

FUTURE RESEARCH CORPORATION



8(a) Streamlined Technology Acquisition Resources for Services (STARS) Government Wide Acquisition Contract (GWAC)

Labor Category Descriptions and Hourly Rates

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For information about 8(a) STARS GWACs, go to www.gsa.gov.

FUNCTIONAL AREA 1 – NAICS Code 541511 (Custom Computer Programming Services)

This NAICS code comprises establishments primarily engaged in writing, modifying, testing, and supporting software to meet the needs of a particular customer.

Business Categories --

- Applications Software Programming Services
- Computer Program or Software Development
- Computer Programming Services
- Computer Software Support Services
- Database Design/Generation
- Legacy Interfaces/Data Migration
- Software Analysis and Design
- Software Programming
- Software Testing
- Web Design

Labor Category Descriptions

Project Manager – Senior:

Responsible for all aspects of the development and implementation of assigned projects and provides a single point of contact for those projects. Takes projects from original concept through final implementation. Interfaces with all areas affected by the project including end users, computer services, and client services. Defines project scope and objectives. Develops detailed work plans, schedules, project estimates, resource plans, and status reports. Conducts project meetings and is responsible for project tracking and analysis. Ensures adherence to quality standards and reviews project deliverables. Manages the integration of vendor tasks and tracks and reviews vendor deliverables. Provides technical and analytical guidance to project team. Recommends and takes action to direct the analysis and solutions of problems.

Applications Programmer:

Devises or modifies procedures to solve complex problems considering computer equipment capacity and limitations, operating time, and form of desired results. Designs, codes, tests, debugs, and documents.

Applications Systems Analyst/Programmer - Intermediate:

Under general supervision, formulates and defines system scope and objectives through research and fact-finding to develop or modify moderately complex information systems. Prepares detailed specifications from which programs will be written. Designs, codes, tests, debugs, documents, and maintains those programs. Competent to work on most phases of applications systems analysis and programming activities, but requires instruction and guidance in other phases.

Applications Systems Analyst/Programmer - Senior:

Under general direction, formulates and defines system scope and objectives. Devises or modifies procedures to solve complex problems considering computer equipment capacity and limitations, operating time, and form of desired results. Prepares detailed specifications from which programs will

be written. Designs, codes, tests, debugs, and documents those programs. Competent to work at the highest technical level of all phases of applications systems analysis and programming activities. May be responsible for completion of a phase of a project. Regularly provides guidance and training to less-experienced analyst/programmers.

Business Subject Matter Specialist:

Provides technical knowledge and analysis of highly specialized applications and operational environments, high-level functional systems analysis, design, integration, documentation and implementation advice on exceptionally complex problems that need extensive knowledge of the subject matter for effective implementation. Participates as needed in all phases of software development with emphasis on the planning, analysis, testing, integration, documentation, and presentation phases.

Chief Information Security Officer:

Ensures that all information systems are functional and secure.

Client/Server Database Manager:

Projects long-range requirements for client/server database administration in conjunction with other managers in the information systems function as well as business function managers. Prepares activity and progress reports regarding the client/server database management section.

Communications Facility Engineer:

Provides technical direction and engineering knowledge for communications systems infrastructure activities, including planning, designing, and implementing communications infrastructure requirements for buildings and systems. Ensures that adequate and appropriate planning is provided to direct building architects and planners in building communications spaces and media pathways meet industry standards.

Communications Installer:

Assists in the planning, design, and implementation of communications networks. Responsible for providing assistance and technical support for network design activities. Assists in the review/assessment of user needs. Performs feasibility studies for small projects. Assists in the evaluation and selection of equipment.

Communications Transmission Engineer:

Provides technical direction and engineering knowledge for communications activities including planning, designing, installing and maintaining large communications networks. Develops, operates, and maintains voice, wireless, video, and data communications systems. Provides complex engineering or analytical tasks and activities associated with one or more technical areas within the communications function.

Consultant:

Works with end user groups to evaluate and solve technical problems. Evaluates existing systems and/or user needs to analyze, design, recommend, and implement system changes.

Data Architect:

Designs and builds relational databases. Develops strategies for data acquisitions, archive recovery, and implementation of a database. Works in a data warehouse environment, which includes data design,

database architecture, metadata and repository creation. Translates business needs into long-term architecture solutions. Defines, designs, and builds dimensional databases. Develops data warehousing blueprints, evaluating hardware and software platforms, and integrating systems. Evaluates reusability of current data for additional analyses. Reviews object and data models and the metadata repository to structure the data for better management and quicker access.

Database Analyst/Programmer - Intermediate:

Under general supervision, designs, implements and maintains moderately complex databases. Maintains database dictionaries and integration of systems through database design. Competent to work on most phases of database administration but may require some instruction and guidance in other phases. Requires two years experience in the field.

Database Analyst/Programmer - Senior:

Under general direction, designs, implements and maintains complex database with respect to JCL, access methods, access time, device allocation, validation checks, organization, protection and security, documentation and statistical methods. Includes maintenance of database dictionaries, overall monitoring of standards and procedures and integration of systems through database design. Competent to work at the highest level of all phases of database management. Requires three years experience in the field.

Data/Configuration Management Specialist:

Provides configuration management planning. Describes provisions for configuration identification, change control, configuration status accounting, and configuration audits. Regulates the change process so that only approved and validated changes are incorporated into product documents and related software.

Documentation Specialist - Intermediate:

Under general supervision, prepares and/or maintains systems, programming, and operations documentation, including user manuals. Maintains a current internal documentation library. Competent to work on most phases of documentation.

Documentation Specialist - Senior:

Under general supervision, is responsible for preparing and/or maintaining systems, programming, and operations documentation, procedures, and methods including user manuals and reference manuals. Maintains a current internal documentation library. Provides or coordinates special documentation services as required. Competent to work at the highest level of all phases of documentation. May act as project leader for large positions.

Engineering Subject Matter Specialist:

Provides technical knowledge and analysis of highly specialized applications and operational environment, high-level functional systems analysis, design, integration, documentation, and implementation advice on exceptionally complex problems that necessitate high-level knowledge of the subject matter for effective implementation. Participates as needed in all phases of software development with emphasis on the planning, analysis, modeling, simulation, testing, integration, documentation and presentation phases.

Graphics Specialist:

Responsible for graphics design and use, operation, and setup of computer graphic systems for business communications. Executes graphic projects and assists in coordination of all graphic production scheduling. Coordinates production support with outside vendors, as needed. Ensures that graphic projects are completed on time, within budget, and to user's satisfaction. Interfaces with users to determine scope of project and best graphic medium. Trains other personnel in proper use of computer graphic equipment. Troubleshoots computer equipment problems and performs minor preventive maintenance. Frequently reports to a department manager or information systems management.

Information Assurance Development Engineer:

Analyzes and defines security requirement for computer systems which may include mainframes, workstations, and personal computers. Designs, develops, engineers, and implements solutions that meet security requirements. Provides integration and implementation of the computer system security solution.

Information Assurance Engineer:

Establishes and satisfies complex system-wide information security requirements based upon the analysis of user, policy, regulatory, and resource demands. Supports customers at the highest levels in the development and implementation of doctrine and policies. Applies know-how to government and commercial common user systems, as well as to dedicated special purpose systems requiring specialized security features and procedures.

Information Assurance Network Specialist:

Analyzes general information assurance-related technical problems and provides basic engineering and technical support in solving these problems. Designs, develops, engineers, and implements solutions that meet network security requirements. Performs vulnerability/risk analyses of computer systems and applications during all phases of the system development life cycle.

Information Assurance Systems/Network Specialist:

Installs, configures and maintains organization's operating systems. Analyzes and resolves problems associated with server hardware, NT, applications software. Detects, diagnoses, and reports NT related problems on both NT server and NT desktop systems. Performs a wide variety of tasks in software/hardware maintenance and operational support of NT Server systems.

Information Security Business Analyst:

Determines enterprise information security standards. Develops and implements information security standards and procedures. Ensures that all information systems are functional and secure.

IT Subject Matter Specialist:

Provides extremely high-level subject matter proficiency for work described in the task. Provides advanced technical knowledge and analysis of highly specialized applications and operational environment, high-level functional systems analysis, design, integration, documentation, training, and implementation advice on complex problems that require doctorate level knowledge of the subject matter for effective implementation.

Project Engineer:

Manages long-term IT engineering projects. Performs engineering design evaluations and works to complete projects within budget and scheduling restraints. Develops, implements, and monitors

information systems policies and controls to ensure data accuracy, security, and regulatory compliance. Reviews reports of computer and peripheral equipment production, malfunction, and maintenance to determine and address problems.

Quality Assurance Analyst - Intermediate:

Under general supervision, carries out procedures to ensure that all information systems, products and services meet minimum organization standards and end-user requirements. Thoroughly tests software to ensure proper operation and freedom from defects. Documents and works to resolve all problems. Reports progress on problem resolution to management. Devises improvements to current procedures and develops models of possible future configurations. Performs workflow analysis and recommends quality improvements. Frequently reports to a Quality Assurance Manager.

Quality Assurance Analyst - Senior:

Under general direction, carries out procedures to ensure that all information systems, products and services meet organization standards and end-user requirements. Performs and leads tests of software to ensure proper operation and freedom from defects. May create test data for applications. Documents and works to resolve all complex problems. Reports progress on problem resolution to management. Devises improvements to current procedures and develops models of possible future configurations. Acts as information resource about assigned areas to technical writers and other Quality Assurance Analysts. Performs complex workflow analysis and recommends quality improvements. Frequently reports to a Quality Assurance Manager.

Quality Assurance Specialist:

Provides development of project Software Quality Assurance Plan and the implementation of procedures that conforms to the requirements of the contract. Provides an independent assessment of how the project's software development process is being implemented relative to the defined process and recommends methods to optimize the organization's process.

Security Coordinator:

Coordinates, develops, and evaluates security programs for an organization.

Software Architect:

Works independently designing and developing new software products or major enhancements to existing software. May lead a large development team in the design of highly complex software systems. Acts as highest-level technical expert, addressing problems of systems integration, compatibility, and multiple platforms. Responsible for project completion. Performs feasibility analysis on potential future projects to management.

Software Developer - Intermediate:

Under general supervision, develops codes, tests, and debugs new software or enhancements to existing software. Has good understanding of business applications. Works with technical staff to understand problems with software and resolve them. Resolves customer complaints with software and responds to suggestions for improvements and enhancements. May assist in development of software user manuals. Requires two years experience in the field.

Software Developer - Senior:

Under general direction, participates as high-level technical expert in design development, coding, testing, and debugging new software or significant enhancements to existing software. Works with

technical staff to understand problems with software and develops specifications to resolve them. Resolves customer complaints and responds to suggestions for improvements and enhancements. Participates in the development of software user manuals. May act as team leader on less complex projects. Assists in training less experienced software development staff. Requires five years experience in the field.

Software Systems Engineer - Intermediate:

Under general supervision, works from specifications to develop or modify moderately complex software programming applications. Assists with design, coding, benchmark testing, debugging, and documentation of programs. Applications generally deal with utility programs, position control language, macros, subroutines, and other control modules. Competent to work on most phases of software systems programming applications, but requires instruction and guidance in other phases.

Software Systems Engineer –Senior:

Under general direction, formulates and defines specifications for complex operating software programming applications or modifies/maintains complex existing applications using engineering releases and utilities from the manufacturer. Designs, codes, tests, debugs, and documents those programs. Responsible for applications dealing with the overall operating system, such as sophisticated file maintenance routines, large telecommunications networks, computer accounting, and advanced mathematical/scientific software packages. Competent to work at this highest technical level on all phases of software systems programming applications. May have responsibility for the evaluation of new and existing software products. May assist other systems programmers to effectively utilize the system's technical software.

Strategic Planner:

Provides strategic planning of large projects or a significant segment of a strategic planning portion of a large complex project. Provides the overall approach to clarify mission statements so they can be used as springboards in envisioning their desired future. Assists in developing mission and vision statements, subsequent goal delineation, provides guidance for building operational plans and specifying measurable outcomes to include capital outlay planning efforts in a consolidated strategic planning process and prioritizes those initiatives.

Systems Engineer:

Performs a variety of systems engineering tasks and activities that are broad in nature and are concerned with major systems design, integration, and implementation, including personnel, hardware, software, budgetary, and support facilities and/or equipment. Provides quality assurance review and the evaluation of new and existing software products.

Technical Editor:

Responsible for content of technical documentation. Checks author's document for spelling, grammar and content problems (e.g., missing instructions or sections; redundant or unnecessary sections). Accuracy of content may fall under this position or the programmer, depending on the expertise of the editor. Ensures that documents follow the style laid out in the organization's style guide. May also be responsible for maintaining the style guide. Suggests revisions to the style guide as appropriate. Editor is often a technical writer who has moved to this position. Note: This description is for a technical editor in a large software house or an editor in a technical lab, which produces papers for publication. Newsletter, newspaper, or magazine editors should not be matched to this position.

Technical Writer:

Writes a variety of technical articles, reports, brochures, and/or manuals for documentation for a wide range of uses. Coordinates the display of graphics and the production of the document.

Web Content Analyst:

Provides for development and content that will motivate and entertain users so that they regularly access the website and utilize it as a major source for information and decision-making. Provides managing/performing website editorial activities including gathering and researching information that enhances the value of the site.

Web Security Analyst:

Performs all procedures necessary to ensure the safety of the organization's website and transactions across the Internet/intranet. Applies Internet firewall technologies to maintain security. Ensures that the user community understands and adheres to necessary procedures to maintain security. Updates and deletes users, monitors and performs follow-up on compliance violations, and develops security policies, practices, and guidelines.

Web Software Developer:

Designs, develops, troubleshoots, debugs, and implements software code (such as HTML, CGI, and JavaScript) for a component of the website. Works with graphic designers and other members of a project team to develop the site concept, interface design, and architecture of the website. Responsible for interface implementation. Integrates web applications with backend databases. Deploys large web-based transaction systems using application servers. Researches, tests, builds, and coordinates the integration of new products per production and client requirements. Requires strong navigation and site-design instincts.

Functional Area 1 Hourly Rates

FA 1 Labor Category	6/1/10 to 5/31/11
Project Manager – Senior	\$ 98.63
Applications Programmer	\$ 105.63
Applications Systems Analyst/ Programmer – Intermediate	\$ 61.57
Applications Systems Analyst/ Programmer – Senior	\$ 73.49
Business Subject Matter Expert	\$ 166.79
Chief Information Security Officer	\$ 211.27
Client/Server Database Manager	\$ 94.71
Communications Facility Engineer	\$ 73.41
Communications Installer	\$ 72.28
Communications Transmission Engineer	\$ 73.41
Consultant	\$ 189.03
Data Architect	\$ 91.12
Database Analyst/ Programmer - Intermediate	\$ 70.43
Database Analyst/ Programmer – Senior	\$ 86.22
Data/Configuration Management Specialist	\$ 94.51
Documentation Specialist – Intermediate	\$ 48.03
Documentation Specialist – Senior	\$ 57.54
Engineering Subject Matter Specialist	\$ 233.51
Graphics Specialist	\$ 56.68
Information Assurance Development Engineer	\$ 83.40
Information Assurance Engineer	\$ 76.72
Information Assurance Network Specialist	\$ 74.50
Information Assurance Systems/Network Specialist	\$ 74.50
Information Security Business Analyst	\$ 76.72
IT Subject Matter Specialist	\$ 266.86
Project Engineer	\$ 138.99
Quality Assurance Analyst - Intermediate	\$ 57.16
Quality Assurance Analyst - Senior	\$ 69.52
Quality Assurance Specialist	\$ 74.88
Security Coordinator	\$ 74.50
Software Architect	\$ 104.06
Software Developer – Intermediate	\$ 66.19
Software Developer – Senior	\$ 80.26
Software Systems Engineer - Intermediate	\$ 65.65
Software Systems Engineer - Senior	\$ 79.51
Strategic Planner	\$ 83.40
Systems Engineer	\$ 100.07
Technical Editor	\$ 48.35
Technical Writer	\$ 72.28

FA 1 Labor Category	6/1/10 to 5/31/11
Web Content Analyst	\$ 94.51
Web Security Analyst	\$ 101.40
Web Software Developer	\$ 68.76

FUNCTIONAL AREA 2 – NAICS Code 541512 (Computer Systems Design Services)

This U.S. industry comprises establishments primarily engaged in planning and designing computer systems that integrate computer hardware, software, and communication technologies. The hardware and software components of the system may be provided by this establishment or company as part of integrated services or may be provided by third parties or vendors. These establishments often install the system and train and support users of the system.

Business Categories --

- Business Process Reengineering (BPR)
- Cabling & Wiring
- Computer-Aided Design (CAD) Services
- Computer-Aided Engineering (CAE) Services
- Computer-Aided Manufacturing (CAM) Services
- Computer Hardware Consulting Services
- Computer Software Consulting Services
- Computer Systems Integration Analysis and Design
- Computer Systems Integration Design Consulting
- Configuration Management
- Enterprise Architecture Development
- Enterprise Resource Planning (ERP)
- Hardware
- IT Capital Planning Management
- LAN/WAN Design
- Network Design & Installation
- Network Systems Integration
- Systems Analysis
- Systems Integration

Labor Category Descriptions

Project Manager – Senior:

Responsible for all aspects of the development and implementation of assigned projects and provides a single point of contact for those projects. Takes projects from original concept through final implementation. Interfaces with all areas affected by the project including end users, computer services, and client services. Defines project scope and objectives. Develops detailed work plans, schedules, project estimates, resource plans, and status reports. Conducts project meetings and is responsible for project tracking and analysis. Ensures adherence to quality standards and reviews project deliverables. Manages the integration of vendor tasks and tracks and reviews vendor deliverables. Provides technical and analytical guidance to project team. Recommends and takes action to direct the analysis and solutions of problems.

Applications Programmer:

Devises or modifies procedures to solve complex problems considering computer equipment capacity and limitations, operating time, and form of desired results. Designs, codes, tests, debugs, and documents.

Business Subject Matter Specialist:

Provides technical knowledge and analysis of highly specialized applications and operational environments, high-level functional systems analysis, design, integration, documentation and implementation advice on exceptionally complex problems that need extensive knowledge of the subject matter for effective implementation. Participates as needed in all phases of software development with emphasis on the planning, analysis, testing, integration, documentation, and presentation phases.

Chief Information Security Officer:

Ensures that all information systems are functional and secure.

Client/Server Database Manager:

Projects long-range requirements for client/server database administration in conjunction with other managers in the information systems function as well as business function managers. Prepares activity and progress reports regarding the client/server database management section.

Client/Server Network Architect:

Top-level technical expert responsible for design and development of a client/server environment. Develops strategy of client/server system and the design infrastructure necessary to support that strategy. Advises on selection of technological purchases with regards to processing, data storage, data access, and applications development. Sets standards for the client/server relational database structure for the organization (SQL, ORACLE, SYBASE, etc.). Advises of feasibility of potential future projects to management.

Communications Installer:

Assists in the planning, design, and implementation of communications networks. Responsible for providing assistance and technical support for network design activities. Assists in the review/assessment of user needs. Performs feasibility studies for small projects. Assists in the evaluation and selection of equipment.

Communications Transmission Engineer:

Provides technical direction and engineering knowledge for communications activities including planning, designing, installing and maintaining large communications networks. Develops, operates, and maintains voice, wireless, video, and data communications systems. Provides complex engineering or analytical tasks and activities associated with one or more technical areas within the communications function.

Consultant:

Works with end user groups to evaluate and solve technical problems. Evaluates existing systems and/or user needs to analyze, design, recommend, and implement system changes.

Data Architect:

Designs and builds relational databases. Develops strategies for data acquisitions, archive recovery, and implementation of a database. Works in a data warehouse environment, which includes data design, database architecture, metadata and repository creation. Translates business needs into long-term architecture solutions. Defines, designs, and builds dimensional databases. Develops data warehousing blueprints, evaluating hardware and software platforms, and integrating systems. Evaluates reusability

of current data for additional analyses. Reviews object and data models and the metadata repository to structure the data for better management and quicker access.

Data/Configuration Management Specialist:

Provides configuration management planning. Describes provisions for configuration identification, change control, configuration status accounting, and configuration audits. Regulates the change process so that only approved and validated changes are incorporated into product documents and related software.

Engineering Subject Matter Specialist:

Provides technical knowledge and analysis of highly specialized applications and operational environment, high-level functional systems analysis, design, integration, documentation, and implementation advice on exceptionally complex problems that necessitate high-level knowledge of the subject matter for effective implementation. Participates as needed in all phases of software development with emphasis on the planning, analysis, modeling, simulation, testing, integration, documentation and presentation phases.

ERP Business Analyst - Intermediate:

Under general supervision, serves as subject matter expert associated with content, processes, and procedures associated with enterprise applications. Applies functional knowledge to design and customize workflow systems that provide seamless integration for client/server applications. Writes functional requirements, develops test plans, and works with production issues.

ERP Business Analyst - Senior:

Under general direction, serves as senior subject matter expert associated with content, processes, and procedures associated with ERP. Defines detailed requirements, analyzes business needs, and validates solutions with the client. Details requirements through product development and other functions to support the project team. Monitors other business analysts in software development methods and processes and implementation of those methods. Evaluates development projects and assists in tailoring the development process to meet the project needs.

ERP Business/Architectural Specialist:

Adapts functional business requirements and processes to technical solutions based upon comprehensive enterprise application solution sets. Enterprise resource planning and management processes, including but not limited to: knowledge management, investment analysis, data warehousing, e-commerce, return on investment analysis, human resource analysis, material management and logistics, supply chain management, procurement, ordering, manufacturing, decision support, and information dissemination.

ERP Programmer:

Under general supervision, works primarily in ERP client/server enterprise application. Designs and develops all aspects of data conversion. Builds application tables, panels, and reports. Codes individual modules and complex functions. Develops application tables, panels, and reports for projects. Responsible for software integration and external interface development. Troubleshoots and resolves testing issues. Responsible for technical documentation.

Information Assurance Development Engineer:

Analyzes and defines security requirement for computer systems which may include mainframes, workstations, and personal computers. Designs, develops, engineers, and implements solutions that meet security requirements. Provides integration and implementation of the computer system security solution.

Information Assurance Engineer:

Establishes and satisfies complex system-wide information security requirements based upon the analysis of user, policy, regulatory, and resource demands. Supports customers at the highest levels in the development and implementation of doctrine and policies. Applies know-how to government and commercial common user systems, as well as to dedicated special purpose systems requiring specialized security features and procedures.

Information Assurance Network Specialist:

Analyzes general information assurance-related technical problems and provides basic engineering and technical support in solving these problems. Designs, develops, engineers, and implements solutions that meet network security requirements. Performs vulnerability/risk analyses of computer systems and applications during all phases of the system development life cycle.

Information Assurance Systems/Network Specialist:

Installs, configures and maintains organization's operating systems. Analyzes and resolves problems associated with server hardware, NT, applications software. Detects, diagnoses, and reports NT related problems on both NT server and NT desktop systems. Performs a wide variety of tasks in software/hardware maintenance and operational support of NT Server systems.

Information Security Business Analyst:

Determines enterprise information security standards. Develops and implements information security standards and procedures. Ensures that all information systems are functional and secure.

Information Services Consultant:

Top-level technical expert supporting unlimited end user groups. Works with user groups to solve business problems with available technology including hardware, software, databases, and peripherals. Requires high level of diverse technical experience related to studying and analyzing systems needs, systems development, systems process analysis, design, and re-engineering. Has skills and experience related to business management, systems engineering, operations research, and management engineering. Typically requires specialization in particular software or business application utilized in an end user environment. Keeps abreast of technological developments and applications.

Information Systems Training Specialist - Intermediate:

Under general supervision, organizes and conducts moderately complex training and educational programs for information systems or user personnel. Maintains records of training activities, employee progress, and program effectiveness. Competent to work on most phases of information systems training.

Information Systems Training Specialist - Senior:

Under general direction, organizes, prepares, and conducts complex training and educational programs for information systems or user personnel. May design and develop in-house programs. Maintains

records of training activities, employee progress, and program effectiveness. Competent to work at the highest level of all phases of information systems training.

IT Subject Matter Specialist:

Provides extremely high-level subject matter proficiency for work described in the task. Provides advanced technical knowledge and analysis of highly specialized applications and operational environment, high-level functional systems analysis, design, integration, documentation, training, and implementation advice on complex problems that require doctorate level knowledge of the subject matter for effective implementation.

LAN Administrator - Intermediate:

Under general supervision, responsible for the acquisition, installation, maintenance, and usage of the organization's local area network. Manages LAN performance and maintains LAN security. Ensures that security procedures are implemented and enforced. Installs all network software. Evaluates, develops and maintains telecommunications systems. Troubleshoots LAN problems. Establishes and implements LAN policies, procedures, and standards and ensures their conformance with information systems and organization objectives. Trains users on LAN operation. Typically requires two to four years of experience. Frequently reports to a PC support manager or Senior LAN Administrator.

LAN Administrator - Senior:

Under general direction, responsible for administration and day-to-day operation of organization's local area network (LAN). Provides integrated team support and maintenance of LAN hardware and software. Maintains integrity of the LAN hardware and software. Installs LAN software upgrades, including planning and scheduling, testing and coordination. Studies vendor products to determine those which best meet organization needs; assists in presentation of information to management resulting in purchase, and installation of hardware, software, and telecommunications equipment. Performs LAN security procedures, including implementing login requests. Evaluates new products and technologies to determine impact on existing system configurations. Prepares proposals, cot/benefit analyses, and feasibility studies. Provides liaison support between the PC/LAN team, vendors and internal support group as needed. Typically requires five to seven years of experience. Frequently reports to an information systems executive.

LAN/WAN Integrator:

Responsible for the overall integration of the enterprise-wide network including the planning, design, installation, maintenance, management, and coordination of the corporate LAN/WAN (may include local, metropolitan, and wide area networks). Has responsibility for technical architecture and recommendations related to LAN/WAN. Is typically a top-level technical contributor with advanced knowledge and experience in the area of local and wide area networking, communications, and related hardware/software. Maintains high level of technical expertise and studies vendor products to determine those which best meet organization needs. Presents information to management, which may result in the purchase and installation of hardware, software, and telecommunications equipment. Recommends network security procedures and policies. Knowledgeable in a multi-platform operating environment. May work with Voce and/or Data Communications Analysts.

LAN/WAN/MAN Administrator:

Monitors LAN, WAN, and servers. Provides batch monitoring, tape back-up, and restoration. Administers mail system and implements new database architecture. Monitors and conducts performance

evaluation of networks. Supports, installs, maintains, and troubleshoots all local area and wide area networking devices and related software for branch offices and internal and external networks.

Network Control Technician:

Tests and analyzes all elements of complex network facilities (including power, software, communications devices, lines, modems, and terminals). Monitors and controls the performance and status of the network resources. Utilizes software and hardware tools and identifies and diagnoses complex problems and factors affecting network performance.

Network Engineer - Intermediate:

Under general supervision, oversees the purchase, installation, and support of network communications, including LAN/WAN systems. Works on problems of diverse scope where analysis of situation requires evaluation and judgment. Responsible for evaluating current systems. Assists in the planning of large-scale systems projects through vendor comparison and cost studies. Requires thorough knowledge of LAN/WAN systems, networks, and applications. Typically requires two to five years of experience.

Network Engineer - Senior:

Under general direction, manages the purchase, installation, and support of network communications, including LAN/WAN systems. Responsible for evaluating current systems. Works on complex problems where analysis of situation requires in-depth evaluation of various factors. Plans large-scale systems projects through vendor comparison and cost studies. Provides work leadership and training to lower level network engineers. Requires expert knowledge of LAN/WAN systems, networks, and applications. Typically requires at least five years of experience.

Network/Hardware Support Technician:

Monitors and responds to hardware, software, and network problems. Provides the routine testing and analysis of all elements of the network facilities (including power, software, communications machinery, lines, modems, and terminals). Monitors and controls the performance and status of the network resources.

Network Systems Administrator:

Provides system administration of Network, Web, and/or communication systems, including Local Area Network (LAN) and Wide Area Network (WAN) systems, involving network security. Prepares technical implementation plans that provide integrated solutions including actions, milestones, timelines and critical paths required for complete solutions.

Network Systems Manager:

Supervises all personnel engaged in the operation and support of network facilities, including all communications equipment in large scale or multi-shift operations. Supervises complex operations that involve two or more additional functions such as, but not limited to, network operations, systems security, systems software support, and production support activities.

Operations Manager - Data Communications:

Manages all aspects of the daily operation for data network(s) in either a stand-alone data network environment in a voice and data separated network environment. Develops project plans for the implementation of new telecommunications technology and systems. Directs technical analysis of

complex software, hardware, and transmission systems. Coordinates with vendors involved in providing communication activities.

Operations Manager - Voice Communications:

Manages all aspects of the daily operation for voice network(s) in either a stand-alone voice network OR in a voice and data separated network environment. Develops project plans for the implementation of new telecommunications technology and systems. Directs technical analysis of complex software, hardware, and transmission systems.

Operations/Network LAN Administrator:

Supports, monitors, tests, and troubleshoots hardware and software problems pertaining to LAN. Recommends and schedules repairs. Provides end users support for all LAN- based applications. Installs and configures workstations.

Operations Systems Manager:

Provides assistance and oversight for all information systems operations activities, including computer and telecommunications/communications operations, data entry, data control, operations support, operating systems programming, system security policy procedures, and/or web strategy and operations. Provides input to policy level discussions regarding standards and budget constraints.

Operations/Technical Support Analyst:

Provides technical guidance for directing and monitoring information systems operations. Implements machine modifications to increase the capacity of the system. Directs compilation of records and reports concerning production, machine malfunctioning and maintenance.

PC/LAN Management Analyst - Intermediate:

Under general supervision, works closely with business and management and staff on LAN support, network design, and configuration in a multi-server environment. Responsible for the installation/configuration and support of client servers, application support software, and implementation of new business software applications. Participates with client in the installation/configuration of equipment and software. Analyzes and coordinates resolution of network problems. Provides technical support and guidelines to client and systems areas through documentation. Requires experience with Token Ring.

PC/LAN Management Analyst - Senior:

Under general direction, provides consultation to business area management and staff at the highest technical level for all aspects of PC/LAN design and configuration in a multi-server environment. Plans and coordinates the installation of new or modified Local Area Networks and installs and coordinates the resolution of network problems or malfunctions. Provides technical support and guidelines to client and systems areas through documentation. Requires experience with Token Ring.

Project Engineer:

Manages long-term IT engineering projects. Performs engineering design evaluations and works to complete projects within budget and scheduling restraints. Develops, implements, and monitors information systems policies and controls to ensure data accuracy, security, and regulatory compliance. Reviews reports of computer and peripheral equipment production, malfunction, and maintenance to determine and address problems.

Quality Assurance Specialist:

Provides development of project Software Quality Assurance Plan and the implementation of procedures that conforms to the requirements of the contract. Provides an independent assessment of how the project's software development process is being implemented relative to the defined process and recommends methods to optimize the organization's process.

Security Coordinator:

Coordinates, develops, and evaluates security programs for an organization.

Strategic Planner:

Provides strategic planning of large projects or a significant segment of a strategic planning portion of a large complex project. Provides the overall approach to clarify mission statements so they can be used as springboards in envisioning their desired future. Assists in developing mission and vision statements, subsequent goal delineation, provides guidance for building operational plans and specifying measurable outcomes to include capital outlay planning efforts in a consolidated strategic planning process and prioritizes those initiatives.

Systems Administrator - Intermediate:

Under general supervision, responsible for installing, configuring, and maintaining operating system workstations and servers, including web servers, in support of business processing requirements. Performs software installations and upgrades to operating systems and layered software packages. Schedules installations and upgrades and maintains them in accordance with established IT policies and procedures. Monitors and tunes the system to achieve optimum performance levels. Ensures workstation/server data integrity by evaluating, implementing, and managing appropriate software and hardware solutions. Ensures data/media recoverability by implementing a schedule of system backups and database archive operations. Supports media management through internal methods and procedures or through offsite storage and retrieval services. Develops and promotes standard operating procedures. Conducts routine hardware and software audits of workstations and servers to ensure compliance with established standards, policies, and configuration guidelines. Develops and maintains a comprehensive operating system hardware and software configuration database/library of all supporting documentation.

Systems Administrator - Senior:

Under general direction, responsible for activities related to system administration. Assigns personnel to various projects, directs their activities, and evaluates their work. Ensures long-term requirements of systems operations and administration are included in the overall information systems planning of the organization. Responsible for the installation, maintenance, configuration, and integrity of computer software. Implements operating system enhancements that will improve the reliability and performance of the system.

Systems Analysis and Programming Director:

Develops software within an organization. Directs the software engineering function in developing, releasing, and maintaining software applications/operating systems according to business needs.

Systems Engineer:

Performs a variety of systems engineering tasks and activities that are broad in nature and are concerned with major systems design, integration, and implementation, including personnel, hardware,

software, budgetary, and support facilities and/or equipment. Provides quality assurance review and the evaluation of new and existing software products.

Systems Management Technologist:

Analyzes, develops, operates, and maintains software libraries and catalogs. Provides support and direction for user groups in the use of the software/hardware systems and programs to support an integrated system.

Technical Writer:

Writes a variety of technical articles, reports, brochures, and/or manuals for documentation for a wide range of uses. Coordinates the display of graphics and the production of the document.

Telecommunications/Communications Integration Engineer:

Provides technical direction and analysis for telecommunication activities, including planning, designing, integrating, installing and maintaining large-scale telecommunications/ communications networks and services with computer systems. Applies telecommunications/communications engineering principles and theory to propose design and configuration alternatives. Analyzes network performance, usage and traffic flows, accesses and interfaces, transmission techniques, and protocols to interface with computer systems.

UNIX Systems Administrator:

Responsible for the installation, configuration, and maintenance of UNIX operating systems. Recognizes and troubleshoots problems with server hardware and applications software. Establishes and documents standards and procedures for management review. Requires extensive knowledge of computer operations and familiarity with shell and kernel programming. Typically requires two to four years of experience.

Functional Area 2 Hourly Rates

FA 2 Labor Category	6/1/10 to 5/31/11
Project Manager – Senior	\$ 98.63
Applications Programmer	\$ 105.63
Business Subject Matter Specialist	\$ 166.79
Chief Information Security Officer	\$ 211.27
Client/Server Database Manager	\$ 94.71
Client/Server Network Architect	\$ 93.26
Communications Installer	\$ 72.28
Communications Transmission Engineer	\$ 73.41
Consultant	\$ 189.03
Data Architect	\$ 91.12
Data Configuration Management Specialist	\$ 94.51
Engineering Subject Matter Specialist	\$ 233.51
ERP Business Analyst - Intermediate	\$ 102.75
ERP Business Analyst - Senior	\$ 98.68
ERP Business/Architectural Specialist	\$ 84.00
ERP Programmer	\$ 76.61
Information Assurance Development Engineer	\$ 76.72
Information Assurance Engineer	\$ 83.40
Information Assurance Network Specialist	\$ 74.50
Information Assurance Systems/Network Specialist	\$ 74.50
Information Security Business Analyst	\$ 76.72
Information Services Consultant	\$ 99.23
Information Systems Training Specialist - Intermediate	\$ 61.72
Information Systems Training Specialist - Senior	\$ 96.52
IT Subject Matter Specialist	\$ 266.86
LAN Administrator - Intermediate	\$ 55.82
LAN Administrator - Senior	\$ 66.29
LAN/WAN Integrator	\$ 85.26
LAN/WAN/MAN Administrator	\$ 70.39
Network Control Technician	\$ 68.94
Network Engineer - Intermediate	\$ 66.19
Network Engineer - Senior	\$ 77.68
Network/Hardware Support Technician	\$ 68.94
Network Systems Administrator	\$ 70.39
Network Systems Manager	\$ 94.51
Operations Manager – Data Communications	\$ 98.82
Operations Manager – Voice Communications	\$ 98.82
Operations/Network LAN Administrator	\$ 70.39
Operations Systems Manager	\$ 98.82

FA 2 Labor Category	6/1/10 to 5/31/11
Operations/Technical Support Analyst	\$ 70.39
PC/LAN Management Analyst - Intermediate	\$ 58.61
PC/LAN Management Analyst – Senior	\$ 71.18
Project Engineer	\$ 138.99
Quality Assurance Specialist	\$ 74.88
Security Coordinator	\$ 74.50
Strategic Planner	\$ 83.40
Systems Administrator - Intermediate	\$ 65.49
Systems Administrator - Senior	\$ 77.95
Systems Analysis and Programming Director	\$ 83.00
Systems Engineer	\$ 100.07
Systems Management Technologist	\$ 76.72
Technical Writer	\$ 72.28
Telecommunications/Communications Integration Engineer	\$ 73.41
UNIX Systems Administrator	\$ 76.82

FUNCTIONAL AREA 3 – NAICS Code 541513 (Computer Facilities Management Services)

This U.S. industry comprises establishments primarily engaged in providing on-site management and operation of clients' computer systems and/or data processing facilities. Establishments providing computer systems or data processing facilities support services are included in this industry.

Business Categories --

- Computer Operations/Support
- Computer Systems Facilities Services
- Data Processing Facilities Services
- End User Support
- Equipment Inventory & Maintenance
- Facilities Management, Operation, & Support
- Facilities Planning
- Hardware/Software Maintenance
- Help Desk
- Network Management

Labor Category Descriptions

Project Manager – Senior:

Responsible for all aspects of the development and implementation of assigned projects and provides a single point of contact for those projects. Takes projects from original concept through final implementation. Interfaces with all areas affected by the project including end users, computer services, and client services. Defines project scope and objectives. Develops detailed work plans, schedules, project estimates, resource plans, and status reports. Conducts project meetings and is responsible for project tracking and analysis. Ensures adherence to quality standards and reviews project deliverables. Manages the integration of vendor tasks and tracks and reviews vendor deliverables. Provides technical and analytical guidance to project team. Recommends and takes action to direct the analysis and solutions of problems.

Business Subject Matter Specialist:

Provides technical knowledge and analysis of highly specialized applications and operational environments, high-level functional systems analysis, design, integration, documentation and implementation advice on exceptionally complex problems that need extensive knowledge of the subject matter for effective implementation. Participates as needed in all phases of software development with emphasis on the planning, analysis, testing, integration, documentation, and presentation phases.

Chief Information Security Officer:

Ensures that all information systems are functional and secure.

Client/Server Database Manager:

Projects long-range requirements for client/server database administration in conjunction with other managers in the information systems function as well as business function managers. Prepares activity and progress reports regarding the client/server database management section.

Client/Server Support Analyst:

Under general supervision, assists with personal computer operating systems software and communication system software. Designs, tests, and maintains personal computer systems. Responsible for analyzing and solving personal computer-related problems. Responsible for security, integrity, and reliability of personal computer systems. Tests and integrates new hardware, systems and modifications to existing equipment and systems. Performs research/investigations, analysis, design, testing, and installation of supported hardware and software. Schedules installation of new hardware and software and modifications to existing systems. Monitors performance of hardware and its capacity in all assigned locations. Recommends and implements enhancements to existing hardware and systems.

Communications Facility Engineer:

Provides technical direction and engineering knowledge for communications systems infrastructure activities, including planning, designing, and implementing communications infrastructure requirements for buildings and systems. Ensures that adequate and appropriate planning is provided to direct building architects and planners in building communications spaces and media pathways meet industry standards.

Communications Installer:

Assists in the planning, design, and implementation of communications networks. Responsible for providing assistance and technical support for network design activities. Assists in the review/assessment of user needs. Performs feasibility studies for small projects. Assists in the evaluation and selection of equipment.

Communications Transmission Engineer:

Provides technical direction and engineering knowledge for communications activities including planning, designing, installing and maintaining large communications networks. Develops, operates, and maintains voice, wireless, video, and data communications systems. Provides complex engineering or analytical tasks and activities associated with one or more technical areas within the communications function.

Computer Operations Manager:

Responsible for all activities relating to the operation of centralized data processing equipment and peripheral information systems equipment. Establishes detailed schedules for the utilization of all equipment in the computer operations section to obtain maximum utilization. Assigns personnel to various operations and directs their activities. Reviews and evaluates work and prepares performance reports. Confers with and advises subordinates on administrative policies and procedures, technical problems, priorities, and methods. Consults with personnel in other information systems sections to coordinate activities. Prepares activity and progress reports regarding the computer operations section. Frequently reports to a Director of Information Systems Operations.

Consultant:

Works with end user groups to evaluate and solve technical problems. Evaluates existing systems and/or user needs to analyze, design, recommend, and implement system changes.

Data Architect:

Designs and builds relational databases. Develops strategies for data acquisitions, archive recovery, and implementation of a database. Works in a data warehouse environment, which includes data design,

database architecture, metadata and repository creation. Translates business needs into long-term architecture solutions. Defines, designs, and builds dimensional databases. Develops data warehousing blueprints, evaluating hardware and software platforms, and integrating systems. Evaluates reusability of current data for additional analyses. Reviews object and data models and the metadata repository to structure the data for better management and quicker access.

Electronic Mail Coordinator:

Monitors servers, replication, and mail routing. Creates user accounts and maintains security levels on databases. Provides first-level telephone support and troubleshoots. Monitors existing messaging infrastructure and server usage, ensuring proper working order.

Help Desk Coordinator - Intermediate:

Under general supervision, responds to and diagnoses problems through discussions with users. Includes problem recognition, research, isolation, and resolution steps. Typically is able to resolve less complex problems immediately, while more complex problems are assigned to senior level support. May involve use of problem management database and help desk systems.

Help Desk Coordinator - Senior:

Under general direction, responsible for ensuring the timely process through which problems are controlled. Includes problem recognition, research, isolation, resolution, and follow-up steps. Requires experience and understanding of MIS environment. Typically involves use of problem management database and help desk system. May provide guidance/training for less-experienced personnel.

Help Desk Manager:

Has overall responsibility for help desk operations associated with the identification, prioritization and resolution of reported problems. Ensures that all phases of help desk support are properly coordinated, monitored, logged, tracked and resolved appropriately. May maintain responsibility for development, maintenance and integrity of help desk software. Requires 3 years experience in the field.

Help Desk Specialist:

Provides support to end users on a variety of issues. Identifies, researches, and resolves technical problems. Responds to telephone calls, email and personnel requests for technical support. Documents, tracks, and monitors the problem to ensure a timely resolution.

Help Desk Support Services Specialist - Intermediate:

Under general supervision, provides second-tier support to end users for either PC, server, or mainframe applications and hardware. Handles problems that the first-tier of help desk support is unable to resolve. May interact with network services, software systems engineering, and/or applications development to restore service and/or identify and correct core problem. Simulates or recreates user problems to resolve operating difficulties. Recommends systems modifications to reduce user problems. Maintains currency and high level of technical skill in field of expertise. Escalates more complex problems to senior level.

Help Desk Support Services Specialist - Senior:

Under general direction, provides second-tier support to end users for either PC, server, or mainframe applications and hardware. Handles problems that the first-tier of help desk support is unable to resolve. May interact with network services, software systems engineering, and/or applications development to restore service and/or identify and correct core problem. Simulates or recreates user

problems to resolve operating difficulties. Recommends systems modifications to reduce user problems. Maintains currency and highest level of technical skill in field of expertise.

Information Assurance Development Engineer:

Analyzes and defines security requirement for computer systems which may include mainframes, workstations, and personal computers. Designs, develops, engineers, and implements solutions that meet security requirements. Provides integration and implementation of the computer system security solution.

Information Assurance Engineer:

Establishes and satisfies complex system-wide information security requirements based upon the analysis of user, policy, regulatory, and resource demands. Supports customers at the highest levels in the development and implementation of doctrine and policies. Applies know-how to government and commercial common user systems, as well as to dedicated special purpose systems requiring specialized security features and procedures.

Information Assurance Network Specialist:

Analyzes general information assurance-related technical problems and provides basic engineering and technical support in solving these problems. Designs, develops, engineers, and implements solutions that meet network security requirements. Performs vulnerability/risk analyses of computer systems and applications during all phases of the system development life cycle.

Information Assurance Systems/Network Specialist:

Installs, configures and maintains organization's operating systems. Analyzes and resolves problems associated with server hardware, NT, applications software. Detects, diagnoses, and reports NT related problems on both NT server and NT desktop systems. Performs a wide variety of tasks in software/hardware maintenance and operational support of NT Server systems.

Information Security Business Analyst:

Determines enterprise information security standards. Develops and implements information security standards and procedures. Ensures that all information systems are functional and secure.

IT Subject Matter Specialist:

Provides extremely high-level subject matter proficiency for work described in the task. Provides advanced technical knowledge and analysis of highly specialized applications and operational environment, high-level functional systems analysis, design, integration, documentation, training, and implementation advice on complex problems that require doctorate level knowledge of the subject matter for effective implementation.

LAN/WAN Administrator:

Monitors LAN, WAN, and servers. Provides batch monitoring, tape back-up, and restoration. Responsibilities include performing data configuration and installation of routers and firewalls. Administers mail system and implements new database architecture. Monitors and conducts performance evaluation of networks. Supports, installs, maintains, and troubleshoots all local area and wide area networking devices and related software for branch offices and internal and external networks.

LAN/WAN/MAN Administrator:

Monitors LAN, WAN, MAN, and servers. Provides batch monitoring, tape back-up, and restoration. Supports, installs, maintains, and troubleshoots all local area and wide area networking devices and related software for branch offices and internal and external networks.

Network Control Technician:

Tests and analyzes all elements of complex network facilities (including power, software, communications devices, lines, modems, and terminals). Monitors and controls the performance and status of the network resources. Utilizes software and hardware tools and identifies and diagnoses complex problems and factors affecting network performance.

Network/Hardware Support Technician:

Monitors and responds to hardware, software, and network problems. Provides the routine testing and analysis of all elements of the network facilities (including power, software, communications machinery, lines, modems, and terminals). Monitors and controls the performance and status of the network resources.

Network Operations Supervisor:

Provides first level guidance/direction (either as a full-time supervisory position or on a project management basis) to network operation and maintenance analysts, technicians, and/or engineers. Performs technical analysis of complex software, hardware, and transmission facility using various diagnostic tools in support of efficient network operations. Provides guidance/direction for engineering efforts and test and evaluation programs. Performs on-site engineering when required. Typically requires five years of experience in operations, maintenance, and sustained engineering of LAN to WAN internetworking. Frequently reports to a Regional Manager or Operations Manager.

Network Systems Administrator:

Provides system administration of Network, Web, and/or communication systems, including Local Area Network (LAN) and Wide Area Network (WAN) systems, involving network security. Prepares technical implementation plans that provide integrated solutions including actions, milestones, timelines and critical paths required for complete solutions.

Network Systems Manager:

Supervises all personnel engaged in the operation and support of network facilities, including all communications equipment in large scale or multi-shift operations. Supervises complex operations that involve two or more additional functions such as, but not limited to, network operations, systems security, systems software support, and production support activities.

Operations Manager - Data Communications:

Manages all aspects of the daily operation for data network(s) in either a stand-alone data network environment in a voice and data separated network environment. Develops project plans for the implementation of new telecommunications technology and systems. Directs technical analysis of complex software, hardware, and transmission systems. Coordinates with vendors involved in providing communication activities.

Operations Manager - Voice Communications:

Manages all aspects of the daily operation for voice network(s) in either a stand-alone voice network OR in a voice and data separated network environment. Develops project plans for the implementation of

new telecommunications technology and systems. Directs technical analysis of complex software, hardware, and transmission systems.

Operations/Network LAN Administrator:

Supports, monitors, tests, and troubleshoots hardware and software problems pertaining to LAN. Recommends and schedules repairs. Provides end users support for all LAN- based applications. Installs and configures workstations.

Operations Systems Manager:

Provides assistance and oversight for all information systems operations activities, including computer and telecommunications/communications operations, data entry, data control, operations support, operating systems programming, system security policy procedures, and/or web strategy and operations. Provides input to policy level discussions regarding standards and budget constraints.

Operations/Technical Support Analyst:

Provides technical guidance for directing and monitoring information systems operations. Implements machine modifications to increase the capacity of the system. Directs compilation of records and reports concerning production, machine malfunctioning and maintenance.

Operations/Technical Support Manager:

Responsible for all activities relating to technical guidance for planning, directing, and monitoring information systems operations. Plans and recommends machine modifications or additional equipment to increase the capacity of the system. Prepares operational cost estimates for current and proposed projects. Evaluates vendor proposals for purchases of hardware. May manage related outsourcing contracts and service levels. Directs compilation of records and reports concerning production, machine malfunctioning, and maintenance. May advise or consult on organizational, procedural, and workflow plans, methods, and procedures analysis. Analyzes the results of workflow plans, monitors the operating system(s) and recommends changes to improve processing and utilization. May have departmental staff responsibility. Frequently reports to an Information Systems Operations Manager or Director of Information Systems Operations.

PC Products Analyst:

Under general supervision, analyzes and evaluates microcomputer products and systems available in the marketplace. Analyzes such products for compatibility, expandability, and ease of use and support. Recommends to management the support or nonsupport of evaluated products. Participates in the development and customization of products. Designs application options/screens compatible with mainframe applications. Prepares product development documentation regarding use of product. Frequently reports to a PC Support Manager.

PC Systems Specialist:

Under general supervision, performs analytical, technical, and administrative work in the planning, design, and installation of new and existing personal computer systems. Works on moderately complex applications. Confers with end users to determine types of hardware and software required. Writes programs to fulfill requirements or selects appropriate off-the-shelf software and modifies to suit. May maintain or utilize telecommunications protocols. Installs new hardware and maintains existing hardware. Trains end users in use of equipment and software. Frequently reports to a PC Support Manager.

Project Engineer:

Manages long-term IT engineering projects. Performs engineering design evaluations and works to complete projects within budget and scheduling restraints. Develops, implements, and monitors information systems policies and controls to ensure data accuracy, security, and regulatory compliance. Reviews reports of computer and peripheral equipment production, malfunction, and maintenance to determine and address problems.

Quality Assurance Specialist:

Provides development of project Software Quality Assurance Plan and the implementation of procedures that conforms to the requirements of the contract. Provides an independent assessment of how the project's software development process is being implemented relative to the defined process and recommends methods to optimize the organization's process.

Security Coordinator:

Coordinates, develops, and evaluates security programs for an organization.

Site Manager:

Provides applications systems analysis and programming activities for a Government site, facility or multiple locations. Prepares long and short-range plans for application selection, systems development, systems maintenance, and production activities and for necessary support resources.

Strategic Planner:

Provides strategic planning of large projects or a significant segment of a strategic planning portion of a large complex project. Provides the overall approach to clarify mission statements so they can be used as springboards in envisioning their desired future. Assists in developing mission and vision statements, subsequent goal delineation, provides guidance for building operational plans and specifying measurable outcomes to include capital outlay planning efforts in a consolidated strategic planning process and prioritizes those initiatives.

Systems Engineer:

Performs a variety of systems engineering tasks and activities that are broad in nature and are concerned with major systems design, integration, and implementation, including personnel, hardware, software, budgetary, and support facilities and/or equipment. Provides quality assurance review and the evaluation of new and existing software products.

Telecommunications/Communications Integration Engineer:

Provides technical direction and analysis for telecommunication activities, including planning, designing, integrating, installing and maintaining large-scale telecommunications/ communications networks and services with computer systems. Applies telecommunications/communications engineering principles and theory to propose design and configuration alternatives. Analyzes network performance, usage and traffic flows, accesses and interfaces, transmission techniques, and protocols to interface with computer systems.

Telecommunications Network Help Desk:

Responds to user complaints to research complex problems associated with the organization's telecommunications networks (voice and/or data). Diagnoses problem source through discussions with users. Coordinates with internal company support and operations groups and/or with vendors to resolve

problems. Follows up with users to ensure problem has been resolved. Develops supporting documentation of all activities.

Voice Communications Technician:

Monitors and responds to complex technical control facility hardware and software problems. Interfaces with vendor support service groups to ensure proper escalation during outages or periods of degraded system performance. Maintains PBX/systems and associated hardware.

Functional Area 3 Hourly Rates

FA 3 Labor Category	6/1/10 to 5/31/11
Project Manager – Senior	\$ 98.63
Business Subject Matter Specialist	\$ 166.79
Chief Information Security Officer	\$ 211.27
Client/Server Database Manager	\$ 94.71
Client/Server Support Analyst	\$ 54.80
Communications Facility Engineer	\$ 73.41
Communications Installer	\$ 72.28
Communications Transmission Engineer	\$ 73.41
Computer Operations Manager	\$ 81.98
Consultant	\$ 189.03
Data Architect	\$ 91.12
Electronic Mail Coordinator	\$ 66.72
Help Desk Coordinator – Intermediate	\$ 39.49
Help Desk Coordinator – Senior	\$ 50.39
Help Desk Manager	\$ 73.60
Help Desk Specialist	\$ 55.60
Help Desk Support Services Specialist – Intermediate	\$ 45.66
Help Desk Support Services Specialist – Senior	\$ 51.73
Information Assurance Development Engineer	\$ 76.72
Information Assurance Engineer	\$ 83.40
Information Assurance Network Specialist	\$ 74.50
Information Assurance Systems/Network Specialist	\$ 74.50
Information Security Business Analyst	\$ 76.72
IT Subject Matter Specialist	\$ 266.86
LAN/WAN Administrator	\$ 69.30
LAN/WAN/MAN Administrator	\$ 70.39
Network Control Technician	\$ 70.39
Network/Hardware Support Technician	\$ 67.83
Network Operations Supervisor	\$ 74.84
Network Systems Administrator	\$ 70.39
Network Systems Manager	\$ 94.51
Operations Manager – Data Communications	\$ 98.82
Operations Manager – Voice Communications	\$ 98.82
Operations Systems Manager	\$ 98.82
Operations/Network LAN Administrator	\$ 70.39
Operations/Technical Support Analyst	\$ 70.39
Operations/Technical Support Manager	\$ 91.54
PC Products Analyst	\$ 52.97
PC Systems Specialist	\$ 52.00

FA 3 Labor Category	6/1/10 to 5/31/11
Project Engineer	\$ 138.99
Quality Assurance Specialist	\$ 74.88
Security Coordinator	\$ 74.50
Site Manager	\$ 91.18
Strategic Planner	\$ 83.40
Systems Engineer	\$ 100.07
Telecommunications/Communications Integration Engineer	\$ 73.41
Telecommunications Network Help Desk	\$ 55.60
Voice Communications Technician	\$ 70.39

FUNCTIONAL AREA 4 – NAICS Code 518210 (Data Processing, Hosting & Related Services)

This industry comprises establishments primarily engaged in providing infrastructure for hosting or data processing services. These establishments may provide specialized hosting activities, such as web hosting, streaming services or application hosting, provide application service provisioning, or may provide general time-share mainframe facilities to clients. Data processing establishments provide complete processing and specialized reports from data supplied by clients or provide automated data processing and data entry services.

Business Categories --

- Application Hosting
- Application Service Providers (ASPs)
- Automated Data Processing
- Computer Input Preparation
- Data Capture Imaging Services
- Data Entry Services
- Data Processing
- Data Warehousing
- Document Imaging
- Electronic Data Processing
- Media Streaming
- Microfiche/Microfilm Services
- Scanning Services
- Storage Area Networks
- Web Hosting

Labor Category Descriptions

Project Manager – Senior:

Responsible for all aspects of the development and implementation of assigned projects and provides a single point of contact for those projects. Takes projects from original concept through final implementation. Interfaces with all areas affected by the project including end users, computer services, and client services. Defines project scope and objectives. Develops detailed work plans, schedules, project estimates, resource plans, and status reports. Conducts project meetings and is responsible for project tracking and analysis. Ensures adherence to quality standards and reviews project deliverables. Manages the integration of vendor tasks and tracks and reviews vendor deliverables. Provides technical and analytical guidance to project team. Recommends and takes action to direct the analysis and solutions of problems.

Applications Programmer:

Devises or modifies procedures to solve complex problems considering computer equipment capacity and limitations, operating time, and form of desired results. Designs, codes, tests, debugs, and documents.

Business Subject Matter Specialist:

Provides technical knowledge and analysis of highly specialized applications and operational environments, high-level functional systems analysis, design, integration, documentation and implementation advice on exceptionally complex problems that need extensive knowledge of the subject matter for effective implementation. Participates as needed in all phases of software development with emphasis on the planning, analysis, testing, integration, documentation, and presentation phases.

Chief Information Security Officer:

Ensures that all information systems are functional and secure.

Client/Server Database Manager:

Projects long-range requirements for client/server database administration in conjunction with other managers in the information systems function as well as business function managers. Prepares activity and progress reports regarding the client/server database management section.

Consultant:

Works with end user groups to evaluate and solve technical problems. Evaluates existing systems and/or user needs to analyze, design, recommend, and implement system changes.

Data Architect:

Designs and builds relational databases. Develops strategies for data acquisitions, archive recovery, and implementation of a database. Works in a data warehouse environment, which includes data design, database architecture, metadata and repository creation. Translates business needs into long-term architecture solutions. Defines, designs, and builds dimensional databases. Develops data warehousing blueprints, evaluating hardware and software platforms, and integrating systems. Evaluates reusability of current data for additional analyses. Reviews object and data models and the metadata repository to structure the data for better management and quicker access.

Data/Configuration Management Specialist:

Provides configuration management planning. Describes provisions for configuration identification, change control, configuration status accounting, and configuration audits. Regulates the change process so that only approved and validated changes are incorporated into product documents and related software.

Data Entry Supervisor:

Supervises all data entry activities. Assigns work to personnel and directs activities. Reviews and evaluates work and prepares performance reports. Frequently reports to a Computer Operations Manager or Production Control Supervisor.

Data Warehousing Administrator:

Coordinates the data administration technical function for both data warehouse development and maintenance. Plans and oversees the technical transitions between development, testing, and production phases of the workplace. Facilitates change control, problem management, and communication among data architects, programmers, analysts and engineers. Establishes and enforces processes to ensure a consistent, well-managed and well-integrated data warehouse infrastructure. Expands and improves data warehouse to include data from all functions of the organization using data manipulation, transformation and cleansing tools. Requires three years of experience in the field.

Data Warehousing Analyst:

Works in a data warehouse environment, which includes data design, database architecture, metadata and repository creation. Reviews data loaded into the data warehouse for accuracy. Responsible for the development, maintenance and support of an enterprise data warehouse system and corresponding data marts. Troubleshoots and tunes existing data warehouse applications. Conducts research into new data warehouse applications and determines viability for adoption. Assists in establishing development standards. Evaluates existing subject areas stored in the data warehouse. Incorporates existing subject areas into an enterprise model. Creates new or enhanced components of the data warehouse. Requires two years experience in the field.

Data Warehousing Programmer:

Responsible for product support and maintenance of the data warehouse. Performs data warehouse design and construction. Codes and documents scripts and stored procedures. Designs/implements data strategy methods. Develops appropriate programs and systems documentation. Assists with Meta data repository management. Prepares/implements data verification and testing methods for the data warehouse. Creates index and view scripts. Requires two years experience in the field.

Data Warehousing Project Manager:

Works in a data warehouse environment, which includes data design, database architecture, metadata and repository creation. Responsible for leading data warehouse team in development and enhancements of the data warehouse user interface. Establishes user requirements. Creates new standards and procedures related to end user and internal interface development. Works with Data Architect on technical issues and system architecture definition. Translates high-level work plans and converts to detailed assignments for team members. Monitors status of assignments and reviews work for completion and quality. Typically requires more than five years of experience.

Database Administrator:

Participates in the design, creation, and maintenance of computerized databases. Responsible for quality control and auditing of databases to ensure accurate and appropriate use of data. Works with management to develop database strategies to support company needs. Consults with and advises users on access to various databases. Works directly with users to resolve data conflicts and inappropriate data usage. Directs the maintenance and use of the corporate data dictionary. Typically requires two to four years of experience.

Database Manager:

Responsible for all activities related to the administration of computerized databases. Assigns personnel to various projects and directs their activities. Reviews and evaluates work and prepares performance reports. Confers with and advises subordinates on administrative policies and procedures, technical problems, priorities, and methods. Consults with and advises users of various databases. Projects long-range requirements for database administration in conjunction with other managers in the information systems function as well as business function managers. Prepares activity and progress reports regarding the database management section. Typically requires five to seven years of experience.

E-Business Manager:

Sets direction and guides action plans and priorities of electronic commerce, marketing and communications. Develops and facilitates organizational models and structure changes needed to meet

the evolving electronic business strategies. Establishes and implements enterprise-wide business systems.

Electronic Mail Coordinator:

Monitors servers, replication, and mail routing. Creates user accounts and maintains security levels on databases. Provides first-level telephone support and troubleshoots. Monitors existing messaging infrastructure and server usage, ensuring proper working order.

Information Security Business Analyst:

Determines enterprise information security standards. Develops and implements information security standards and procedures. Ensures that all information systems are functional and secure.

IT Subject Matter Specialist:

Provides extremely high-level subject matter proficiency for work described in the task. Provides advanced technical knowledge and analysis of highly specialized applications and operational environment, high-level functional systems analysis, design, integration, documentation, training, and implementation advice on complex problems that require doctorate level knowledge of the subject matter for effective implementation.

Operations Manager - Data Communications:

Manages all aspects of the daily operation for data network(s) in either a stand-alone data network environment in a voice and data separated network environment. Develops project plans for the implementation of new telecommunications technology and systems. Directs technical analysis of complex software, hardware, and transmission systems. Coordinates with vendors involved in providing communication activities.

Operations Manager - Voice Communications:

Manages all aspects of the daily operation for voice network(s) in either a stand-alone voice network OR in a voice and data separated network environment. Develops project plans for the implementation of new telecommunications technology and systems. Directs technical analysis of complex software, hardware, and transmission systems.

Operations/Network LAN Administrator:

Supports, monitors, tests, and troubleshoots hardware and software problems pertaining to LAN. Recommends and schedules repairs. Provides end users support for all LAN- based applications. Installs and configures workstations.

Operations Systems Manager:

Provides assistance and oversight for all information systems operations activities, including computer and telecommunications/communications operations, data entry, data control, operations support, operating systems programming, system security policy procedures, and/or web strategy and operations. Provides input to policy level discussions regarding standards and budget constraints.

Operations/Technical Support Analyst:

Provides technical guidance for directing and monitoring information systems operations. Implements machine modifications to increase the capacity of the system. Directs compilation of records and reports concerning production, machine malfunctioning and maintenance.

Project Engineer:

Manages long-term IT engineering projects. Performs engineering design evaluations and works to complete projects within budget and scheduling restraints. Develops, implements, and monitors information systems policies and controls to ensure data accuracy, security, and regulatory compliance. Reviews reports of computer and peripheral equipment production, malfunction, and maintenance to determine and address problems.

Quality Assurance Specialist:

Provides development of project Software Quality Assurance Plan and the implementation of procedures that conforms to the requirements of the contract. Provides an independent assessment of how the project's software development process is being implemented relative to the defined process and recommends methods to optimize the organization's process.

Security Coordinator:

Coordinates, develops, and evaluates security programs for an organization.

Systems Engineer:

Performs a variety of systems engineering tasks and activities that are broad in nature and are concerned with major systems design, integration, and implementation, including personnel, hardware, software, budgetary, and support facilities and/or equipment. Provides quality assurance review and the evaluation of new and existing software products.

Web Content Analyst:

Provides for development and content that will motivate and entertain users so that they regularly access the website and utilize it as a major source for information and decision-making. Provides managing/performing website editorial activities including gathering and researching information that enhances the value of the site.

Web Operations Manager:

Monitors LAN, WAN, and servers. Provides batch monitoring, tape back-up, and restoration. Responsibilities include performing data configuration and installation of routers and firewalls. Administers mail system and implements new database architecture. Monitors and conducts performance evaluation of networks. Supports, installs, maintains, and troubleshoots all local area and wide area networking devices and related software for branch offices and internal and external networks.

Web Security Analyst:

Performs all procedures necessary to ensure the safety of the organization's website and transactions across the Internet/intranet. Applies Internet firewall technologies to maintain security. Ensures that the user community understands and adheres to necessary procedures to maintain security. Updates and deletes users, monitors and performs follow-up on compliance violations, and develops security policies, practices, and guidelines.

Functional Area 4 Hourly Rates

FA 4 Labor Category	6/1/10 to 5/31/11
Project Manager – Senior	\$ 98.63
Applications Programmer	\$ 101.96
Business Subject Matter Specialist	\$ 160.99
Chief Information Security Officer	\$ 203.93
Client/Server Database Manager	\$ 91.42
Consultant	\$ 182.46
Data Architect	\$ 87.96
Data/Configuration Management Specialist	\$ 91.23
Data Entry Supervisor	\$ 75.08
Data Warehousing Administrator	\$ 85.47
Data Warehousing Analyst	\$ 81.60
Data Warehousing Programmer	\$ 67.53
Data Warehousing Project Manager	\$ 99.39
Database Administrator	\$ 76.98
Database Manager	\$ 97.83
E-Business Manager	\$ 128.80
Electronic Mail Coordinator	\$ 69.76
Information Security Business Analyst	\$ 74.06
IT Subject Matter Specialist	\$ 257.59
Operations Manager – Data Communications	\$ 95.38
Operations Manager – Voice Communications	\$ 95.38
Operations/Network LAN Administrator	\$ 67.94
Operations Systems Manager	\$ 95.38
Operations/Technical Support Analyst	\$ 67.94
Project Engineer	\$ 134.16
Quality Assurance Specialist	\$ 72.28
Security Coordinator	\$ 71.91
Systems Engineer	\$ 96.60
Web Content Analyst	\$ 91.23
Web Operations Manager	\$ 98.74
Web Security Analyst	\$ 97.87