowledge of all phases of computer map preparation, digitization, data transmission, and data reformatting.

Knowledge of the capabilities, programming techniques, and intricacies of general purpose computerized systems and peripheral equipment.

Ability to use computer operating systems including logon, logoff, system editor, moving between directories, listing directory contents, copying and deleting files, and listing printouts.

Ability to use modern graphic reproduction methods, including slide preparation, diazo processing, PMT camera, photographic enlargement and reduction, compugraphic lettering, and film developing techniques.

Ability to work with computer mapping and graphics software packages analogous to the agency Geographic Information System.

Ability to understand techniques of computer image processing, and map categorization of remote sensing data from aircraft and earth satellites.

Ability to use one or more statistical computer packages.

Ability to assess the specific data needs of various units and to utilize appropriate computer mapping and geographic analysis capabilities.

Ability to learn to program in the various computer languages used by the agency.

Ability to use and operate various geographic information systems and database software while conducting complex geographic research.

Ability to handle routine computer graphic hardware/software problems under guidance from a supervisor.

Ability to transfer data from one operating system to another.

Ability to learn to utilize various types of electronic and/or manual recording and information systems used by the agency, office, or related units.

Ability to read, write, speak, understand, or communicate English sufficiently to perform the duties of this position. American Sign Language or Braille may also be considered as acceptable forms of communication.

Persons with mental or physical disabilities are eligible as long as they can perform the essential functions of the job after reasonable accommodation is made to their known limitations. If the accommodation cannot be made because it would cause the employer undue hardship, such persons may not be eligible.

Interested, qualified applicants should apply online at www.aclink.org

Alternatively, applications may be mailed to the

Atlantic County Division of Human Resources

1333 Atlantic Avenue, Atlantic City, NJ 08401

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