

## **COUNTY OF SOLANO**

### **SYSTEMS ANALYST**

#### **DEFINITION**

Plans, designs, customizes, and maintains designated applications software of a moderately complex nature; analyzes business needs and processes of designated users and the County organization; assesses potential or existing problem situations and proposes technical solutions; implements, debugs, tests, migrates, and documents new and/or modified applications and systems.

#### **CLASS CHARACTERISTICS**

This is the journey level classification within the Systems Analyst job series. Incumbents in this job class perform work at the advanced level of logical phases of systems analysis, design, and programming in supporting moderately complex project assignments for multi-departmental processing and applications systems. Employees in this class work within a framework of established procedures. Incumbents in this job class participate as responsible members of a project team designing, developing, and/or maintaining moderately complex to complex, original on-site systems or commercial applications software systems. Employees may also act as a project lead on smaller, less complex projects. The Systems Analyst classification differs from the Senior Systems Analyst job class in that the latter is assigned the most difficult and complex projects/systems and acts as a team leader in the design and implementation of these projects.

#### **SUPERVISION RECEIVED AND EXERCISED**

Receives direction from the Systems and Programming Manager or from a department director and may receive technical and functional supervision from the Senior Systems Analyst.

May provide technical guidance to project teams and lower level and/or newly hired employees.

#### **EXAMPLES OF DUTIES** *-Duties may include but are not limited to the following:*

Conducts organizational, operational, and procedural analyses to determine information input, work processes, and desired output for potential and/or up-dated computerization for a large

number of users in support of a multi-departmental or county-wide application; reviews and analyzes a variety of forms, documents, reports, data output, and record keeping requirements.

Defines and documents system requirements for data, workflow, logical processes, hardware and operating systems environment, interfaces with other systems, networking, and internet access, internal and external checks and controls, and outputs from the users' perspective and within the context of budgetary constraints as well as available technical products and resources.

Confers with and conducts meetings with a variety of user groups to gather all necessary information and documentation; facilitates the information flow and systems development activities across departmental and/or agency lines.

Meets with user groups on a periodic and regular basis to discover new/changed system input/output requirements and initiates necessary up-dating activities; conducts feasibility studies to include needs surveys and cost/benefit analyses to evaluate the necessity for and impact of desired changes; researches and analyzes existing software for applicability to project requirements.

Prepares data flow charts, designs programs utilizing structured programming and systems design techniques; converts designs and specifications into computer code; compiles and/or directs the compilation of code into programs; consults with project/team leader and/or outside consultants/vendors concerning the systems development and design.

Writes and maintains technical specifications for assigned systems/projects and in support of user groups; details procedures to be followed by users; revises user forms, screens, data collection and documentation requirements.

Acts as liaison and primary resource between in-house users, commercial software/hardware vendors, and consultants; provides technical expertise and over-all perspective; ensures adherence to design specifications and professional programming/systems analyses standards and methodologies.

Analyzes data base and security requirements based on users' current and future needs and priorities as well as legal, procedural, and operational requirements; designs and/or oversees the modification of existing database/systems administration systems to maximize the systems' effectiveness and protection.

Creates test transactions and runs tests to discover errors and confirm programs meet specifications; analyzes code to find causes of errors and revises programs as necessary; monitors performance of programs/systems after implementation on a periodic and on-going basis.

Writes and/or modifies documentation describing program development, logic, coding, testing, changes, and corrections as necessary; develops, coordinates, and/or conducts training of users to ensure systems are applied in an optimum manner.

### **JOB RELATED AND ESSENTIAL QUALIFICATIONS**

#### **Knowledge of:**

Standard and accepted principles and methodologies of computer programming and logic.

Current systems/programming methods and procedures.

Standard and accepted design and workflow principles.

Standard and accepted applications programming, coding and testing.

Standard and accepted data organization and access methods in computerized systems.

Standard and accepted data base management systems, data communications and on-line and interactive systems.

Basic methods of estimating/cost analysis.

Standard and accepted budget development and tracking methods and techniques.

Standard and accepted bidding and procurement methods and techniques.

#### **Skills to:**

Utilize basic office equipment including computer equipment, file servers, scanners and plotters.

May require the skill to drive a motor vehicle.

#### **Ability to:**

Learn and understand designated systems, processes, and operations in relation to users' goals, needs, and priorities.

Prepare feasibility and needs studies/surveys and narrative and statistical reports.

Research regulations, procedures, and/or technical reference materials.

Perform a variety of technical and specialized tasks and functions in an independent, competent, and timely manner.

Establish and maintain designated documentation and records in an accurate and timely manner.

Maintain confidentiality of records and information per pertinent laws and regulations.

Collect and analyze data to identify needs and/or problems; evaluate system effectiveness; research and analyze alternative solutions; draw logical conclusions; recommend and implement most appropriate actions to be taken.

Operate a variety of usual and specialized software programs to include word processing, spreadsheets, and specialized databases at a level sufficient for successful job performance.

Conduct and integrate assigned functions and activities in a cohesive and effective service delivery system; secure cooperation and teamwork among departmental staff and other departments/contractors.

### **Experience and Education/Training**

#### **Experience**

Four (4) years of experience performing progressively responsible programming duties and functions.

#### **Education**

An Associate's degree is required, or equivalent in information technology, management information systems, or a closely related field. A Bachelor's degree from an accredited college or university, preferably in information technology, management information systems may be substituted for two years of experience.

### **SPECIAL REQUIREMENTS**

No special requirements for this position.

### **SUPPLEMENTAL INFORMATION**

Independent travel may be required.

Incumbents are required to work outside normal business hours.

Candidates for positions in this classification will be required to pass a background investigation in accordance with applicable law, regulation, and/or policy.

**ADA COMPLIANCE**

**Physical Ability:** Tasks involve the ability to exert light physical effort in sedentary to light work, but which may involve some lifting, carrying, pushing and/or pulling of objects and materials of light weight (5-10 pounds). Tasks may involve extended periods of time at a keyboard or workstation. Requires sufficient hand/eye coordination to perform semi-skilled repetitive movements, such as typing, data entry and/or use of other office equipment.

**Sensory Requirements:** Some tasks require visual perception and discrimination. Some tasks require oral communications ability.

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Director of Human Resources

**Established Date:** September 2001

**Revised Date:** November 2002

**BOS Date:** June 30, 2003

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