

INFORMATION SERVICES ANALYST

CODES/PAY RANGE

Class Code: 1605 EEO Code: B FLSA: E Pay Range: 510
Level I
Level II

MAJOR FUNCTION

This is a classification, which incorporates the work in geographic information services, microcomputer services, and programming depending on where the position is located. This is progressively responsible technical and professional work developing and supporting a diverse, multi-user GIS network and client base; analyzing, designing, developing, implementing and maintaining the microcomputer systems; and developing, implementing and maintaining the mainframe information systems.

ILLUSTRATIVE DUTIES

(NOTE: These are intended only as illustrations of the various types of work performed. The omission of specific duties does not exclude them from the position if the work is similar, related, or a logical assignment to the position.)

GIS ANALYST

Level I

Researches and tests new software and makes recommendations for use in applications.

Assists with the design and development of new GIS applications.

Determines most effective and efficient use of GIS software in a wide range of applications.

Assists in data conversion programs, including design, development, training, quality assurance, data storage and backup.

Designs macros for effective system utilization.

Assists Systems Administrator with computer system maintenance tasks, including queue management and system documentation.

Trains staff and users on new software.

Manages specific GIS projects. Develops and implements processes and programs for problem resolution.

(Information Services Analyst continued - page 2 of 6)

Assists in developing and documenting production and standard operating procedures.

Performs related work as required.

Level II

May perform all duties of lower classifications in this series.

Works with users to design effective GIS applications and reports. Analyzes users' needs and systems to understand problems in order to recommend solutions.

Researches and tests new software and makes recommendations for use. Serves as lead worker over quality assurance and quality control for GIS.

Manages specific GIS projects and may be assigned the more complex projects.

Assists in developing and documenting standard operating procedures.

Assists Systems Administrator with computer system maintenance tasks, including backup/restore, queue management and system documentation.

May be required to serve as System Administrator in Administrator's absence. Must be able to troubleshoot problems with the system and diagnose problems.

Performs related work as required.

MICROCOMPUTER ANALYST

Level I

Designs, tests, implements and maintains microcomputer hardware and software systems. Monitors and updates existing systems. Coordinates implementation of new microcomputer systems (hardware and software.) Reviews and upgrades systems determining capacity needs and growth requirements.

Installs, tests and maintains microcomputer links to other platforms (host mainframes and minicomputers) troubleshooting hardware and software connectivity problems to these systems.

Serves as a liaison to user agencies as analyst and advisor for current and future microcomputer needs. Reviews and evaluates division systems.

Designs and writes system specifications. Flowcharts program and implementation phases. Develops network blueprints.

May design, test and implement custom data base software programs to meet a specialized user need.

Assists with designing, testing, implementing and maintaining microcomputer networks

(Information Services Analyst continued - page 3 of 6)

(software and hardware.)

May assist with microcomputer presentations to management and users. May be involved in the research, evaluation and recommendation of specialized third party application solutions for users.

Performs related work as required.

Level II

Designs, tests, implements and maintains microcomputer hardware and software systems. Monitors and updates existing systems. Coordinates implementation of new microcomputer systems (hardware and software.) Reviews and upgrades systems determining capacity needs and growth requirements.

Installs, tests and maintains microcomputer links to other platforms (host mainframes and minicomputers) troubleshooting hardware and software connectivity problems to these systems.

Serves as a liaison to user agencies as analyst and advisor for current and future microcomputer needs. Reviews and evaluates division systems.

Designs and writes system specifications. Flowcharts program and implementation phases. Develops network blueprints.

May design, test and implement custom data base software programs to meet a specialized user need.

Assists with designing, testing, implementing and maintaining microcomputer networks (software and hardware.)

May assist with microcomputer presentations to management and users.

May be involved in the research, evaluation and recommendation of specialized third party application solutions for users.

Performs related work as required.

PROGRAMMER ANALYST

Level I

Codes, test and implements comprehensive information systems according to written specifications and established activity programming standards.

Assists with the implementation of new systems and the monitoring and updating of existing systems. Coordinates the implementation of methods, procedures and forms to be utilized by the user division/activity or agency.

(Information Services Analyst continued - page 4 of 6)

May assist with the preparation of materials for management presentations regarding the implementation of a management information system.

Performs program maintenance according to specifications to modify or improve existing programs.

Compiles new and updates existing documentation of systems and programs according to established activity standards. These are for use internally by applications and operations personnel and externally by the user division/activity or agency.

Level II

Designs, codes, tests and implements comprehensive management information systems according to written specifications and established activity programming standards.

Coordinates implementation of new systems. Monitors and updates existing systems.

Designs methods, procedures and forms to be utilized by the user division/activity or agency.

May assist with management presentations regarding implementation of a management information system.

Performs program maintenance according to specifications to modify or improve existing programs.

Compiles new or updates existing documentation of systems and programs for use by internal application and operations personnel and external users.

May be assigned as a liaison to a user agency. Acts as systems analyst and advisor on a management information system.

May determine project resource requirement including personnel, hardware, and software.

Analyzes cost statistics and prepares economic comparisons of alternative methods. Establishes standard accounting control for source data and file balancing.

Performs related work as required.

KNOWLEDGE, SKILLS AND ABILITIES

GENERAL

Knowledge of systems analysis, data processing, mathematics, statistics, logic and principles of reasoning. Knowledge of the assigned governmental functions and the information required

(Information Services Analyst continued - page 5 of 6)

from data processing services. Ability to express ideas clearly and concisely, orally and in writing. Knowledge of the assigned governmental functions and the information required from data processing services. Ability to establish and maintain effective working relationships with the management staff of the divisions serviced.

PROGRAMMER ANALYST

Knowledge of the operating characteristics, capabilities and limitations of large mainframe computers and related equipment for a large multi-mainframe, multi-platform site. Knowledge of the operating system software components providing central control for large mainframe computers. Knowledge of the computer programming and understanding of the operating system. Knowledge of the assigned governmental functions and the information required from data processing services. Ability to plan, schedule, and coordinate the work effort involved in the development of management information systems. Ability to interpret system statements, develop general and detailed computer flow charts, and to prepare block diagrams indicating hardware configuration.

GIS ANALYST

Knowledge of UNIX workstations and GIS peripherals. Knowledge of Arc/Info software and related ESRI software products. Knowledge of principles and techniques of cartography, geodetic control, spatial analysis and relational database management systems.

Ability to interact with a client base that has a wide range of GIS applications. Ability to analyze client's needs and apply GIS solutions to these needs. Ability to develop effective working relationships with staff within and outside the GIS Activity. Ability to train other employees. Ability to work and accomplish multiple tasks within schedules.

MICROCOMPUTER ANALYST

Knowledge of microcomputer hardware and software systems. Ability to plan, schedule and coordinate the work effort involved in the development of microcomputer systems. Ability to troubleshoot problems and diagnose whether they are hardware, software or user related. Ability to work and accomplish multiple tasks within schedules. Ability to design and write system specifications. Ability to research, evaluate and recommend microcomputer based hardware and software solutions. Ability to establish and maintain effective working relationships with the management staff of the assigned Divisions and Activities.

MINIMUM QUALIFICATIONS

(For all levels in the Information Systems Analyst, "A comparable amount of training, education, or experience may be substituted for the minimum qualifications.")

GIS Analyst Level I

Bachelor's degree in computer science, geography, planning, engineering, or related field with

(Information Services Analyst continued - page 6 of 6)

course work in GIS; or AS degree in a related technical field, and one (1) year of experience in with ESRI software products.

Level II

Bachelor's degree in Computer Science, GIS, Geography, Planning, Engineering, or related field, and two (2) years programming or spatial analysis experience using ESRI software products;

OR

Two (2) years at the Level I.

Microcomputer Analyst Level I

Bachelor's degree in Business Administration, Computer Science, Mathematics, or related field, and one (1) year of experience in microcomputers or related field.

Level II

Bachelor's degree in Business Administration, Computer Science, Mathematics, or related field, and two (2) years of microcomputer related experience.

Programming Analyst Level I

Bachelor's degree in Mathematics, Computer Science, Data Processing or related field, and one (1) year of responsible experience as a programmer.

Level II

Bachelor's degree in Mathematics, Computer Science or related field, and two (2) years experience in programming analysis.

ADA REQUIREMENTS:

Mental Demands: Ability to read and comprehend technical and professional journals and manuals; letters, memos, abstracts, instructions; schematics, flow charts. Ability to perform general mathematical functions. Ability to write reports, critiques, memos, letters, instructions and procedures. Ability to speak publicly; conversant in theory and practices of discipline. Ability to analyze data and develop conclusions. Ability to identify and resolve problems. Ability to think logically and show attention to detail.

Physical Demands: Light to medium work. Ability to see, hear, talk; finger dexterity, lift, push, pull, handle, grasp.

Environmental Demands: Inside work.

Rev. 1/99