STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF MANAGEMENT AND BUDGET

October 1, 2015

TO: ALL STATE AGENCIES, SCHOOL DISTRICTS, MUNICIPALITIES, VOLUNTEER FIRE COMPANIES AND POLITICAL SUBDIVISIONS

FROM: MICHAEL BACU, CPPO
STATE CONTRACTING PROCUREMENT ADMINISTRATOR
302-857-4522

SUBJECT: **AWARD NOTICE, Addendum #6**
Updates Vendor Contact Information
CONTRACT NO. GSS15597-IT_SERVICES
Information Technology Staff Augmentation Services

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OF
KEY CONTRACT INFORMATION

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Information regarding this contract is also available at: http://delaware.compaid.com/

GOVERNMENT SUPPORT SERVICES – CONTRACTING
100 ENTERPRISE PLACE – SUITE 4 – DOVER, DE 19904-8202
PHONE: (302) 857-4550 – FAX: (302) 739-3779 – GSS.OMB.DELAWARE.GOV

1. MANDATORY USE CONTRACT

REF: Title 29, Chapter 6911(d) Delaware Code. Every state department and agency within the Executive Branch and Judicial Branch of the state government shall procure all material, equipment and nonprofessional services through the statewide contracts administered by Government Support Services, Office of Management and Budget. Delaware State University, Delaware Technical and Community College, the operations funded by Public School Districts, Delaware Transit Corporation, Department of Elections, the Legislative Branch and the Board of Pension Trustees and their consultants are specifically exempted from the requirements of this subsection.

Under Title 29 §6933, The State of Delaware is authorized to participate in, sponsor, conduct or administer a cooperative purchasing agreement for the procurement of materiel or nonprofessional services with 1 or more public procurement units either within the State or within another state in accordance with an agreement entered into between the participants.

The State of Virginia awarded a contract to Contractor for Information Technology Contingent Labor Services, Contract Number VA-130620-CAI, in accordance with its laws and statutes governing competitive procurements, the State of Delaware has determined that it is in the best interest of the State to enter into a cooperative agreement with the State of Virginia under Virginia Contract Number VA-130620-CAI.

2. CONTRACT PERIOD

This contract shall be from valid from October 1, 2015 through September 30, 2017. The State reserves the right, in its sole discretion, to extend this contract pursuant to and including any extensions of the State of Virginia Contract. VA-130629-CAI under the same terms and conditions.

This contract has been extended through June 30, 2018.
This contract has been extended through June 30, 2019.
This contract has been extended through June 30, 2020.
This contract has been extended through June 30, 2021.

3. VENDORS

Contract # GSS15597-IT_SERVICES State of Virginia Contract Number: VA-130620 FSF Vendor ID: 0000018102 **Company Information** Computer Aid, Inc. (CAI) 3801 Paxton Street Harrisburg PA 17111 **Website:** www.cai.io	Contact: Damien Graeff Office Phone: (717) 651-3205 Cell Phone: (717) 571-8863 Fax: (717) 651-3200 Email: Damien.Graeff@cai.io	Contact: Matt Payne Cell Phone: (302) 750-5585 Office Phone: (302) 831-5545 Fax: (302) 444-5399 Email: Matthew.Payne@cai.io

4. SHIPPING TERMS

F.O.B. destination.

5. POSITIONS, SKILL CATEGORY MATRIX AND AREA DEFINITION

Positions and Job Descriptions are listed in this Award Notice as Attachment A: Delaware IT Staff Augmentation Contract Job Titles/Descriptions and Skills Matrix.

6. STAFF AUGMENTATON CONTRACT RATE CARD

Rates are listed in this Award Notice as Attachment B: Delaware IT Staff Augmentation Contract Rate Card.

7. PAYMENT

For each P.O. issued as part of this contract, the State will pay Vendor monthly, within thirty (30) days of receipt of the Vendor's billing, the amount which is legitimately earned by the Vendor, and supported by payroll data and an itemized accounting of reasonable reimbursable direct non-salary costs.

Final settlement for total payment to the Contractor will be made within thirty (30) days from the date of final written State acceptance of the work and services as agreed to in the P.O.

No premium time for overtime will be paid without prior written State authorization. Indirect overhead cost shall not be applied to the premium portion of the overtime.

8. PARTICIPATION CRITERIA

Information to participate in this contract, to include a Fact Sheet, Criteria for Participation, and Helpful Hints are available at http://delaware.compaid.com/ .

9. HOLD HARMLESS

The contractor agrees that it shall indemnify and hold the State of Delaware and all its agencies harmless from and against any and all claims for injury, loss of life, or damage to or loss of use of property caused or alleged to be caused, by acts or omissions of the contractor, its employees, and invitees on or about the premises and which arise out of the contractor’s performance, or failure to perform as specified in the Agreement.

10. NON-PERFORMANCE

In the event the contractor does not fulfill its obligations under the terms and conditions of this contract, the ordering agency may purchase equivalent product on the open market. Any difference in cost between the contract prices herein and the price of open market product shall be the responsibility of the contractor. Under no circumstances shall monies be due the contractor in the event open market products can be obtained below contract cost. Any monies charged to the contractor may be deducted from an open invoice.

11. FORCE MAJEURE

Neither the contractor nor the ordering agency shall be held liable for non-performance under the terms and conditions of this contract due, but not limited to, government restriction, strike, flood, fire, or unforeseen catastrophe beyond either party's control. Each party shall notify the other in writing of any situation that may prevent performance under the terms and conditions of this contract.

12. AGENCY'S RESPONSIBILITIES

The Agency shall:

a. Examine and review in detail all letters, reports, drawings and other documents presented by the Contractor to the Agency and render to the Contractor in writing, findings and decisions pertaining thereto within a reasonable time so as not to delay the services of Contractor.

b. Give prompt written notice to the Contractor whenever the Agency observes or otherwise becomes aware of any development that affects the scope or timing of the Contractor's services.

c. When an ordering agency first experiences a relatively minor problem or difficulty with a vendor, the agency will contact the vendor directly and attempt to informally resolve the problem. This includes failure to perform by the date specified and any unacceptable difference(s) between the purchase order and the merchandise received. Ordering agencies should stress to vendors that they should expedite correction of the differences because failure to reply may result in an unfavorable rating in the execution of the awarded contract.

d. The state has several remedies available to resolve non-performance issues with the contractor. The Agency should refer to the Contract Terms and Conditions to view these remedies. When a default occurs, the Agency should first review the contract to confirm that the issue is a part of the contract. If the issue is not covered by the contract, the state cannot expect the contractor to perform outside the agreement. If the issue is a part of the contract, the Agency or GSS - Contracting must then contact the contractor, discuss the reasons surrounding the default and establish a date when the contractor will resolve the non-performance issue.

e. If there is a performance deficiency, a Corrective Action Report (CAR) may be used. Complete this form to report concerns with vendors or commodities. Be sure to furnish as much detail as possible. http://gss.omb.delaware.gov/divisionwide/forms.shtml.

Attachment A – Job Titles and Descriptions

Information Technology Staff Augmentation Services

Job Titles and Descriptions

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BSME3 9
CADD/GIS Administrator 10
CGA1 10
CGA2 10
CGA3 10
Computer Operator 10
CO1 10
CO2 11
CO3 11
Continuity of Operations Specialist 11
COS1 11
COS2 12
COS3 12
Data Entry Operator 12
DE1 12
DE2 13
Database Administrator 14
DBA1 14
DBA2 14
DBA3 14
Database Architect 15
DA1 15
DA2 15
DA3 16
Desktop Support Specialist 16
DSS1 16
DSS2 16
DSS3 16
Disaster Recovery Specialist 17
DRS1 17
DRS2 17
DRS3 17
Facilitator 18
FAC1 18
FAC2 18
FAC3 18
Functional Architect 18
FA1 19
FA2 19
FA3 20
Help Desk Analyst 20
HDA1 20
HDA2 21
HDA3 21
IT Security Administrator 22

ISA1 22
ISA2 22
ISA3 22
Lead Computer Operator 23
LCO1 23
LCO2 23
Network Administrator 23
NA1 23
NA2 24
NA3 24
Network Architect 24
NAR1 24
NAR2 25
NAR3 25
Network Engineer 25
NE1 25
NE2 26
NE3 26
Organizational Change Management Specialist 26
OCM1 26
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OCM3 27
Planning Manager 28
PLAN1 28
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Product Specialist 29
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Senior Project Management Specialist 43
SPMS1 43
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Telecom Engineer 59
TE1 59
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Test3 61
Video Conference Specialist 61
VCS1 61
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Voice/Data Engineer 62
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Business Analyst

The Business Analyst is responsible for the set of tasks and techniques used to work as a liaison among stakeholders in order to understand the structure, policies, and operations of an organization, and to recommend solutions that enable the organization to achieve its goals. The various technical tiers of Legacy/Core and Emerging are dictated by the complexity of technical skills added to the roles below.

BA1

Years of Relevant Experience:	Up to 4 years
Preferred Education:	4 year college degree or equivalent.
Role Description:	▪ Experience conducting Facilitated Workshops for requirements analysis. ▪ Experience creating workflows using formal notation such as the Business Process Modeling Notation (BPMN). ▪ Knowledge of formal requirements gathering methodologies. ▪ Experience developing Business Requirements - project initiation document, what the needed achievements will be, and the quality measures. ▪ Experience developing Functional requirements - describe what the system, process, or product/service must do in order to fulfill the business requirements. ▪ Experience developing User (stakeholder) requirements - are a very important part of the deliverables, the needs of the stakeholders will have to be correctly interpreted. This deliverable can also reflect how the product will be designed, developed, and define how test cases must be formulated. ▪ Experience developing Quality-of-service (non-functional) requirements - are requirements that do not perform a specific function for the business requirement but are needed to support the functionality. For example: performance, scalability, quality of service (QoS), security and usability. ▪ Experience developing Report Specifications - define the purpose of a report, its justification, attributes and columns, owners and runtime parameters. ▪ Experience developing Requirements Traceability Matrix - a cross matrix for recording the requirements through each stage of the requirements gathering process. ▪ Strong organization and writing skills. Experienced developing graphic representations of complex business processes.

BA2

Years of Relevant Experience:	4 to 6 years
Preferred Education:	4 year college degree or equivalent.
Role Description:	All roles specified in BA1 plus additional work experience and job knowledge.

BA3

Years of Relevant Experience:	7 plus years
Preferred Education:	4 year college degree or equivalent and IIBA-certified Business Analyst.
Role Description:	All roles specified in BA1 plus additional work experience, job knowledge, and IIBA certification, ▪ Could include Technical skills focusing on more Systems Analysis roles ▪ Experience in a leadership role as a Business Analyst

Business Subject Matter Expert

The Business Subject Matter Expert (BSME) brings proven experience from related businesses or organizations as well as system integration and technology experience. He or she consults with the client to define needs or problems, conduct research, perform studies and surveys to obtain data, and analyze problems to advise and make recommendations on business and technical solutions based on hands-on experience solving similar business problems. The Business Subject Matter Expert leverages knowledge of theory, principles, or technology of specific discipline or field of specialization. This role typically combines technology and business subject matter expertise to ensure an area of specialization related to a discipline and technology.

BSME1

Years of Relevant Experience:	Up to 3 years
Preferred Education:	4 year college degree or equivalent experience related to area of Subject Matter
Role Description:	• Knowledge of computer programming and other related technical fields as well as extensive experience in a particular business or industry subject matter. • Possess core knowledge of specific industry standard practices or disciplines. • Analyze data to determine solution, such as installation of alternate methods and procedures, changes in processing methods and practices, modification of machines or equipment, or redesign of products or services. • Advise client or department heads on alternate methods of solving a need or problem, and/or recommends specific solution. • Experience in providing consulting services to governmental entities. • Translate requirements into technical or functional documents as an expert on specified subject.

BSME2

Years of Relevant Experience:	3 to 8 years
Preferred Education:	4 year college degree or equivalent experience related to area of Subject Matter
Role Description:	All roles specified in BSME1 plus the following: • Consult with executive-level stakeholders to define business need or problem. • Conduct research, performs studies and surveys to obtain data. • Analyze problems to advise on or recommend solutions • Utilize knowledge of theory, principles, or technology of specific discipline or field of specialization. • Function as professional responsible for advanced concept design. • Focus as consultant to process and concept creation. • Consult with various vendors and industry experts to ensure adherence to best practices. • Visionary on new concepts and ideas related to area of subject matter expertise.

BSME3

Years of Relevant Experience:	8 plus years
Preferred Education:	4 year college degree or equivalent experience related to area of Subject Matter or advanced certifications or degrees related to SME
Role Description:	All roles specified in BSME2 plus the following: • Function as enterprise wide expert in areas of increasing difficulty. • Responsible for projects spanning multiple agencies. • Deliver product decisions and evaluations related to RFPs.

CADD/GIS Administrator

The CADD/GIS Administrator (CGA) is responsible for providing direct support of various CADD/GIS software and hardware systems. The CGA will perform hardware and software installations, relocations, testing and routine maintenance.

CGA1

Years of Relevant Experience:	Up to 5 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	• Assist in troubleshooting CADD/GIS system hardware problems and work with the appropriate service and warranty vendors to make the necessary repairs and fixes. • Track version upgrades and notify proper parties of available updates to CADD/GIS Systems software. • Assist with phone and online problem reporting and maintaining problem report records. • Assist with ordering consumable supplies for the CADD/GIS Systems. • Maintain current inventory of all hardware, software, upgrades and fixes for each site. • Maintain configuration charts of current inventory. • Maintain data backups and data archives and provide data retrieval from backup. • Monitor system status and data integrity.

CGA2

Years of Relevant Experience:	5 to 8 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in CGA1 plus the following: • Able to work independently. • Demonstrate proven experience in troubleshooting with little supervision. • Able to communicate status to managers and project sponsors. • Assist in developing standards and direction for systems.

CGA3

Years of Relevant Experience:	8 plus years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in CGA2 plus the following: • Lead efforts to troubleshoot CADD/GIS system hardware and software problems. • Lead team of CGAs developing software and hardware plans and solutions. • Expertise in teaching/conveying technical and/or functional courses/concepts.

Computer Operator

The Computer Operator (CO) is responsible for the preparation and operation of teleprocessing computers and peripheral equipment. The Computer Operator works on various mainframe and network equipment to troubleshoot issues and restore operability based on established procedures of the State DTI. The Computer Operator might also monitor the computer and network infrastructure, data center environmental controls and physical security systems to take appropriate action as required.

CO1

Years of Relevant Experience:	Up to 5 years
Preferred Education:	2 year college degree or equivalent technical study in computer operations field

Role Description:	• Prepare and operate mainframe and client/server computer systems and peripheral equipment to support day-to-day business operation. • Detect and troubleshoot network, computer and peripheral equipment malfunctions. Take corrective action or escalate problem as required. • Prepare reports and logs detailing all shift activity. • Interpret and execute detailed standard operating procedures written for the computer operations environment. • Possess a detailed knowledge of Data Center operational requirements and standard operating procedures. • Effectively communicate and interface with, on a daily basis, DTI management and technical staff, and other technical and business contacts, as required. • Work under the direction of a Lead Computer Operator or Operator Services Supervisor.

CO2

Years of Relevant Experience:	5 to 8 years
Preferred Education:	2 year college degree or equivalent technical study in computer operations field
Role Description:	All roles specified in CO1 plus the following: • Able to work independently. • Able to communicate status to managers and project sponsors. • Assist in developing standards and direction for systems. • Complete tasks as assigned by a Lead Computer Operator, or Data Center & Operations Team Management. • Analyze problems quickly and adopt an effective course of action. • Effectively communicate with other DTI staff as well as the customer.

CO3

Years of Relevant Experience:	8 plus years
Preferred Education:	2 year college degree or equivalent technical study in computer operations field
Role Description:	All roles specified in CO2 plus the following: • Anticipate patterns and changes to ensure smooth operation using advanced expertise and knowledge. • Operate multiple systems and computers for enterprise wide systems. • Operate of complex ERP platforms to ensure quality of service. • May contribute as expert in operations on retirement of legacy mainframe/midrange systems.

Continuity of Operations Specialist

The Continuity of Operations Specialist (COS) is responsible for assisting State efforts to develop, implement and coordinate Continuity of Operations plans and tests for all state agencies. The Continuity of Operations Specialist is responsible for working with State agencies to develop, test, evaluate and implement continuity of operations plans and ensure business recovery efforts are accomplished within defined timeframes.

COS1

Years of Relevant Experience:	1 to 2 years
Preferred Education:	4 year degree in Management Information Systems (MIS), Computer Science, or related field is preferred

Role Description:	• Coordinate and assist in the evaluation of Continuity of Operations drills. • Ensure that all Continuity of Operations Plans are kept current and maintained centrally. • Assist with the coordination of a real-time Continuity of Operations activation during an event. • Assist with the administration and maintenance of the state's Living Disaster Recovery Planning System.

COS2

Years of Relevant Experience:	2 to 5 years
Preferred Education:	4 year degree in Management Information Systems (MIS), Computer Science, or related field is preferred
Role Description:	All roles specified in COS1 plus the following: • Assist client agencies with the design, testing, and implementation of Continuity of Operations Plans. • Ensure that the essential functions of all are documented and maintained in the Living Disaster Recovery Planning System.

COS3

Years of Relevant Experience:	5 plus years
Preferred Education:	4 year degree in Management Information Systems (MIS), Computer Science, or related field is preferred
Role Description:	All roles specified in COS2 plus the following: • Provide training on Continuity of Operations Plans and the state's implemented Living Disaster Recovery Planning System. • Negotiate and contract with key state partners and hot/cold site industry providers.

Data Entry Operator

For data entry projects that require manual key entry and/or data capture through scanning.

DE1

Years of Relevant Experience:	0 to 2 years
Preferred Education:	Associates Degree or equivalent
Role Description:	• Comprehensive PC skills. • Able to follow written and spoken instructions. • Minimum of 25 wpm. • Ability to accurately enter information into a computer, accessing information from a computer, and verifying information on a screen. • Duties involve utilizing automated equipment, including electronic keyboard, display screen, and sorted memory to perform. • Ability to operate and understand basic scanning and imaging equipment, including pan, skew, and image correction techniques. • Ability to conduct basic data mining and data capture efforts. • Services may be required to be provided at supplier's site using supplier's equipment. Typically need an end product of electronic data, typically transmitted through FTP. • Keypunch and verify records in specified format (ex. ASCII).

	• The total number of keystrokes is limited to actual characters, numbers and special characters that are keyed. Spaces, function keys, nulls, and zeros are not counted as keystrokes. • The contractor must complete all data forms within an agreed-upon amount of time from receipt or average a minimum of a set number of strokes each week data forms are in possession. • Error rate cannot exceed 1/2%. Error rate is calculated on a character (not field or record) basis. • Pickup and delivery by contractor to be made on a weekly basis. • For key entry, required that a second individual completed 100% key verification to control errors. • Knowledge of imaging and visual display operating practices, procedures, and techniques. • Knowledge of arithmetic and numbering systems. • Ability to operate equipment with speed and accuracy to ensure information is captured.

DE2

Years of Relevant Experience:	2 to 4 years
Preferred Education:	Associates Degree or equivalent
Role Description:	• Comprehensive PC skills. • Able to follow written and spoken instructions. • Minimum of 35 wpm. • Ability to accurately enter information into a computer, accessing information from a computer, and verifying information on a screen. • Duties involve utilizing automated equipment, including electronic keyboard, display screen, and sorted memory to perform. • Ability to operate and understand basic scanning and imaging equipment, including pan, skew, and image correction techniques. • Ability to conduct basic data mining and data capture efforts. • Services may be required to be provided at supplier's site using supplier's equipment. Typically need an end product of electronic data, typically transmitted through FTP. • Keypunch and verify records in specified format (ex. ASCII). • The total number of keystrokes is limited to actual characters, numbers and special characters that are keyed. Spaces, function keys, nulls, and zeros are not counted as keystrokes. • The contractor must complete all data forms within an agreed-upon amount of time from receipt or average a minimum of a set number of strokes each week data forms are in possession. • Error rate cannot exceed 1/2%. Error rate is calculated on a character (not field or record) basis. • Pickup and delivery by contractor to be made on a weekly basis. • For key entry, required that a second individual completed 100% key verification to control errors. • Knowledge of imaging and visual display operating practices, procedures, and techniques. • Knowledge of arithmetic and numbering systems. • Ability to operate equipment with speed and accuracy to ensure information is captured.

Database Administrator

The Database Administrator (DBA) is responsible for data analysis and database management. Database Administrators typically are involved in maintenance, enhancement, designing of data dictionaries, physical and logical database models, and performance tuning. Database Administrators have a range of skills and knowledge of the utilities and production tools used for data storage management to support the Application Team.

DBA1

Years of Relevant Experience:	2 to 3 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	• Skilled data dictionary analysis and design and data model analysis design. • Maintain central data repository. • Experience and knowledge in supporting application system development life cycle. • Responsible for data dictionary backup and recovery. • Responsible for definition of standards of data dictionaries. • May program dictionary analysis and maintenance software. • Perform performance tuning. • Monitor database performance and space requirements. • Schedule and monitor end of day data warehousing jobs. • Assist in coordinating software releases. • Communicate accurate and useful status updates. • Manage and report time spent on all work activities. • Follow quality standards. • Ability to work in a team environment. • Complete assigned tasks. • Strong communication skills; both written and spoken.

DBA2

Years of Relevant Experience:	3 to 5 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in DBA1 plus the following: • Business systems analysis and design experience. • Logical data modeling techniques. • Production environment Tools/Utilities. • Knowledgeable in data analysis and database management techniques. • Execution of all responsibilities with little direct supervision of Team Lead. • Administration and scripting experience in relative platform. • Supervise performance tuning. • Author shell scripts to perform back up, restore, and monitoring tasks. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner. • Identify and track issues, risks and action items.

DBA3

Years of Relevant Experience:	5 plus years

Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in DBA2 plus the following: • Highly skilled at database design, installations, conversions. • Responsible for database backup and recovery procedures, access security and database integrity, physical data storage design and data storage management. • Participates in Database Management System selection and maintains database performance. • Expertise in specific Database Management Systems. • Knowledge of various Database Management System products. • Provide status of work to Project Team Lead. • Engage in ongoing process improvement.

Database Architect

The Database Architect (DA) is responsible for designing, developing, and implementing infrastructure to provide highly-complex, reliable, and scalable databases to meet the organization's objectives and requirements. The Database Architect is familiar with a variety of the database technologies, concepts, methodologies, practices, and procedures and relies on experience and judgment to plan and accomplish goals. The Database Architect is able to perform a variety of complicated tasks with minimal or no direct supervision. The Database Architect assists in defining system and application architecture and provides vision, problem anticipation, and problem solving ability to an organization. The Database Architect consults with the client to define needs or issues, conduct research, perform studies and surveys to obtain data, and analyze problems to advise on or recommend solutions, utilizing knowledge of theory, principles, or technology of specific discipline or field of specialization.

DA1

Years of Relevant Experience:	1 to 4 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	• Possess extensive knowledge of specific database systems, and is capable of hands-on work in all phases of database design and management. • Design, develop, and implement infrastructure to provide highly-complex, reliable, and scalable database to meet the organization's objectives and requirements. • Analyze organization's business requirements for database design, and implements changes to database as required. • Perform systems analysis on database, and resolves performance, capacity, and replication issues as necessary. • Provide detailed design and specification documentation, including flowcharts, for all aspects of the database. • Work with database analysts to develop methodologies, report views, queries, and table replications • Ensure that all the data is in the proper format. • Participate in the identification, prioritization, and development of technical initiatives and strategies. • Develop and maintain database standards and naming conventions. • Keep up-to-date on emerging database architectures, technologies, and methodologies, and attends training classes as necessary.

DA2

Years of Relevant Experience:	4 to 7 years
Preferred Education:	4 year college degree or equivalent technical study

Role Description:	All roles specified in DA1 plus the following: • Possess extensive knowledge of multiple types of database systems, and is capable of hands-on work in all phases of database design and management. • Work with enterprise-wide, complex systems. • Maintain specific capabilities regarding best practice and design of complex systems.

DA3

Years of Relevant Experience:	7 plus years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in DA2 plus the following: • Design systems involving multiple agencies for integrated efforts. • May be involved in projects involving database resources from multiple agencies or governmental institutions • May manage teams of developers • Ability to interact with Executive level sponsors and external experts

Desktop Support Specialist

The Desktop Support Specialist (DSS) supports in-house teams and responds in person to helpdesk tickets.

DSS1

Years of Relevant Experience:	0 to 2 years
Preferred Education:	2 year associate degree or equivalent study
Role Description:	• Respond to help desk tickets. • Work with vendor support contacts to resolve technical problems with desktop computing equipment and software. • Ensure desktop computers interconnect seamlessly with diverse systems including associated validation systems, file servers, email servers, computer conferencing systems, application servers and administrative systems. • Build and configure new user workstation equipment set (PC, desktop image, phone, peripherals, software, user accounts) • Troubleshoot basic network, software, and printing problems.

DSS2

Years of Relevant Experience:	2 to 4 years
Preferred Education:	2 year associate degree or equivalent study
Role Description:	All roles specified in DSS1 plus the following: • Assess functional needs to determine specifications for purchases • Order computer supplies. • Work with vendors on supply issues.

DSS3

Years of Relevant Experience:	4 plus years
Preferred Education:	2 year associate degree or equivalent study
Role Description:	All roles specified in DSS2 plus the following:

	• Assume team leadership responsibilities. • Mentor junior team members. • Possess extensive networking knowledge. • Experience working with complex systems or custom hardware.

Disaster Recovery Specialist

The Disaster Recovery Specialist (DRS) is responsible for assisting State efforts to develop, implement and coordinate disaster recovery plans and tests for all mission-critical IT environments. The Disaster Recovery Specialist is responsible for working with State agencies to develop, test, evaluate and implement disaster recovery plans and ensure system recovery efforts are accomplished within defined timeframes.

DRS1

Years of Relevant Experience:	1 to 2 years
Preferred Education:	4 year degree in Management Information Systems (MIS), Computer Science, or related field is preferred.
Role Description:	• Coordinate and monitor disaster recovery tests. • Ensure that all disaster recovery plans are kept current and copies are maintained centrally and off-site. • Prioritize the recovery of data, systems, and facilities across all State departments, agencies and school districts. • Assist with coordination of real-time recovery activities during a disaster event.

DRS2

Years of Relevant Experience:	2 to 5 years
Preferred Education:	4 year degree in Management Information Systems (MIS), Computer Science, or related field is preferred.
Role Description:	All roles specified in DRS1 plus the following: • Document the readiness of the State's IT infrastructure for recovery from a disaster. • Assist client agencies with the design, testing, and implementation of disaster recovery plans for their IT data centers, applications and systems. • Develop and conduct periodic simulated disaster scenarios and assist in the validation of the recovery plans and procedures.

DRS3

Years of Relevant Experience:	5 plus years
Preferred Education:	4 year degree in Management Information Systems (MIS), Computer Science, or related field is preferred.
Role Description:	All roles specified in DRS2 plus the following: • Provide agency training on the planning, testing and evaluation of disaster recovery scenarios as they relate to the Agency's/School District's IT systems and applications. • Negotiate/contract with key disaster recovery, data storage, and hot/cold site industry providers. • Ensure that all critical State systems and information is included in a disaster recovery plan.

Facilitator

The Facilitator (FAC) is responsible for facilitating and managing technical requirements sessions involving Subject Matter Experts who are represented by program staff, technology staff, contractors, and other stakeholders. These sessions are typically information gathering meetings to make decisions and document requirements for workflow diagrams, business processes, system functional specifications, detailed system design specifications, testing plans and scripts, implementations plans, etc. The output from these sessions is documented and compiled in the above documents. These sessions are also utilized to gather requirements for RFI's, RFP's, contracts and federally required documents such as APDs, Feasibility Studies and Cost/Benefit Analyses. The Facilitator is personable, a good listener, well organized, a proficient writer, and can actively manage meetings. This is usually a discipline for larger projects where a Planning or Project Manager requires a meeting specialist.

FAC1

Years of Relevant Experience:	0 to 2 years
Preferred Education:	Bachelor's Degree or equivalent work experience
Role Description:	• Create and maintain Project Plan in MS Project. • Create Meeting Agenda. • Identify SMEs needed for each session. • Lead meetings and manage to the agenda. • Drive team to make decisions. • Document all topics discussed, decisions made and outstanding issues. • Compile documents for review and approval. • Organize documents to feed project deliverables.

FAC2

Years of Relevant Experience:	2 to 5 years
Preferred Education:	Bachelor's Degree or equivalent work experience
Role Description:	All roles specified in FAC1 plus the following: • Experience creating requirements for RFIs, RFPs, and contracts. • Experience in facilitating multi-year projects.

FAC3

Years of Relevant Experience:	5 plus years
Preferred Education:	Bachelor's Degree or equivalent work experience
Role Description:	All roles specified in FAC2 plus the following: • Experience in creating requirements for APDs, Feasibility Studies and Cost/Benefit Analyses. • Experience in facilitating multi-million dollar projects.

Functional Architect

The Functional Architect (FA) is the functional expert for an application, a defined set of applications or a portfolio of related applications. The Functional Architect is also responsible for bringing an understanding of the enterprise, business system and industry to the team(s) supporting or interfacing with the application. The primary responsibility of a Functional Architect is to provide expertise in the business process supported by the application, to prepare and review designs, to recommend improvements, and to provide guidance during the testing process. The Functional Architect helps the Programmers establish a clear understanding of the business functional requirements and either creates the functional designs to meet the requirements or reviews and approves the designs written by the Programmers. The Functional Architect must understand all aspects of their specific application(s), and the underlying business process. The more experienced Functional Architect plans, analyzes, and defines high- level software strategies and solutions. Contained in the experienced role is the task of

coordinating with other Functional Architects to define technical requirements and long range plans for meeting customer requirements.

FA1

Years of Relevant Experience:	2 to 4 years in particular application area
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	• Analyze, determine, and document functional requirements. • Provide definition on how the applications will support business requirements. • Conduct impact analyses of business requirements on the system. • Work with Technical Architecture Specialist in defining software / hardware requirements. • Gather and interpret user requirements into design specifications. • Participate in design of application. • Participate in design code and test reviews as appropriate. • Provide inputs to test planning. • Complete assigned tasks. • Communicate accurate and useful status updates. • Follow quality standards. • Ability to work in a team environment. • Strong communication skills; both written and spoken • Act as the application(s) functional expert; providing expertise in the business process supported by the application. • Provide detailed definition on how the applications will support business requirements. • Work with Technical Architecture Specialist in planning and delivering technical architecture. • Provide expertise for defining functional architecture and infrastructure for applications. • Plan and develop user interface strategy. • Direct and participate in design of application. • Interpret and understand user requirements/design specifications. • Provide detailed definition on how the applications will support business requirements. • Work with Technical Architecture Specialist in defining software / hardware requirements and in planning and delivering architecture. • Provide expertise for defining architecture and infrastructure for applications. • Review and understand team work plan • Identify and track issues, risks and action items affecting own work and work of team. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner.

FA2

Years of Relevant Experience:	4 to 5 years in particular application area
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in FA1 plus the following: • Provide functional expertise to planning organization as required. • Review tasks prior to migration into production as appropriate. Provide assistance in scheduling design work for Lead Functional Architect. • Coordinate the design and development of work estimates and act as the primary point

	of contact. Assist in managing and directing application team processes. • Organize and prepare work effectively to facilitate proactive resolution of problems. • Work with client and Lead Functional Architect to identify direction of software. • Ensure business requirements are supported by the software. • Identify and initiate continuous improvement opportunities. • Define user interface strategies. • Understand specific business needs and overall business strategy of the business customer.

FA3

Years of Relevant Experience:	5 plus years in particular application area
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in FA2 plus the following: • Guide processes for Functional Architects and direct work planning and design activities. • Provide standard, well-structured work planning which defines scope, resources, commitments, quality, risk, tasks, and acceptance criteria. • Ensure that overall application designs remain within project scope. • Work with customer business units to understand their business processes. • Work with customer business units and client to identify direction of software. Ensure business requirements are supported by the software. • Ensure goals for Functional Architects are being met and manage team commitments. • Analyze, define, and document how the applications will support functional and business requirements. Coordinate these efforts with Functional Architects. • Understand supporting/interfacing system applications. • Approve the determined need for new software/hardware. • Understand prioritization work based on business needs request/releases for work affecting an application. • Manage the accomplishment of delivery metrics, Service Level Agreements and other contractual obligations within areas of responsibility. • Sponsor coordination of the required skills, training, methodologies, and processes to ensure the success of team/project/program goals. • Coordinate and conduct project review meetings with Group Lead Functional Architects and Team Leads. • Communicate and resolve application interface issues with other Lead Functional Architects as needed. • Monitor and measure maintenance and development process effectiveness. • Communicate clearly the program/application goals, operational and organizational philosophies, and policies and procedures to the Functional Architects. • Communicate to team members the relationships between their work and assignments and the organizational and/ or program objectives.

Help Desk Analyst

The Help Desk Analyst (HAD) provides Helpdesk Level 2 Support by performing the skills listed below.

HDA1

Years of Relevant Experience:	1 to 3 years field experience

Preferred Education:	2 year associates degree or equivalent technical study
Role Description:	• Provide technical assistance, support, and advice to end users for hardware, software, and systems. • Provide hands-on technical assistance to business and technical users. • Investigate and resolve computer software and hardware problems of users. • Serve as a contact for level 1 support. • Serve as a contact for users having problems using computer software, hardware, and operating systems, and escalates as necessary. • Determine whether problem is caused by hardware, software, or system. • Answer questions, applying knowledge of computer software, hardware, systems, and procedures. • Talk with technical and non-technical co-workers to research problem and find solution. • Asks user with problem to use telephone and participate in diagnostic procedures, using diagnostic software or by listening to and following instructions. • Experienced with a variety of call-tracking software and systems. • Reads trade magazines and engages in independent study to maintain current industry knowledge. • Follow quality standards, and displays strong customer service skills. • Ability to work in a team environment. • Complete assigned tasks. • Strong communication skills; both written and spoken.

HDA2

Years of Relevant Experience:	3 to 5 years field experience
Preferred Education:	4 year college degree in field of specialty or equivalent education and experience combined
Role Description:	All roles specified in HDA 1 plus the following: • Call software and hardware vendors to request service regarding defective products. • Act as a subject matter expert for one or more custom or COTS applications. • Talk to programmers to explain software errors or to recommend changes to programs. • May work as in-house consultant and research alternate approaches to existing software and hardware when standardized approaches cannot be applied. • Test software and hardware to evaluate ease of use and whether product will aid user in performing work. • Write software and hardware evaluation and recommendations for management review. • Write or revise user-training manuals and procedures. • Develop training materials, such as exercises and visual displays. • Train users on software and hardware on-site or in classroom, or recommend outside contractors to provide training.

HDA3

Years of Relevant Experience:	5 plus years field experience
Preferred Education:	4 year college degree in field of specialty
Role Description:	All roles specified in HDA 1 and 2 plus the following: • Manage expectations at all levels: customers/end users, executive sponsors. • Ensure quality standards are followed.

	• Monitor the team's open backlog of support issues and re-assign issues as necessary to ensure they are closed per agreed upon service levels. • Act as the escalation point for high priority support issues. • Ability to make recommendations on policies on system use and services.

IT Security Administrator

The IT Security Administrator (ISA) is responsible for administration of access controls on mainframe for all statewide users, DTI staff, employees, contractors and vendors. The ISA is also accountable for physical security through proprietary administration and surveillance monitoring. The ISA researches upgrades and improvements for better flexibility and control and supports agency Information Security Officers with reports and troubleshooting. The ISA could also provide 2nd level support to DTI Service Desk as well as support customer agencies with security expertise and problem resolution.

ISA1

Years of Relevant Experience:	0 to 2 years
Preferred Education:	Bachelor's Degree or equivalent work experience
Role Description:	• Implement and maintain security policies, procedures, standards, and guidelines for DTI facilities/computing systems and for state agencies, school districts and other entities. • Assist other security personnel in developing and drafting security procedures and forms for administration. • Provide physical security for DTI work locations including building access, door and video surveillance, inspections, investigations and maintenance. • Prepare security violations logs and deliver regular reports; incident reporting, issue remediation. • Administer personnel/HR packets and clearances for DTI staff, contractors and vendors.

ISA2

Years of Relevant Experience:	2 to 5 years
Preferred Education:	Bachelor's Degree or equivalent work experience
Role Description:	All roles specified in ISA1 plus the following: • Conduct investigations, administer information access controls, and perform other security measures for DTI computing sites statewide. • Develop and implement training materials for Information Security Officers. • Develop and conduct security training to DTI and customers related to information security and risk management. • Support the Information Security Officers Team and DTI management as required. • Self-motivated and able to work independently with general direction from the Lead DTI Security Administrator.

ISA3

Years of Relevant Experience:	5 plus years
Preferred Education:	Bachelor's Degree or equivalent work experience
Role Description:	All roles specified in ISA2 plus the following: • Coordinate and administer security activities across interdepartmental teams within DTI and other outside client agencies. • Support and participate in agency projects to implement, insure, train and administer information security.

	• Investigate and report incidents/violations of individuals, systems and accesses with recommendations/alternatives for prevention and risk mitigation. • Write proposals, summaries, documentation, forms and whitepapers concerning information and physical security.

Lead Computer Operator

The Lead Computer Operator (LCO) is responsible for the tasks associated with the leadership and coordination of Computer Operators. Some roles involved preparation and operation of teleprocessing computers and peripheral equipment. The Lead Computer Operator will function as a partner to client employees in enforcing standards and practices that ensure best practices are followed. The Lead Computer Operator would also monitor the computer and network infrastructure, data center environmental controls, and physical security systems to take appropriate action as required.

LCO1

Years of Relevant Experience:	1 to 5 years
Preferred Education:	2 year college degree or equivalent technical study in computer operations field
Role Description:	• Lead efforts of operators or teams of operators to ensure support of computer systems and platforms. • Report resource changes and adjustments to staff to senior management. • Act as focal point for mainframe/midrange operations issues escalation.

LCO2

Years of Relevant Experience:	5 plus years
Preferred Education:	2 year college degree or equivalent technical study in computer operations field.
Role Description:	All roles specified in LOP1 plus the following: • Lead efforts to troubleshoot GIS system hardware and software problems. • Lead team Operators supporting complex systems or multiple enterprise wide application platforms or infrastructure.. • Expertise in teaching/conveying technical and/or functional courses/concepts.

Network Administrator

The Network Administrator (NA) installs, configures, and supports an organization's local area network (LAN), wide area network (WAN), and Internet system or a segment of a network system. The Network Administrator maintains network hardware and software, monitors the network to ensure network availability to all system users and performs necessary maintenance to support network availability. The Network Administrator may supervise other network support and client server specialists and plan, coordinate, and implement network security measures.

NA1

Years of Relevant Experience:	1 to 3 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	• Monitor, diagnose and troubleshoot network (LAN/WAN) performance, hardware and software platforms, resolve server connectivity issues in a multi-tiered and secure networking environment, and replace defective components. • Install, configure, manage and maintain server hosted network attached storage (NAS) and storage area network (SAN) disk storage technologies. • Perform server backups, restorations, fail-over recovery and disaster recovery operations • Maintain and administer computer networks and related computing environments

	including computer hardware, systems software, applications software, and all configurations. • Plan, coordinate, and implement network security measures to protect data, software, and hardware. • Perform routine server operating system and application software with patches and updates. • Test computer hardware, networking software and operating system software. • Confer with network users about how to solve existing system problems. • Work with vendors to resolve problems. • Experience in network cabling systems and fiber optic cabling.

NA2

Years of Relevant Experience:	3 to 5 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in NSA1 plus the following: • Design, install, configure, monitor and troubleshoot network equipment such as, but not limited to, Hubs, Network Interface Cards (NIC), Local Area Network (LAN) cards, hard drives, Ethernet switches, routers, wireless bridges, monitoring devices, access points, firewalls, intrusion detection systems, and content devices. • Recommend changes to improve systems and network configurations, and determine hardware or software requirements related to such changes. • Supervise other team members and provide training in advanced networking skills. • Write and produce technical documentation.

NA3

Years of Relevant Experience:	5 plus years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in NSA2 plus the following: • Recommend changes to improve systems and network configurations, and determine hardware or software requirements related to such changes. • Supervise other team members and provide training in advanced networking skills. • Act as a subject matter expert during technical reviews/audits and provide input during RFP process.

Network Architect

The Network Architect (NAR) is responsible for large-scale infrastructure design, coordination and organization of LAN/WAN Network installations using best practices and leading edge techniques. The Network Architect will have advanced knowledge in network analysis, as well as experience with designing and implementing enterprise class wide area networks. The Network Architect will possess knowledge of network vulnerabilities and be able to mitigate and prevent each one. The Network Architect also has a proven ability to design systems that prevent security issues. The Network Architect may be a Certified Engineer/Expert and may be experienced with agency or statewide network operating systems, network devices, and configuration of client/server systems.

NAR1

Years of Relevant Experience:	1 to 4 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	• Knowledge of network analysis related to infrastructure design.

	• May be an expert in security or intrusion detection. • Proficient in proprietary network technology.

NAR2

Years of Relevant Experience:	4 to 7 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in NAR1 plus the following: • Advanced experience with, but not limited to routers, firewalls, switches and servers. • Advanced knowledge in network analysis. • Advanced problem resolution and project management skills. • Experience with designing and implementing enterprise class wide area networks. • Experience with Firewalls, VPN, encryption, intrusion detection and prevention systems, and penetration testing. • Knowledge of network vulnerabilities and be able to mitigate and prevent each one.

NAR3

Years of Relevant Experience:	7 plus years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in NAR2 plus the following: • Proven ability to conduct and document security assessments and understand and assess governmental and regulatory compliance requirements. • Prior experience designing systems for multiple facilities to integrate simultaneously. • Prior experience acting as a network security SME for State-wide critical networks.

Network Engineer

The Network Engineer (NE) is responsible for Network and Server Connectivity on both hardware and software related to the installation and design of LAN/WAN environments. The Network Engineer will also have experience with networks in which telephony is integrated to IT systems or stand-alone custom kiosks. The Network Engineer may also be the focal point for migration and infrastructure expansion on existing systems. The Network Engineer may possess a formal certification; if not, he or she would have equivalent experience in installing hardware and software associated with networks. In larger environments, the Network Engineer will collaborate or take direction from a Network Architect in larger environments. In smaller environments, the Network Engineer often assumes the role of a Network Architect.

NE1

Years of Relevant Experience:	1 to 3 years
Preferred Education:	2 year college degree or equivalent technical study
Role Description:	• Install, configure, and manage server hosted network attached storage (NAS) and storage area network (SAN) disk storage technologies tied to network infrastructure. • Install complex computer networks and related computing environments including computer hardware, systems software, applications software, and all configurations. • Design, install, configure, monitor, and troubleshoot network equipment such as, but not limited to, Hubs, Network Interface Cards (NIC), Local Area Network (LAN) cards, hard drives, Ethernet switches, routers, wireless bridges, monitoring devices, access points, firewalls, intrusion detection systems, and content devices. • Plan, coordinate, and implement network security measures to protect data, software, and hardware. • Test computer hardware, networking software and operating system software in

	preparation of new installation or upgrade. • Work with vendors to resolve problems. • Working knowledge of network applications, switches and servers. • Experience in network cabling systems and fiber optic cabling.

NE2

Years of Relevant Experience:	3 to 5 years
Preferred Education:	4 year college degree or equivalent technical study or Network Certification
Role Description:	All roles specified in NE1 plus the following: • Execute changes to improve systems and network configurations, and determine hardware or software requirements related to such changes. • Supervise other team members and provide training in advanced networking skills. • Write and produce technical documentation. • Working knowledge of network applications, switches and servers. • Function as enterprise infrastructure expert in maintaining large, disparate systems and networks. • Confer with Network Architects or systems managers to ensure compliance of DTI standards.

NE3

Years of Relevant Experience:	5 plus years
Preferred Education:	4 year college degree or equivalent technical study or Network Certification
Role Description:	All roles specified in NE2 plus the following: • Architect and design changes to improve systems and network configurations, and determine hardware or software requirements related to such changes. • Act as a subject matter expert during technical reviews/audits and provide input during RFP process.

Organizational Change Management Specialist

The Organizational Change Management Specialist (OCM) will provide support to the State of Delaware's business organizations (state agencies and school districts) through the transformational processes related to major project implementations. The difference in the role levels 1, 2 and 3 are based on size and scale of project and needed years' experience.

OCM1

Years of Relevant Experience:	2 to 4 years
Preferred Education:	4 year degree (i.e. business administration, communications, information systems, public administration, organizational development)or equivalent experience
Role Description:	• Develop, document, and communicate policies, processes, procedures, and other information for the preparation of major project implementation within state organizations. • Work with project team members to ensure that business organizations understand and implement changes that are a result of reengineering and system development. • Must be able to exhibit effective communication skills, be highly organized, detail oriented, and work independently. • Assist the user community in identifying and understanding the changes resulting from business reengineering efforts, new system development, and other modifications to

	business processes accompanying technological advances and provide guidance and support in responding to those changes. • Provide a communications link between technical and functional personnel to ensure a clear understanding of requirements, functionality, change issues etc. • Plan, organize, develop, and implement effective communications for the smooth sharing of information between technology teams and business organizations. • Work with the project team to identify and define project operating standards and translate those standards into system documentation. • Work with project team and end user community to identify and define end user procedures and translate those procedures into easily understood, user friendly, readily available end user documentation. • Assist user organizations and technical teams in the process of conducting acceptance testing for maximum clarity and confidence in understanding on the part of both.

OCM2

Years of Relevant Experience:	4 to 6 years
Preferred Education:	4 year degree (i.e. business administration, communications, information systems, public administration, organizational development)or equivalent experience
Role Description:	• Develop, document, and communicate policies, processes, procedures, and other information for the preparation of major project implementation within state organizations. • Work with project team members to ensure that business organizations understand and implement changes that are a result of reengineering and system development. • Must be able to exhibit effective communication skills, be highly organized, detail oriented, and work independently. • Assist the user community in identifying and understanding the changes resulting from business reengineering efforts, new system development, and other modifications to business processes accompanying technological advances and provide guidance and support in responding to those changes. • Provide a communications link between technical and functional personnel to ensure a clear understanding of requirements, functionality, change issues etc. • Plan, organize, develop, and implement effective communications for the smooth sharing of information between technology teams and business organizations. • Work with the project team to identify and define project operating standards and translate those standards into system documentation. • Work with project team and end user community to identify and define end user procedures and translate those procedures into easily understood, user friendly, readily available end user documentation. • Assist user organizations and technical teams in the process of conducting acceptance testing for maximum clarity and confidence in understanding on the part of both.

OCM3

Years of Relevant Experience:	6 plus years
Preferred Education:	4 year degree (i.e. business administration, communications, information systems, public administration, organizational development)or equivalent experience
Role Description:	• Develop, document, and communicate policies, processes, procedures, and other information for the preparation of major project implementation within state organizations.

	• Work with project team members to ensure that business organizations understand and implement changes that are a result of reengineering and system development. • Must be able to exhibit effective communication skills, be highly organized, detail oriented, and work independently. • Assist the user community in identifying and understanding the changes resulting from business reengineering efforts, new system development, and other modifications to business processes accompanying technological advances and provide guidance and support in responding to those changes. • Provide a communications link between technical and functional personnel to ensure a clear understanding of requirements, functionality, change issues etc. • Plan, organize, develop, and implement effective communications for the smooth sharing of information between technology teams and business organizations. • Work with the project team to identify and define project operating standards and translate those standards into system documentation. • Work with project team and end user community to identify and define end user procedures and translate those procedures into easily understood, user friendly, readily available end user documentation. • Assist user organizations and technical teams in the process of conducting acceptance testing for maximum clarity and confidence in understanding on the part of both.

Planning Manager

The Planning Manager (PLAN) is responsible for the planning phase of an IT project. This involves the necessary planning and requirements gathering to ensure that the proper implementation RFP (or equivalent requirements document) and/or contract is in place. Planning manager will serve on a one person capacity on smaller projects and will manage a planning team on large projects. Planning manager will facilitate requirements sessions to gather necessary detail to author planning project documents such as workflow diagrams, business re-engineering documents including as is, to-be and gap analysis, system functional specifications, detailed system design specifications, testing plans and scripts, implementations plans, etc.

PLAN1

Years of Relevant Experience:	0 to 2 years
Preferred Education:	Bachelor's Degree or equivalent work experience.
Role Description:	• Create and maintain Project Plan in MS Project. • Lead various meetings including stakeholder, requirements gathering/JAD with appropriate SMEs and manage to the agenda. • Drive team to make decisions. • Document all topics discussed, decisions made and outstanding issues. • Compile documents for review and approval. • Organize documents to author project deliverables.

PLAN2

Years of Relevant Experience:	2 to 4 years
Preferred Education:	Bachelor's Degree or equivalent work experience.
Role Description:	All roles specified in PLAN1 plus the following: • Manage team of one to two planning staff members. • Project is multi-year.

PLAN3

Years of Relevant Experience:	4 plus years
Preferred Education:	Bachelor's Degree or equivalent work experience.
Role Description:	All roles specified in PLAN2 plus the following: • Manage larger planning team. • Project is mission critical and/or has statewide implications.

Product Specialist

The Product Specialist (PS) is the expert for a technical development or execution environment product or set of products. The primary responsibility of a Product Specialist is to ensure the availability and facilitate the productive use of a product for Application Teams or end users. The Product Specialist may own part of a product, all of one, or several products depending on the nature of the product(s) and their use. The Product Specialist requires significant to expert experience and skills in the product supported. The Product Specialist will usually also have significant experience in the operating environment(s) (e.g., HP/UX, NT, MVS, etc) on which the product is implemented. If the product is one that was internally developed, the supporting PS should also have most of the skills of a Programmer. The Product Specialist is responsible for collaborating with Technical Architecture Specialist, System Specialists, Programmers and vendors to ensure and enhance the use of the product and effect migration to new versions of a product.

PS1

Years of Relevant Experience:	1 to 2 years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	• Make sound recommendations on functional and technical improvements to the product. • Analyze the functional and technical impact of product planning decisions. • Develop appropriate functional and usability standards for products. • Track and document expected volume and type of use of the product. • Participate in product design reviews to verify that design meets quality standards and functional/technical requirements. • Perform impact analyses on production fixes and enhancements to establish priorities. • Provide basic product support and provide accurate and complete answers to detailed product questions in a timely manner. • Provide effective on-site product support as needed. • Accurately sets severity of identified defects. • Provide input to training and / or documentation materials regarding latest technical and functional design changes. • Document all work for future reference. • Review the system test approach and conditions used as the basis for detailed test scenarios. • Follow quality standards. • Analytical and customer service skills. • Communicate accurate and useful status updates. • Ability to work in a team environment. • Complete assigned tasks. • Strong communication skills; both written and spoken

PS2

Years of Relevant Experience:	2 to 5 years

Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in PS1 plus the following: • Actively contribute as an expert or actual designer. • Coordinate product design reviews to verify that design meets quality standards and functional/technical requirements. • Provide accurate estimates for design and programming efforts for system changes and enhancements. • Coordinate enhancements to business and logical data models with data base administration to make the appropriate changes to the physical data model. • Confirm that technical architecture will support all changes required by product enhancements. • Effectively lead product tests and trials. • Identify appropriate business examples to illustrate key concepts / features. • Anticipate, identify, track and resolve issues and risks affecting own work and work of the Application Team. Develop contingency plans as necessary. • Apply specific expertise to ensure that products meet defined customer objectives. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner. • Identify and track issues, risks and action items.

PS3

Years of Relevant Experience:	5-7 years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in PS2 plus the following: • Demonstrate expertise in teaching / conveying technical and / or functional courses / concepts. • Develop appropriate work programs / budgets and use to effectively schedule tasks / assignments. • Identify improvements to project standards to achieve high quality services / products.

PS4

Years of Relevant Experience:	7 to 8 years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in PS3 plus the following: ▪ Development and design using software applications designed using languages and products that are in higher demand sometimes using N-Tier and Web Architecture ▪ Deliver support and design for industry specific applications that require integration with statewide systems or applications. ▪ Interact with executive level business users or technical experts. ▪ May function as a niche SME. ▪ Provide direct technical expertise to applications involving national security, governmental consolidation

PS5

Years of Relevant Experience:	9 to 11 years

Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in PS4 plus the following: ▪ May be responsible for functioning as the Technical SME on an enterprise-wide system. ▪ Responsible for implementations of products/services that involve significant State and/or federal oversight.

PS6

Years of Relevant Experience:	12 plus years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in PS5 plus the following: • Responsible for serving as a Technical Team Lead on enterprise-wide systems. • Serves as a mentor to team members by sharing industry best standards and practices.

Programmer

The Programmer (PR) is responsible for analysis, design, coding, component and assembly testing of all application code owned by the Application Team. Programmers typically are involved in maintenance (including production support), enhancement and development work. Programmers have a range of skills and knowledge of the technologies used and applications supported by the Application Team. The Programmer works with the Functional Architect and Technical Architecture Specialist on an as needed basis to ensure that design and code meets customer requirements.

PR1

Years of Relevant Experience:	Less than 2 years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	• Code enhancement and development programs and/or required fixes to production problems using the functional and technical programming standards. • Test enhancement and development programs. • Participate in structured code reviews / walkthroughs. • Execute all required process steps. • Create and provide content for operational documentation to Technical Writers. • Utilize configuration management tools, design tools, debugging tools, and any other environment specific tools necessary to create, test, and implement an application. • Research problems before approaching the Team Lead or Functional Architect for assistance. • Limited functional knowledge. • Follow quality standards. • Support installation of application releases into production as directed. • Communicate accurate and useful status updates. • Ability to work in a team environment. • Complete assigned tasks. • Strong communication skills; both written and spoken.

PR2

Years of Relevant Experience:	2 to 5 years
Preferred Education:	4 year college degree or equivalent technical study.

Role Description:	All roles specified in PR1 plus the following: • Analyze and design enhancements, development programs, and/or required fixes to production problems. • Design applications to functional and technical programming standards. • Work with Functional Architects to gather and interpret user requirements into design specifications. • Develop system specifications and interfaces. • Determine time estimates and schedule for work. • Moderate functional and process knowledge. • Assist in managing and directing Application Team processes. • Coordinate work with other software developers on Application Teams. • Assist Team Lead or Test Team Lead in monitoring estimated-time-to-complete (ETC) and actuals for assigned tasks. • Develop application designs in support of the systems specifications and interfaces, perhaps in conjunction with application or technical architects. • Operating System expertise sufficient to perform performance and tuning diagnostics. • Work with users to ensure that solutions meet business requirements. • Execution of all responsibilities with little direct supervision of Team Lead. • Generally aware of new developments in industry and process and has ability to apply them to work as appropriate. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner. • Identify and track issues, risks and action items.

PR3

Years of Relevant Experience:	5 to 8 years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in PR2 plus the following: • Plan all required process steps. • Review and understand the Application Team's workplan. • Provide status of work to Team Lead. • Anticipate, identify, track and resolve issues and risks affecting own work and work of the Application Team. Develop contingency plans as necessary. • Engage in ongoing process improvement. • Detailed functional and process knowledge. • Utilize deep modeling, design and coding skills. • Provide expertise in one or more database environments.

PR4

Years of Relevant Experience:	8-10 years
Preferred Education:	4 year college degree or equivalent technical study with advanced study preferred.
Role Description:	All roles specified in PR3 plus the following: • Converts scientific, engineering, and other technical problem formulations to formats that can be processed by computer. • Resolves symbolic formulations, prepares flowcharts and block diagrams, and encodes resultant equations for processing by applying extensive knowledge of branch of science, engineering, or advanced mathematics, such as differential equations or numerical analysis, and understanding of capabilities and limitations of computer. • This is a professional level non-supervisory position which may require coordination of programming activities being conducted by the team • Confers with other business and technical personnel to resolve problems of intent, inaccuracy, or feasibility of computer processing. • Works with necessary personnel to determine if modifications are necessary with interested personnel to determine necessity for modifications or enhancements. • Leverages excellent written and verbal communication skills to develop new business process and programming solutions as directed by business and technical stakeholders. • May coordinate activities of computer programmers.

PR5

Years of Relevant Experience:	10 plus years
Preferred Education:	4 year college degree or equivalent technical study with advanced study preferred.
Role Description:	All roles specified in PR4 plus the following: ▪ Proven track record of hands-on technical design and code work within large complex systems. ▪ Proven hands-on technical work with a variety of technologies. ▪ Demonstrated technical expertise integrating a variety of diverse technical environments and cross-platform technologies. ▪ Proven experience mentoring and performing supervisory functions for technical teams. ▪ Ability to make best practice recommendations based on past work.

	▪ Proven ability to present complex technical constructs to business and non-technical users. ▪ Proven ability to collaborate with business users, project managers and technical architects. ▪ Programming using software applications designed using languages and products in higher demand sometimes using N-Tier and Web Architecture

PR6

Years of Relevant Experience:	10 plus years
Preferred Education:	4 year college degree or equivalent technical study with advanced study preferred.
Role Description:	All roles specified in PR5 plus the following: • Proven track record leading technical design and code work within complex enterprise systems. • Proven hands-on technical design and development expertise working with emerging technologies in diverse technical environments and cross-platform technologies. • Serves as a mentor to team members by sharing industry best standards and practices. • Proven ability to lead complex technical discussions with business and non-technical users.

Project Management Specialist

The Project Management Specialist (PMS) directs, controls, administers, and manages an enhancement or development of **small to medium size** project(s). The Project Management Specialist is the individual ultimately responsible for projects. The Project Management Specialist's primary responsibility is to drive the entire project/program from start to finish. The Project Management Specialist must ensure that the project/program is completed on schedule and that the final product meets the business, technical standards and policies.

PMS1

Years of Relevant Experience:	2 to 5 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	• Responsible for the development of estimates for the enhancement or development effort in planning, analysis, design, construction, testing, and implementation. • Accountable for delivery of all work tasks identified in the program plan. • Responsible for the capture and reporting of required program management metrics. • Adjust and revise estimates when necessary. • Ensure all changes to scope follow processes and are documented. • Ensure new estimates are approved by the client and agreed upon. • Adjust and revise estimates when necessary. • Manage, and track the program progress against the program plan. • Monitor project milestones and phases to ensure the project is on schedule. Take corrective actions if a project begins to slip its schedule. • Prepares status reports on a periodic basis for program team, team leads, group leads, and program manager and appropriate stakeholders. • Plan, organize, prioritize, and manage multiple work efforts across application teams. • Develop the detailed program plan for the enhancement or development effort • Accountable for the final program management evaluation review with stakeholders for approval upon program completion. • Responsible to tailor and baseline all program templates. • Accountable to schedule or monitor status reviews, peer reviews, program management

	inspections, and software quality assurance work product and process reviews with the appropriate designated resources. • Notify team leads of project timelines, milestones, phases, work requests target dates, and approved executable work package. • Communicate and work with users and client as necessary. • Coordinate and present proposals to agencies as necessary. • Analyze and distribute reports on program metrics associated with work items related to improvement measures. • Ensure processes and activities are followed.

PMS2

Years of Relevant Experience:	5 to 7 years
Preferred Education:	4 year college degree or equivalent technical study or PMP Certification
Role Description:	All roles specified in PMS1 plus the following: • Accountable for the approval and sign-off of the program plan with customer representatives, such as portfolio managers, and all affected program stakeholders. • Accountable for management of scope for the program and gaining agreement and approval of scope changes with customer representatives and affected stakeholders. • Build and maintain relationships with key stakeholders and customer representatives. • Direct work planning and scheduling design work. • Manage, and track the program progress against the program plan. • Serve as the primary point of contact for all program-related issues and resolution of issues. • Coordinate and present proposals to agencies as necessary. • Identify and manage program risk and develops risk mitigation strategies, track to closure. • Ensure team leads adjust and revise estimates when necessary. • Anticipate issues and proactively address them. Resolve conflicts with sensitivity and tact. • Coordinate the establishment of program standards and program specific procedures with team leads. • Responsible for project compliance with standards and procedures. • Responsible for the capture and reporting of required program management metrics. • Responsible to tailor and baseline all program templates. • Develop and facilitate achievement of program service commitments and performance metrics. • Ensure that tasks provide value and support the strategic direction of the program and meet service commitments; conduct reviews with agencies. • Accountable for the final program management evaluation review with stakeholders for approval upon program completion. • Communicate effectively with customers and software / hardware suppliers supporting the State as appropriate. • Identify and track issues. • Balance workload with program members' capacity. • Communicate to team members how their work assignments relate to and help achieve program objectives. • Plan program specific training and orientation needs.

PMS3

Years of Relevant Experience:	7 plus years
Preferred Education:	4 year college degree or equivalent technical study of PMP Certification
Role Description:	All roles specified in PMS2 plus the following: • Accountable for activities with excess delivery cycles of 8 to 12 months.

Project Manager

The Project Manager (PM) directs, controls, administers, and regulates an enhancement or development program. The Project Manager is the individual ultimately responsible to the agency. The Program Manager's primary responsibility is to drive the entire effort from start to finish. The Project Manager must ensure that the program is completed on schedule and that the final product meets the business, technical, and established quality requirements. The difference between a PM1, PM2, and PM3 will depend on the size of the project, and the breadth and scope of the project.

PM1

Years of Relevant Experience:	2 to 5 years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	• Responsible for the development of estimates for the enhancement or development effort in planning, analysis, design, construction, testing, and implementation. • Accountable for delivery of all work tasks identified in the program plan. • Responsible for the capture and reporting of required program management metrics. • Adjust and revise estimates when necessary. • Ensure all changes to scope follow processes and are documented. • Ensure new estimates are approved by the client and agreed upon. • Adjust and revise estimates when necessary. • Manage, and track the program progress against the program plan. • Monitor project milestones and phases to ensure the project is on schedule. Take corrective actions if a project begins to slip its schedule. • Prepares status reports on a periodic basis for program team, team leads, group leads, and program manager and appropriate stakeholders. • Plan, organize, prioritize, and manage multiple work efforts across application teams. • Develop the detailed program plan for the enhancement or development effort • Accountable for the final program management evaluation review with stakeholders for approval upon program completion. • Responsible to tailor and baseline all program templates. • Accountable to schedule or monitor status reviews, peer reviews, program management inspections, and software quality assurance work product and process reviews with the appropriate designated resources. • Notify team leads of project timelines, milestones, phases, work requests target dates, and approved executable work package. • Communicate and work with users and client as necessary. • Coordinate and present proposals to agencies as necessary. • Analyze and distribute reports on program metrics associated with work items related to improvement measures. • Ensure processes and activities are followed.

PM2

Years of Relevant	5 to 7 years

Experience:	
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in PM1 plus the following: • Accountable for the approval and sign-off of the program plan with customer representatives, such as portfolio managers, and all affected program stakeholders. • Accountable for management of scope for the program and gaining agreement and approval of scope changes with customer representatives and affected stakeholders. • Build and maintain relationships with key stakeholders and customer representatives. • Direct work planning and scheduling design work. • Manage and track the program progress against the program plan. • Serve as the primary point of contact for all program-related issues and resolution of issues. • Coordinate and present proposals to agencies as necessary. • Identify and manage program risk and develops risk mitigation strategies, track to closure. • Ensure team leads adjust and revise estimates when necessary. • Anticipate issues and proactively address them. Resolve conflicts with sensitivity and tact. • Coordinate the establishment of program standards and program specific procedures with team leads. • Responsible for project compliance with standards and procedures. • Responsible for the capture and reporting of required program management metrics. • Responsible to tailor and baseline all program templates. • Develop and facilitate achievement of program service commitments and performance metrics. • Ensure that tasks provide value and support the strategic direction of the program and meet service commitments; conduct reviews with agencies. • Accountable for the final program management evaluation review with stakeholders for approval upon program completion. • Communicate effectively with customers and software / hardware suppliers supporting the State as appropriate. • Identify and track issues. • Balance workload with program members' capacity. • Communicate to team members how their work assignments relate to and help achieve program objectives. • Plan program specific training and orientation needs.

PM3

Years of Relevant Experience:	7 plus years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in PM2 plus the following: • Accountable for activities with excess delivery cycles of 8 to 12 months.

Quality Acceptance Analyst

The Quality Acceptance Analyst (QAA) is responsible for representing the State in providing review of various project activities and deliverables to ensure that the Project is proceeding on time, within budget and that the outputs of the project are satisfactory. The QAA will serve independent of the Project Manager and will provide feedback to the PM and State staff on project issues and risks so they may be properly mitigated before they affect the scope. A QAA usually serves on large projects.

QAA1

Years of Relevant Experience:	0 to 2 years
Preferred Education:	Bachelor's Degree or equivalent work experience.
Role Description:	• Familiar with industry practices such as CMMI and Six Sigma. • Provide metrics to measure quality outputs. • Provide metrics to track defects and minimize them. • Provide metrics to measure and track risks. • Utilize industry best practices to manage and minimize defects through creation of front end quality measures to minimize/eliminate common sources. • Create repeatable methods to measure performance. • Review outputs including all project deliverables either through a complete review or development of a sampling methodology for large result sets. • Assist in developing traceability metrics. • Help develop test plans that prove traceability. • Assure that testing plans are traceable and repeatable through scripting or similar testing methods. • Develop easy to understand scoring process (e.g. green, yellow red) for tracking issues and project schedule. • Regularly communicate findings to State and vendor partners. • Escalate findings, as appropriate. • Advocate on behalf of the State with PM.

QAA2

Years of Relevant Experience:	2 to 4 years
Preferred Education:	Bachelor's Degree or equivalent work experience.
Role Description:	All roles specified in QAA1 plus the following: • Manage team of one to QA staff. • Project is multi-year.

QAA3

Years of Relevant Experience:	4 plus years
Preferred Education:	Bachelor's Degree or equivalent work experience.
Role Description:	All roles specified in QAA2 plus the following: • Manage larger QA team. • Project is mission critical and/or has statewide implications.

Quality Assurance Specialist

The Quality Assurance Specialist (QAS) is responsible for the design, pilot, and implementation of the software quality assurance review processes. The QAS Specialist will work with Application Teams during pre and post assessment periods. The QAS Specialist reports to the Quality Assurance Team Lead. For each phase end review the Quality Assurance Specialist is responsible to plan, schedule, execute, and document findings of the review. Quality Assurance Specialists must have a detailed understanding of processes which support the software development lifecycle. The Quality Assurance Lead is

responsible for communicating with the State regarding the progress of the quality approach and a summary of the metrics, as well as managing the Quality Assurance Specialists.

QAS1

Years of Relevant Experience:	3 years software development and testing
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	• Assist in software activities in defined span of control for the organization. • Track and monitor process and work product improvement opportunities. • Collect, review, and evaluate the project's required work products against standard work product templates. • Verify that established measurement procedures are used and all required metrics are collected. • Respond to requests for information. • Coordinate work with others on team and across teams • Draft report of observations, minor and major non-compliance. • Develop quality standards. • Monitor progress of action item resolution activity and ensure appropriate internal stakeholders are aware of pending deadlines. • Conduct training courses with project teams on software quality review process. • Research problems before approaching Quality Assurance Lead for assistance. • Communicate accurate and useful status updates. • Manage and report time spent on all work activities. • Follow quality standards. • Able to work in a team environment. • Complete assigned tasks. • Strong communication skills; both written and spoken.

QAS2

Years of Relevant Experience:	5 years software development, testing, and project management
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in QAS1 plus the following: • Conduct software quality phase end review activities (work product and process) for each software project and produce the required quality assurance reports, as specified in the project's quality assurance plan. • Ensure the software development process followed by the project teams is compliant with approved tailored processes. • Review and check project's software development activities and the associated internal tasks required by the agencies as employed by the project and specified in the project plan. • Prepare preliminary software quality audit package for review before conduct of audit. • Define quality standards. • Monitor progress of action item resolution activity and ensure appropriate stakeholders are aware of pending deadlines. • Assist in managing and improving quality assurance team processes. • Review and understand project team work plan. • Determine time estimates and schedule for software quality review work. Conduct reviews according to schedule.

	• Organize and prepare work effectively to facilitate proactive resolution of problems, rather than reactive. • Identify and track issues, risks and action items affecting own work and work of team. • Report on progress of action item resolution and possible risk areas. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner.

QAS3

Years of Relevant Experience:	7 plus years software development, testing and project management
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in QAS2 plus the following: • Review project's required work products to ensure compliance with approved tailored procedures and standards. • Review and check project's software development activities and the associated internal tasks required as employed by the project and specified in the project plan. • Compare actual project procedures to the specified standards, procedures, and, if required, specific 3rd party contractual requirements. • Perform detailed reviews of interim and final tasks as appropriate. • Ensure process improvement opportunities are reviewed by appropriate contact to identify training needs of the organization. • Perform or manage the required software quality phase end reviews of work product and process for each software project and produce the required software quality reports, as specified in the project's software quality plan. • Develop, and manage short and long-term plans and schedules for organization wide software quality needs. • Balance workload with team's capacity by managing the team's activities according to schedule and budgets. • Coordinate and procure the required skills and techniques required. • Obtain feedback from project teams regarding the overall effectiveness of processes and procedures – Forward to appropriate stakeholders and process owners. • Provide feedback to project teams regarding process/procedure improvement opportunities and other potential areas for improvement discovered during software quality activities. • Report all software quality-revealed non-compliance. • Provide regular reports on the results of compliance reviews to the project team, project team leaders and management. Report on progress on action item resolution and possible risk areas. • Anticipate and resolve issues dealing with software quality. • Develop options and recommendations to assist teams in resolving issues. • Ensure action items are addressed and closed based on agreed dates and activities. • Ensure that defined processes are followed. • Communicate related improvement measures to the project team. • Obtain feedback from project teams regarding the overall effectiveness of software quality processes followed. Review with team and develop continuous improvement action plans. Report status to executive team. • Communicate and work with customers and other personnel as necessary. • Communicate clearly the team goals, organizational philosophies, and policies and

	procedures to the team. • Communicate to team members the relationship between their work assignments and the team and project objectives. • Lead efforts in developing and facilitating implementation of team goals and metrics.

Senior Architect

The Senior Architect (SAR) is responsible for designing, developing, and implementing application infrastructure to provide highly-complex, reliable, and scalable applications and systems to meet the organization's objectives and requirements. Senior Architects are familiar with a variety of the application technologies, environments, concepts, methodologies, practices, and procedures and rely on experience and judgment to plan and accomplish goals. Senior Architects are able to perform a variety of complicated tasks with minimal or no direct supervision. They have proven experience defining systems and application architecture and provide vision, problem anticipation, and problem solving ability to organization. They consult with the client to define needs or problems, conduct research, perform studies and surveys to obtain data, and analyze problems to advise on or recommend solutions, utilizing knowledge of theory, principles, or technology of specific discipline or field of specialization.

SAR1

Years of Relevant Experience:	5 years software development, testing, and project management
Preferred Education:	4 year college degree in computer science or related field with advanced study preferred.
Role Description:	• Manage, organize, and administer systems analysis and preparation of applications and operating systems programming to process data and solve problems by use of computers. • Establish priorities and schedules, and oversees and reviews work of systems analysis personnel and programming personnel. • Review feasibility studies and time and cost estimates of new or revised systems. • Assist in the development of standards, procedures, and operating systems applications. • A combination of directly-related technical training and hands-on experience. • Work with stakeholders and management to ensure projects are completed on time and according to organization standards. • Consult with personnel in other information systems groups to coordinate activities. • Consult with management to clarify systems and programs intent, identify problems, suggest changes, and determine extent of application systems changes required. • Participate in developing a project plan and schedule with key milestones, contingency plans, workflow charts or diagrams, considering factors, such as resource requirements, computer storage capacity and speed, extent of peripheral equipment, and intended use of output data. • Manage conversion of workflow charts to language that can be processed by computer and entering of program codes and test data into computer. • Analyze test runs on computer and supervises correction of coded program and input data. • Manage the revision of existing programs to increase operating efficiency or adapt to new requirements. • Compile documentation of program development and subsequent revisions. • Train subordinates in systems analysis, feasibility studies, programming, and program coding. • Prescribe standards for terms and symbols used to simplify interpretation of programs. • Collaborate with computer manufacturers and other users to develop new programming methods. • Prepare records and reports.

Senior Business Subject Matter Expert

The Senior Business Subject Matter Expert (SBSME) brings proven experience from related businesses or organizations as well as system integration and technology experience. They consult with the client to define needs or problems, conduct research, perform studies and surveys to obtain data, and analyze problems to advise and make recommendations on business and technical solutions based on hands-on experience solving similar business problems. They are able to utilize knowledge of theory, principles, or technology of specific discipline or field of specialization.

SBSME1

Years of Relevant Experience:	More than 10 years
Preferred Education	4 year college degree in computer science or a related field with advanced study preferred; certifications specific to the field of project management.
Role Description	• Consult with executive-level stakeholders to define business need or problem; conducts research, performs studies and surveys to obtain data; and analyzes problems to advise on or recommend solutions, utilizing knowledge of theory, principles, or technology of specific discipline or field of specialization. • Require knowledge in computer programming and other related technical fields as well as extensive experience in a particular business or industry subject matter. • Conduct study or survey on need or problem to obtain data required for solution. • Analyze data to determine solution, such as installation of alternate methods and procedures, changes in processing methods and practices, modification of machines or equipment, or redesign of products or services. • Advise client or department heads on alternate methods of solving need or problem, or recommends specific solution. • Require experience providing consulting services to governmental entities. • May be designated according to field of business and technical specialization.

Senior Product Specialist

The Senior Product Specialist (SPRS) is the leading expert for a technical development or execution environment product or set of products. The primary responsibility of a Senior Product Specialist is to ensure the availability and facilitate the productive use of a product for Application Teams or end users. This role will often involve technical development, design and implementation of applications or systems within an industry specialization (i.e. Traffic management, Emergency Response, GIS Systems etc). The
Senior Product Specialist requires expert experience and skills in the product supported. If the product is one that was internally developed, the supporting Senior Product Specialist should also possess the majority of the skills of a Developer/Architect. The Senior Product Specialist is responsible for collaborating with vendors to ensure and enhance the use of the product and effect migration to new versions of a product.

SPRS1

Years of Relevant Experience:	2 to 5 years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in PS2 plus the following: • Responsible for enterprise wide implementation of industry specific enterprise wide systems. • Function as the technical expert with ERP systems involving financials or human resource applications. • Identify improvements to project standards to achieve high quality services / products.

SPRS2

Years of Relevant Experience:	5 to 8 years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in PS2 plus the following: • Demonstrate expertise in teaching / conveying technical and / or functional courses / concepts. • Develop appropriate work programs / budgets and use to effectively schedule tasks / assignments. • Deliver support and design for industry specific applications that require integration with statewide systems or applications. • Design and implement technologies that require GIS Expertise. • Interact with executive level business users or technical experts. • May function as a niche SME

SPRS3

Years of Relevant Experience:	8 plus years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in PS3 plus the following: • Responsible for functioning as the Technical SME on an enterprise-wide system. • Responsible for implementations of products/services that involve significant federal oversight. • Provide direct technical expertise to Executive applications involving national security.

Senior Project Management Specialist

The Senior Project Management Specialist (SPMS) directs, controls, administers, and manages an enhancement or development of **medium to large and/or enterprise-wide** project(s). The Senior Project Management Specialist is the individual ultimately responsible for projects. The Project Management Specialist's primary responsibility is to drive the entire project/program from start to finish. The Project Management Specialist must ensure that the project/program is completed on schedule and that the final product meets the business, technical standards and policies.

SPMS1

Years of Relevant Experience:	2 to 5 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	• Responsible for the development of estimates for the enhancement or development effort in planning, analysis, design, construction, testing, and implementation. • Accountable for delivery of all work tasks identified in the program plan. • Responsible for the capture and reporting of required program management metrics. • Adjust and revise estimates when necessary. • Ensure all changes to scope follow processes and are documented. • Ensure new estimates are approved by the client and agreed upon. • Adjust and revise estimates when necessary. • Manage, and track the program progress against the program plan. • Monitor project milestones and phases to ensure the project is on schedule. Take corrective actions if a project begins to slip its schedule. • Prepares status reports on a periodic basis for program team, team leads, group leads, and program manager and appropriate stakeholders.

	• Plan, organize, prioritize, and manage multiple work efforts across application teams. • Develop the detailed program plan for the enhancement or development effort • Accountable for the final program management evaluation review with stakeholders for approval upon program completion. • Responsible to tailor and baseline all program templates. • Accountable to schedule or monitor status reviews, peer reviews, program management inspections, and software quality assurance work product and process reviews with the appropriate designated resources. • Notify team leads of project timelines, milestones, phases, work requests target dates, and approved executable work package. • Communicate and work with users and client as necessary. • Coordinate and present proposals to agencies as necessary. • Analyze and distribute reports on program metrics associated with work items related to improvement measures. • Ensure processes and activities are followed.

SPMS2

Years of Relevant Experience:	5 to 7 years
Preferred Education:	4 year college degree or equivalent technical study or PMP Certification
Role Description:	All roles specified in SPMS1 plus the following: • Accountable for the approval and sign-off of the program plan with customer representatives, such as portfolio managers, and all affected program stakeholders. • Accountable for management of scope for the program and gaining agreement and approval of scope changes with customer representatives and affected stakeholders. • Build and maintain relationships with key stakeholders and customer representatives. • Direct work planning and scheduling design work. • Manage, and track the program progress against the program plan. • Serve as the primary point of contact for all program-related issues and resolution of issues. • Coordinate and present proposals to agencies as necessary. • Identify and manage program risk and develops risk mitigation strategies, track to closure. • Ensure team leads adjust and revise estimates when necessary. • Anticipate issues and proactively address them. Resolve conflicts with sensitivity and tact. • Coordinate the establishment of program standards and program specific procedures with team leads. • Responsible for project compliance with standards and procedures. • Responsible for the capture and reporting of required program management metrics. • Responsible to tailor and baseline all program templates. • Develop and facilitate achievement of program service commitments and performance metrics. • Ensure that tasks provide value and support the strategic direction of the program and meet service commitments; conduct reviews with agencies. • Accountable for the final program management evaluation review with stakeholders for approval upon program completion. • Communicate effectively with customers and software / hardware suppliers supporting the State as appropriate.

	• Identify and track issues. • Balance workload with program members' capacity. • Communicate to team members how their work assignments relate to and help achieve program objectives. • Plan program specific training and orientation needs.

SPMS3

Years of Relevant Experience:	7 plus years
Preferred Education:	4 year college degree or equivalent technical study of PMP Certification
Role Description:	All roles specified in SPMS2 plus the following: • Accountable for activities with excess delivery cycles of 8 to 12 months.

Senior Project Manager

The Senior Project Manager (SPM) is responsible for managing, coordinating, and establishing priorities for the complete life-cycle of projects including the planning, design, programming, testing, and implementation of business solutions designed to meet requirements of various departments in the company, such as distribution, finance, and manufacturing. Senior Project Managers are familiar with a variety of the project management methodologies and rely on experience and judgment to plan and accomplish goals. They have proven experience leading technology projects to successful implementation. They consult with the client to define needs or problems, conduct research, perform studies and surveys to obtain data, and analyze problems to advise on or recommend solutions, utilizing knowledge of theory, principles, or technology of specific discipline or field of specialization.

SPM1

Years of Relevant Experience:	More than 10 years
Preferred Education:	4 year college degree in computer science or a related field; certifications specific to the field of project management.
Role Description:	All roles specified in PM3 plus the following: • Manage, coordinate, and establish priorities for complete life-cycle of projects including the planning, design, programming, testing, and implementation of business solutions designed to meet requirements of various departments in the company, such as distribution, finance, and manufacturing. • Design project plans, which identify needs and define major tasks and milestones, based on scope, resources, budget, and personnel. • Require proven success communicating verbally and in writing to multiple project stakeholders internal and external to the organization. • Determine project needs and acquires resources required for the success of the project. • Coordinate the development of new systems and/or applications projects, the modification of existing systems or applications, or changes in current methods or techniques. • Coordinate project performance with the other work of the affected department or departments. • Excludes those who do not have full time responsibilities for project management.

Senior Technical Architecture Specialist

The Senior Technical Architecture Specialist (STAS) is the technical expert centered on a technology, technologies, or a portfolio of applications. The Senior Technical Architecture Specialist is an expert architect whose role will involve technical architecture of applications or systems within an industry specialization (i.e. Traffic management, Emergency Response, GIS Systems etc). This individual is responsible for setting the technical approach and direction and implementation for work. The Senior Technical Architecture Specialist provides technical design expertise, defines what technical requirements are needed

to support defined business requirements, participates in detailed design and code reviews, reviews system performance issues, reviews test plans, and provides technical guidance to development experts and vendors. The Senior Technical Architecture Specialist will interface with Executive Sponsors, Group Leads, and Lead Functional Architects to convey infrastructure requirements, plan, and schedule deployment of tasks, and resolve any issues that impact the deployment of the Application Delivery systems that cross agencies, divisions and may include federally integrated projects.

STAS1

Years of Relevant Experience:	1 to 5 years, and 1 to 2 years project management experience
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in TAS3 plus the following: • Communicate effectively with IT staff, client organization and software / hardware suppliers involving specialized technology • Responsible for architecture of industry specific enterprise wide systems • Function as the technical architect of ERP systems involving financials or human resource applications • Identify improvements to project to achieve high quality system design. • Lead efforts in designing technical strategy, direction and approach, technical architecture, data architecture, development architecture, performance tuning, performance and capacity analysis, technical standards, technical reliability and flexibility. • Design and define overall system technical architecture - including software and hardware within the framework and constraints of technical architecture. • Evaluate alternative designs. • Maintain control of specific tools and assets. • Own the technical architecture for a portfolio of applications, including the interpretation and application of the technical architecture. • Plan, design development and/or execution of architectures. • Participate in the plan and design of technical architecture. • Assist with the preparation of estimates for new technology applications and maintenance of existing applications as part of Service Management. • Provide experience in utilizing the project architecture. Acknowledged as highly competent in one or more technologies. • Communicate accurate and useful status reports and other management on a timely basis. • Coordinate and conduct project architecture, infrastructure review meetings, and portfolio review meetings with Group Lead, Lead Functional Architects, and Team Leads. Integrate issues and identify impacts. • Communicate and resolve application interface issues. • Communicate to team members the relations between their work assignments and the organizational and/or program strategy, objectives, business and technology needs of the application/system. • Share knowledge across teams with both similar and non-similar applications, specifically focusing on Technical Architecture. • Interpret and communicate technical architecture to the Technology Application Architecture Team(s).

STAS2

Years of Relevant Experience:	5 to 8 years, and 1 to 2 years project management experience
Preferred Education:	4 year college degree or equivalent technical study

Role Description:	All roles specified in STAS1 plus the following: • Architect systems and design infrastructure/applications for industry specific roles that require integration with statewide systems or applications. • Architect/implement technologies that require GIS Expertise. • Interact with executive level business users or technical experts. • May function as an expert related to architectural best practices.

STAS3

Years of Relevant Experience:	8 plus years, and 1 to 2 years project management experience
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in STAS2 plus the following: • Responsible for functioning as the SME related to architecture on an enterprise wide system. • Responsible for designing architecture for products that involve significant federal oversight. • Provide direct technical/architectural knowledge to Executive applications involving national security.

Service Desk

The Service Desk (SD) analyzes and troubleshoots computer support problems and applies his or her understanding of computer software and hardware products and services to resolve user problems.

SD2

Years of Relevant Experience:	0 to 3 years A+ certification preferred
Preferred Education:	Usually prefer two years of postsecondary training in field of specialty; may accept equivalent education and experience combined.
Role Description:	• Receive telephone calls and e-mails from users having problems using computer software and hardware or inquiring how to use specific software, programming languages, electronic mail, or operating systems. • Ascertain the nature of problem, determine whether problem is caused by hardware such as modem, printer, cables, or telephone, and log in tracking system. • Escalate problems in accordance with defined procedures. • Assist users through problem solving steps • Use technical databases to research problems, and talk with co-workers to research problem and find solution. • Test software and hardware for troubleshooting and problem resolution. ▪ Provide service and preventive maintenance activities on element exchange/baseline products (products with element exchange service and traditional maintenance philosophies; i.e., terminals, printers, personal computers, etc.). ▪ Able to diagnose and detect correct equipment errors and repair products by replacing worn or broken parts, and making technical adjustments. ▪ Makes appropriate use of reference publications and diagnostic aids in resolving technical problems. ▪ Assist in coordination of changes, upgrades and new products, ensuring systems will operate correctly in current and future environment. ▪ Provide accurate and complete answers to general use and administrative environment questions in a timely manner. ▪ Support shared software, such as operating systems, configuration management

	tools, application and development tools, testing tools, compilers, and code editors. ▪ Communicate accurate and useful status updates. ▪ Manage and report time spent on all work activities. ▪ Follow quality standards. ▪ Ability to work in a team environment ▪ Complete assigned tasks. ▪ Strong communication skills; both written and spoken

SD3

Years of Relevant Experience:	More than 3 years A+ certification preferred; additional certification may be required based on specific technologies.
Preferred Education:	4 year college degree or equivalent technical study; may accept equivalent education and experience combined.
Role Description:	All roles specified in SD2 plus the following: • Test software and hardware to evaluate ease of use and whether product will aid user in performing work. • Write or revise training manuals and procedures. • Develop training materials, such as exercises and visual displays. • Train users on software and hardware on-site or in classroom, or recommend outside contractors to provide training. • Write software and hardware evaluation and recommendation for management review. • Implement shared software, such as operating systems, configuration management tools, application and development tools, testing tools, compilers, and code editors.

Software Process Engineer

The Software Process Engineer (SPS) is responsible for implementing and supporting a set of standard software engineering processes used by agencies. The Software Process Engineer participates in the entire life-cycle of software process improvement initiatives. This includes the planning, analysis, design, construction, testing, and implementation of new processes. The Software Process Engineer is responsible for identifying opportunities for improving existing processes and implementing appropriate solutions.

The Software Process Engineer is also responsible for supporting projects and individual Teams in the use and understanding of processes on an ongoing basis. The Software Process Engineer is responsible for collaborating with the Team Lead(s) and Program Managers to provide guidance to team members and facilitate continual software process improvement. The Software Process engineer must understand all aspects of the specific processes used by the Teams. The Software Process Engineer must also be familiar with industry process models and standards.

SPS1

Years of Relevant Experience:	3 years in Computer Software development
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	• Facilitate the implementation of standard software engineering processes. • Identify software development process improvement opportunities either independently or through working with projects and teams. • Assist in planning software process improvement initiatives. • Direct and participate in teams working on the analysis, design, construction, testing, and implementation of new processes. • Work with projects and teams to define the need for tailored processes and tools and assist in implementation, as appropriate. • Provide ongoing support to projects and teams in the use and understanding of the software processes.

	• Provide on-site support for teams on process related issues. • Provide assistance to the Software Process Engineer Lead in planning and scheduling activities. • Provide support in tracking and monitoring the success of process improvement initiatives. • Monitor and solicit feedback on the usability and functionality of implemented processes. • Communicate accurate and useful status updates. • Manage and report time spent on all work activities. • Follow quality standards. • Ability to work in a team environment • Complete assigned tasks. • Strong communication skills; both written and spoken

SPS2

Years of Relevant Experience:	5 years in software development and testing
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in SPS1 plus the following: • Facilitate the implementation of standard software engineering processes across agencies. • Determine time estimates and schedule for own work and resolve issues on a timely basis. • Identify and track issues, risks and action items. • Determine process to support various initiatives. • Lead the development of content for process training and deliver process training as appropriate. • Coordinate with various teams about process improvement opportunities. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner. • Identify and track issues, risks and action items.

SPS3

Years of Relevant Experience:	7 plus years total experience; 5 plus years in software development and testing.
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in SPS2 plus the following: • Organize and prepare work effectively to facilitate proactive resolution of problems. • Anticipate and resolve issues on a timely basis. • Communicate accurate and useful status as appropriate. • Demonstrate and promote a focus on client service. • Communicate effectively with suppliers as appropriate. • Work with internal customers and others to identify direction of software process. • Identify knowledge in a form that is reusable.

System Administrator

The System Administrator (SA) is responsible for server back up and security, along with performance tuning and capacity planning. System Administrators should possess an understanding of network and distributed computing concepts. This is accomplished by working with the Systems Management Team Lead to understand the scope of services to be provided and assessing the impact they will have on the technical infrastructure.

SA1

Years of Relevant Experience:	Less than 2 years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	• Familiar with most basic system administrator tools and process; for example, can boot/shutdown a machine, add and remove user accounts, use back up programs, and maintain system database files. • Maintain the project servers. • Maintain the file and print capacity • Ensure that backups are performed as appropriate. • Act as a front-line interface to users. • Accepts trouble reports and dispatch them to appropriate system administrators. • Ability to write scripts in a particular administrative language. • Programming experience with any applicable language. • Communicate accurate and useful status updates. • Manage and report time spent on all work activities. • Follow quality standards. • Ability to work in a team environment • Complete assigned tasks. • Strong communication skills; both written and spoken

SA2

Years of Relevant Experience:	2 to 4 years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in SA1 plus the following: • Responsible for operating and other system software. • Responsible for upgrading the operating and system software and keeping patches current. • Familiar with fundamental networking/distributed computing environment concepts. • Able to do minimal debugging and modification of programs. • Execute the disaster recovery/back up procedures and archiving procedures. • Manage security for servers. • Responsible for performance tuning, capacity planning, database administration, and fault management. • Provide tier two support of the technical infrastructure. • Coordinate efforts with vendors if tier three support is required. • Responsible for ensuring high priority issues are resolved in a timely manner. • Responsible for keeping the environment up and running. • In many cases is responsible for identifying and reporting hardware problems. • Capable of writing purchase justifications. • Understand basic routing concepts. • Identify and track issues, risks, and action items. • Resolve and/or assist in resolving issues. • Review, prioritize, and research service requests. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner.

SA3

Years of Relevant Experience:	4 plus years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in SA2 plus the following: • Solid understanding of networking/distributed computing environment concepts. • Understand principles of routing client/server programming. • Manage expectations at all levels: customers/end users, executive sponsors. • Ensure quality standards are followed. • Understand the business application of technical support and design in an application development environment. • Work with the various Infrastructure teams and operations provider to identify the strategic direction of systems management activities. • Understand the design of consistent network-wide file system layouts • Maintain strong relationships with employees and various tier two and three support groups. • Develop plans for disaster recovery/ back up and archiving. • Manage the daily operations of the systems management team to ensure service levels are being met. • Manage the systems management team's support issue and backlog. • Monitor the team's open backlog of support issues and re-assign issues as necessary to ensure they are closed per agreed upon service levels. • Act as the first level of escalation for high priority support issues. • Function as the liaison to the various support groups with whom the systems management team interfaces. • Develop the technical infrastructure maintenance strategy. • Manage the system management resources. • Act as a system's management expert. • Analyze, determine, and document requirements in terms of system management needs and implement them. • Identify, approve, and prioritize team projects. • Manage a large site or network. • Recommend policies on system use and services.

System Specialist

The System Specialist (SS) is knowledgeable on the usage and support of a collection of development platforms or technical architectures, and products that run on those platforms. The primary responsibility of a System Specialist is to ensure the availability and facilitate the productive use of a development platform or a test environment for Application Teams or end users. The System Specialist may support one or several instances of a platform/environment, applying their skills directly to a platform/environment and/or leveraging their skills across multiple platforms/environment. The System Specialist may, especially for usage and support of a platform, be part of an Application Team using the architecture. The System Specialist requires experience and skills in the environment supported and in the operations and in common usage of products for the environment The System Specialist are responsible for collaborating with Technical Architecture Specialist, Functional Architects, Programmers and vendors to coordinate and enhance the use of the platform and facilitate migration to new versions of the platform.

SS1

Years of Relevant Experience:	1 to 3 years in desired environment
Preferred Education:	4 year college degree or equivalent technical study.

Role Description:	• Assist in coordination of testing changes, upgrades and new products, ensuring systems will operate correctly in current and future environment. • Make recommendations on functional and technical improvements to the environment. • Participate in performance and volume analysis and design. • Participate in performance improvement activities. Identify and apply potential improvements related to the environment for an application. • Provide accurate and complete answers to general use and environment questions in a timely manner. • Provide effective on-site environment support as needed. • Accurately set severity of identified defects. • Provide input to training and/or documentation materials regarding latest technical and functional design changes. • Ensure that all work is documented for future reference. • Follow quality standards. • Ensure effective and reliable backups are being performed and distributed properly. • Proactively address customer needs. • Track and anticipate volume and type of use of the environment. • Plan and implement shared software, such as operating systems, configuration management tools, application and development tools, testing tools, compilers, and code editors. • Basic scripting and programming skills, including languages that run on specified platform. • Analytical and customer service skills. • Communicate accurate and useful status updates. • Ability to work in a team environment • Complete assigned tasks. • Strong communication skills; both written and spoken

SS2

Years of Relevant Experience:	3 to 5 years in desired environment
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in SS1 plus the following: • Plan and manage network operating system upgrades. • Actively participate in analyzing and evaluating emerging software and hardware technologies/standards. • Serve as a liaison between teams for network planning and connectivity. • Develop appropriate functional and usability standards for the environments. • Plan or assist in planning network environment, including supporting existing structure and enhancements. • Plan and coordinate testing changes, upgrades and new and standard products, ensuring systems will operate correctly in current and future environment. • Anticipate, identify, track and resolve issues and risks affecting own work and work of the Application or Environment team. Develop contingency plans as necessary. • Analyze the functional and/or technical impact of new product releases. • Advanced scripting and programming skills, including languages that run on specified platform. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely

	manner. • Identify and track issues, risks and action items.

SS3

Years of Relevant Experience:	5 plus years in desired environment
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in SS2 plus the following: • Identify opportunities for new and improved technologies/standards to be used in the organization. • Identify, plan, and implement phase-out strategies for products and technologies. • Plan and coordinate testing changes, upgrades and new products, ensuring systems will operate correctly in current and future environment. • Demonstrate expertise in teaching/conveying technical courses/concepts. • Assist in setting architecture direction and knowledge sharing. • Plan, organize, prioritize, and manage multiple work efforts the Application or Environment Teams. • Develop appropriate work programs and use to effectively schedule tasks/assignments.

Team Lead

The Team Lead (TL) manages an Application Team to deliver services according to defined service level commitments owned by the Application Team. The Team Lead coordinates resources and work to deliver solutions to customers on time and within budget. The Team Lead is assigned responsibility and accountability for overseeing the successful completion of all work assigned to the Application Team. The Team Lead is a process expert within the Application Team, understanding the software development / maintenance processes and verifying process conformance. The Team Lead will monitor stability of production applications owned by the Application Team. The Team Lead assists Application Team members in development activities and reviews tasks as required. The Team Lead manages and updates progress towards Application Team objectives, assists Application Team members in resolving problems, and engages in personnel management and guidance to Application Team members. The Team Lead fosters a positive work environment by mentoring, supporting, and committing to the professional development of Application Team members. The Team Lead reports to the Group Lead or Program Manager, as appropriate. The difference between a TL1 and a TL2 will depend on the size of the project, and the breadth and scope of the project.

TL1

Years of Relevant Experience:	4 to 5 years, and 1 to 2 years project management experience.
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	• Monitor stability of production applications owned by Application Team. • Prepare estimates for maintenance and enhancement of existing applications and development of new applications. • Perform detailed reviews of interim and final tasks as appropriate. • Process work requests; review, prioritize, and package. • Manage and review tasks of suppliers and other interfaces to the Application Team. • Conduct structured walk-throughs or inspections; manage issues to closure. • Develop and manage short and long-term plans and schedules. • Direct the development of accurate estimates for Application Team activities as required. • Balance workload with Application Teams capacity by managing the Application Teams activities according to schedule. • Manage the accomplishment of delivery metrics to support contractual obligations in the areas of service delivery and on time performance commitments and productivity improvement.

	• Ensure work remains within the agreed scope. • Track work plan baseline against results. • Coordinate / communicate with Group Leads and / or Program Manager to ensure initiatives are in accordance with agreed customer commitments as planned. • Proactively identify and manage issues/risks affecting the project. • Communicate accurate and useful status to Group Lead and other management on a timely basis. • Identify and initiate continuous improvements. • Instill commitment to quality, customer service, ownership, and teamwork. • Conduct post project wrap-ups. • Monitor and measure maintenance and development process effectiveness. • Ensure that defined processes are followed. • Manage expectations of the Application Teams internal and external customers. • Facilitate communication and knowledge sharing within the Application Teams. • Maintain awareness of new developments in industry and processes and apply as appropriate. • Develop and deepen understanding of system business requirements supported by the Application Team. • Communicate clearly the Application Team goals, organizational philosophies, and policies and procedures to the Application Teams. • Conduct structured walk-throughs or inspections; manage issues to closure. • Communicate clearly the Application Team goals, organizational philosophies, and policies and procedures to the Application Teams.

TL2

Years of Relevant Experience:	5 plus years, and 2 to 3 years project management experience
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in TL1 plus the following: • Manage the resolution of high severity production problems. • Manage and direct Application Team activities employing appropriate program management and planning principles. • Coordinate work with other Team Leads as appropriate. • Coordinate and procure the required skills and techniques required by the Application Team.

Technical Architecture Specialist

The Technical Architecture Specialist (TAS) is the technical expert centered on a technology, technologies or a portfolio of applications. The Technical Architecture Specialist is the technologist who coordinates with other parties in setting the technical approach and direction and implementation for work. The Technical Architecture Specialist provides technical design expertise, defines what technical requirements are needed to support defined business requirements, participates in detailed design and code reviews, reviews system performance issues, reviews test plans, and provides technical guidance to the Application Team and Test Team members. The Technical Architecture Specialist is responsible for collaborating with the Team Lead(s) to coordinate project schedules, budgets, request management, and work authorization. The expert level Technical Architecture Specialist will interface with Executive Sponsors, Group Leads, and Lead Functional Architects to convey infrastructure requirements, plan, and schedule deployment of tasks, and resolve any issues that impact the deployment of the Application Delivery systems.

TAS1

Years of Relevant	2 to 5 years

Experience:	
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	• Define test plans and criteria for acceptance for the technical components of an application. • Ensure business requirements are supported by the technical architecture. • Assist in leading technical direction of software; coordinating and presenting proposals to Group Leads, Leads, and the client. • Define and evaluate logical and physical data models. • Assist in development of overall system technical architecture - including software and hardware. • Define test plans and criteria for acceptance for the technical components of an application. • Analyze, determine, and document technical requirements and change request impact analysis. • Participate in detailed design and product test execution as required. • Develop technical programming standards. • Ensure business requirements are supported by the technical architecture. • Conduct structured walk-throughs or inspections for technical areas; resolve issues. • Assist in defining technical programming standards. • Communicate accurate and useful status updates. • Manage and report time spent on all work activities. • Follow quality standards. • Ability to work in a team environment • Complete assigned tasks. • Strong communication skills; both written and spoken • Perform integration of various architectures across multiple enterprises • Develop overall system technical architecture - including software and hardware. • Perform review of technical designs, code, and component test plans. • Resolve and / or assist in resolving cross application technical issues. • Conduct structured walk-throughs or inspections for technical areas; resolve issues. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner. • Identify and track issues, risks and action items.

TAS2

Years of Relevant Experience:	5 plus years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in TAS1 plus the following: • Ensure consistency and completeness across data models. • Plan and deliver development architecture environments in coordination with the Environmental Support Specialist. • Assist in managing and directing team's technical architecture processes. • Provide assistance in scheduling design work for Lead Technical Architecture Specialist. • Develop and document expert practices/ standards. • Possess strong analysis, presentation, documentation, and quality assurance skills. • Analyze, determine, and document technical requirements and impact analysis for technical and development architectures.

	• Explain defect priorities and enhancement classifications to client and customer when needed. • Maintain awareness of new technological developments in industry and processes - implement concepts appropriately. • Lead or participate in setting the service levels for the application. • Define overall system logical architecture. • Provide standard, well-structured work planning which defines scope, resources, milestones, quality, risk, tasks, and acceptance criteria. • Prepare contingencies, scenarios, scenario plans and action items to resolve issues. • Lead efforts in providing technical expertise, guidance, and training to the Application and Test Teams.

TAS3

Years of Relevant Experience:	5 plus years, and 1 to 2 years project management experience
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in TAS2 plus the following: • Communicate effectively with IT staff, client organization and software / hardware suppliers. • Lead efforts in designing technical strategy, direction and approach, technical architecture, data architecture, development architecture, performance tuning, performance and capacity analysis, technical standards, technical reliability and flexibility. • Design and define overall system technical architecture - including software and hardware within the framework and constraints of technical architecture. • Evaluate alternative designs. • Maintain control of specific tools and assets. • Own the technical architecture for a portfolio of applications, including the interpretation and application of the technical architecture. • Plan, design development and/or execution of architectures. Participate in the plan and design of technical architecture. • Assist with the preparation of estimates for new technology applications and maintenance of existing applications as part of Service Management. • Provide experience in utilizing the project architecture. Acknowledged as highly competent in one or more technologies. • Communicate accurate and useful status reports and other management on a timely basis. • Coordinate and conduct project architecture, infrastructure review meetings, and portfolio review meetings with Group Lead, Lead Functional Architects, and Team Leads. Integrate issues and identify impacts. • Communicate and resolve application interface issues. • Communicate to team members the relations between their work assignments and the organizational and/ or program strategy, objectives, business and technology needs of the application / system. • Share knowledge across teams with both similar and non-similar applications, specifically focusing on Technical Architecture • Interpret and communicate technical architecture to the Technology Application Architecture Team(s).

Technical Writer

The Technical Writer (TW) develops and maintains user and technical documentation and project process documentation for Application Teams. Technical Writer understands the user's view of applications and /or technology and is able to put procedures in a logical sequence. The experienced Technical Writer provides expertise on technical concepts of applications and /or user groups and structuring procedures in a logical sequence, due to a broad understanding of the applications within their Tower.

TW1

Years of Relevant Experience:	1 to 3 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	• Develop, enhance, and maintain user documentation for multiple applications including documentation required for the operations provider. • Develop on-line source documentation as appropriate. • Maintain documentation libraries and subscription lists. • Identify, create, revise, and maintain documentation and templates needed by the Application Teams. • Ensure appropriate control access/use of documentation materials. • Maintain application and user documentation. • Ensure messages and terminology is consistent across all written materials. • Research and complete documentation service requests. • Communicate and work with customers and other Client Telecommunications personnel as necessary. • Work with Application Team members to enhance their understanding of end-user and technical documentation. • Communicate accurate and useful status updates. • Manage and report time spent on all work activities. • Follow quality standards. • Able to work in a team environment • Complete assigned tasks. • Strong communication skills; both written and spoken

TW2

Years of Relevant Experience:	3 to 5 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in TW1 plus the following: • Review and prioritize documentation service requests. • Determine procedures for use of on-line documentation tools and version control documentation as appropriate. • Assist or guide other Technical Writer as needed to develop and maintain user and technical documentation for their assigned applications. • Educate both business and technical groups on the essential need for developing and using standard documentation for all processes. • Organize and prepare work effectively to facilitate proactive resolution of problems, rather than reactive. • Research problems before approaching Lead Technical Writer or Team Lead for assistance. • Assist the Application Team Lead in monitoring budget by providing estimated-time-to-

	complete and actuals for assigned tasks. • Identify and make recommendations around documentation and templates needed by the Application Teams. • Work with users and other State personnel to ensure that the solutions meet State business requirements. • Identify and initiate continuous improvement opportunities. • Direct the development of accurate estimates for documentation requests/activities as required • Develop options and recommendations to assist documentation team members in resolving issues. • Lead efforts in developing and facilitating implementation of the Documentation team goals and metrics. • Develop workable, practical, measurable work plans defining activities, schedules and tasks with Team Leads and the Lead Technical Writer • Review and understand the Application Teams workplan. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner. • Identify and track issues, risks and action items.

TW3

Years of Relevant Experience:	5 plus years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in TW2 plus the following: • Review and approve procedures for use of on-line documentation tools as appropriate. • Identify business and technical documentation needs not currently addressed. • Manage Technical Writer. • Own documentation libraries and subscription lists. • Promote the need for developing and using standard documentation for all processes within the organization. • Perform detailed reviews of interim and final tasks as appropriate. • Oversee processing of service requests. • Manage, deploy, and schedule Technical Writer activities. • Develop and manage short and long-term documentation plans and schedules. • Understand work requests/needs within Application Teams • Manage the accomplishment of delivery metrics in support of contractual obligations in the areas of service delivery, on time performance. • Work with Team Leads and Group Leads to set documentation goals. • Ensure work remains within the agreed project scope. • Coordinate work with other Lead Technical Writers as appropriate. • Coordinate and procure the required skills and techniques required by the Application Teams for documentation needs. • Communicate accurate and useful status reports to Group Lead and other management on a timely basis. • Anticipate, identify, track and resolve issues and risks affecting own work and work of the Application Team. Develop contingency plans as necessary. • Manage expectations of the Technical Writers' internal and external customers. • Define documentation quality standards as needed.

	• Conduct post project reviews and quality assessments. • Ensure that defined processes are followed. • Communicate related improvement measures to the team. • Communicate clearly to Technical Writers their goals, organizational philosophies, and policies and procedures.

Telecom Engineer

The Telecom Engineer (TE) configures and installs hardware, wiring, and specialized equipment according to local building and electrical codes. The Telecom Engineer may also be responsible for the end-to-end installation of cable, wiring, and related equipment. The Telecom Engineer typically works closely with facilities/construction managers and site-based project managers. The Telecom Engineer should be able to accurately estimate the time and materials needed for tasks assigned. It is not uncommon for the Telecom Engineer to supervise a team of people and coordinate activities with other construction teams.

TE1

Years of Relevant Experience:	0 to 2 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	• Ensure proper connectivity from site-to-site and internal to facility. • Experience with CAT5, Romex, and similar cables/wiring. • Pull cable and ensure adherence to all building codes. • Escalate construction and installation problems to the construction/integration manager, as needed. • Prepare all job-related paperwork. • Close out work authorization when equipment is in service.

TE2

Years of Relevant Experience:	2 to 5 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in TE1 plus the following: • Inspect customer premises to ascertain available space for equipment installation • Determine the type and quantity of equipment that can be installed to provide requested communication facilities. • Create floor plan of equipment arrangement for customer or architect approval. • Prepare cost estimate for equipment and installation and submit data to management for authorization to proceed. • Order equipment and prepare installation specifications. • Monitor progress of installation to ensure facilities are ready on specified date.

TE3

Years of Relevant Experience:	5 plus years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in TE2 plus the following: • Lead full integration teams and interact with large infrastructure teams. • Act as telecommunications interface to outside vendors and construction manager. • Direct activities related to the selection and installation of telephone facilities and special equipment on premises to meet customer's communication requirements.

Tester

The Tester (Test) is a member of a team which plans, constructs, and executes product tests, system tests, unit tests, load tests, volume tests, network tests as well as works with others for release control processes. The more experienced Tester manages, plans, constructs, and executes tests and integrates with release control process.

Test1

Years of Relevant Experience:	Less than 2 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	• Create test models for product test and release control (plans, data, and scripts). • Conduct structured walk-throughs • Execute assembly or product tests. • Meet time estimates for assigned tasks. • Communicate accurate and useful status updates. • Follow quality standards. • Ability to work in a team environment • Complete assigned tasks. • Strong communication skills; both written and spoken.

Test2

Years of Relevant Experience:	2 to 4 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in Test1 plus the following: • Define product test plans and criteria for acceptance. • Develop, update, and maintain testing standards and procedures. • Resolve testing process questions / issues. • Assist in the planning, creation, and control of the test environments. • Conduct inspections; resolve issues. • Coordinate and execute assembly or product tests with the Test Team, Application Team and the Program Manager. • Assist Team Lead or Test Team Lead in monitoring estimated-time-to-complete (ETC) and actuals for assigned tasks. • Work with Test Team members to enhance their testing skills and build technical and business knowledge. • Update and test release installation procedures. • Generally aware of new developments in industry and processes and ability to apply to work as appropriate. • Determine time estimates and schedule for work efforts. • Define and utilize entry / exit criteria for testing. • Schedule the design of structured walk-throughs or inspections; resolve issues. • Work with users to ensure that solutions meet business requirements. • Anticipate and resolve issues specific to the team. • Determine time estimates and schedule for own work and resolve issues in a timely manner. • Identify and track issues, risks and action items.

Test3

Years of Relevant Experience:	4 plus years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in Test2 plus the following: • Review and understand the Test Team work plan. • Assist in managing and directing Test Team processes. • Anticipate, identify, track and resolve issues and risks affecting own work and work of the Test and/or Application Teams. Develop contingency plans as necessary. • Research problems before approaching the Team Lead or Test Team Lead for assistance. • Assist or guide Testers as needed. • Develop understanding of system business requirements supported by the Test team • Assist Application Teams to plan and execute component and assembly tests. • Participate in assembly or product test execution as required.

Video Conference Specialist

The Video Conference Specialist (VCS) provides video and photograph production support by operating a variety of film, sound-reproducing equipment, slide, and video equipment.

VCS1

Years of Relevant Experience:	Up to 6 years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	• Maintain equipment in working condition. • Make minor adjustments and repairs to equipment • Notify maintenance personnel when correction of major malfunction is required. • Position, install, connect, and repair equipment. • Familiar with fundamental networking/distributed computing environment concepts. • Troubleshoot network issues, systems, and applications to identify and correct malfunctions and other operational difficulties. • Investigate user problems, identify their source, determine possible solutions, test and implement solutions • Ensure high priority issues are resolved in a timely manner. • Excellent communication skills.

VCS2

Years of Relevant Experience:	6 plus years
Preferred Education:	4 year college degree or equivalent technical study.
Role Description:	All roles specified in VCS1 plus the following: • Coordinate equipment operation with material presented, according to notations in script or instructions of speaker. • Advise speakers and presenters on alternative media. • Meet with department heads, managers, supervisors, vendors, and others, to solicit cooperation and resolve problems. • Actively participate in analyzing and evaluating emerging technologies/standards. • Evaluate and/or recommend purchases of network hardware, software, and peripheral equipment.

	• Act as the first level of escalation for high priority support issues. • Function as the liaison to the various support groups with whom the systems management team interfaces. • Develop the technical maintenance strategy. • Analyze, determine, and document requirements in terms of system management needs and implement them. • Identify, approve, and prioritize team projects. • Mentor and supervise other team members.

Voice/Data Engineer

The Voice/Data Engineer (VDE) directs and participates in all activities related to the selection and installation of telephone facilities and special on-premises equipment that will meet the customer's communication requirements. The Voice/Data Engineer is responsible for all technology and connectivity involving telecommunications and data networks. The Voice/Data Engineer will typically specialize in telephony and data interfaces and systems that have proprietary functions within the communications area of a corporation/business. General wiring excluded, the Voice/Data Engineer ensures that any specialized conduit or wiring is properly deployed and installed according to code. The Voice/Data Engineer is also an expert in audio/visual, teleconferencing, and voice mail equipment. Often times, the Voice/Data Engineer is specialized or is certified in a particular piece of equipment.

VDE1

Years of Relevant Experience:	0 to 2 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	• Ensure proper connectivity of voice and data services and technologies. • Interact and work with Telecom Engineer, Integration Engineer, or Project Manager. • Prepare all job-related paperwork • Close out work authorization when equipment is in service.

VDE2

Years of Relevant Experience:	2 to 5 years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in VDE1 plus the following: • Prepare equipment floor plan for customer or architect approval. • Determine telephone, data services/components, and audio visual equipment placement within facility. • Act as installer of equipment for data/voice or Audio visual use. • Install, test, configure, and train users on products and equipment. • Support systems and products associated with telecommunications/telephone and data within a facility or department.

VDE3

Years of Relevant Experience:	5 plus years
Preferred Education:	4 year college degree or equivalent technical study
Role Description:	All roles specified in VDE2 plus the following: • Familiar with at least one type of equipment or service that is highly specialized. • Prepare cost estimate for equipment and installation and submit data to management for authorization to proceed with job. • Order equipment and prepare installation specification.

	• Monitor installation progress to ensure that the facilities are ready on projected date. • Lead a team of installers and junior Voice/Data Engineers.

Attachment B: Delaware IT Staff Augmentation Contract Rate Card

Job Title	Level	Legacy	Core	Emerging
Business Analyst	BA1	$67.25	$68.62	$73.43
Business Analyst	BA2	$79.27	$80.88	$86.54
Business Analyst	BA3	$89.13	$90.95	$97.32
Business Subject Matter Expert	BSME1	$71.37	$72.82	$77.92
Business Subject Matter Expert	BSME2	$82.51	$84.19	$90.09
Business Subject Matter Expert	BSME3	$92.40	$94.28	$100.87
Computer Operator	CO1	$24.39	$24.89	$26.63
Computer Operator	CO2	$26.17	$26.72	$28.59
Computer Operator	CO3	$29.80	$30.39	$32.52
Continuity of Operations Specialist	COS1	$54.63	$55.74	$59.64
Continuity of Operations Specialist	COS2	$61.35	$62.60	$67.00
Continuity of Operations Specialist	COS3	$71.82	$73.28	$78.41
Desktop Support Specialist	DSS1	$31.06	$31.69	$33.91
Desktop Support Specialist	DSS2	$34.22	$34.90	$37.36
Desktop Support Specialist	DSS3	$41.09	$41.93	$44.86
Disaster Recovery Specialist	DRS1	$49.36	$50.38	$53.91
Disaster Recovery Specialist	DRS2	$56.87	$58.02	$62.08
Disaster Recovery Specialist	DRS3	$66.96	$68.34	$73.12
Facilitator	FAC1	$40.90	$41.73	$44.65
Facilitator	FAC2	$48.26	$49.25	$52.70
Facilitator	FAC3	$57.52	$58.69	$62.80
Functional Architect	FA1	$45.91	$46.85	$50.13
Functional Architect	FA2	$54.27	$55.38	$59.25
Functional Architect	FA3	$64.06	$65.36	$69.95
Help Desk Analyst	HDA1	$35.51	$36.24	$38.78
Help Desk Analyst	HDA2	$38.84	$39.63	$42.40
Help Desk Analyst	HDA3	$47.85	$48.82	$52.24
IT Security Administrator	ISA1	$41.10	$41.94	$44.87
IT Security Administrator	ISA2	$46.98	$47.94	$51.30
IT Security Administrator	ISA3	$54.74	$55.85	$59.76
Lead Computer Operator	LCO1	$41.48	$42.32	$45.28
Lead Computer Operator	LCO2	$44.69	$45.60	$48.80
Network Administrator	NA1	$44.12	$45.01	$48.17
Network Administrator	NA2	$48.21	$49.19	$52.64
Network Administrator	NA3	$56.69	$57.85	$61.90
Network Architect	NAR1	$78.98	$80.59	$86.23
Network Architect	NAR2	$88.54	$90.35	$96.67
Network Architect	NAR3	$97.94	$99.94	$106.94
Network Engineer	NE1	$67.58	$68.97	$73.79
Network Engineer	NE2	$77.01	$78.57	$84.07
Network Engineer	NE3	$82.23	$83.91	$89.78
Organizational Change Management Specialist	OCM1	$62.59	$63.88	$68.35
Organizational Change Management Specialist	OCM2	$69.38	$70.79	$75.74

Organizational Change Management Specialist	OCM3	$77.38	$78.96	$84.49
Planning Manager	PLAN1	$66.76	$68.12	$72.90
Planning Manager	PLAN2	$75.22	$76.75	$82.13
Planning Manager	PLAN3	$90.78	$92.61	$99.11
Product Specialist	PS1	$48.40	$49.38	$52.85
Product Specialist	PS2	$55.03	$56.16	$60.09
Product Specialist	PS3	$70.91	$72.35	$77.42
Product Specialist	PS4	$81.55	$83.22	$89.04
Product Specialist	PS5	$89.76	$91.59	$98.00
Product Specialist	PS6	$96.69	$98.66	$105.57
Programmer	PR1	$41.85	$42.71	$45.70
Programmer	PR2	$49.88	$50.89	$54.45
Programmer	PR3	$60.85	$62.09	$66.44
Programmer	PR4	$71.39	$72.85	$77.96
Programmer	PR5	$82.33	$84.01	$89.90
Programmer	PR6	$90.71	$92.55	$99.03
Project Management Specialist	PMS1	$67.18	$68.55	$73.34
Project Management Specialist	PMS2	$71.50	$72.96	$78.06
Project Management Specialist	PMS3	$77.38	$78.96	$84.49
Quality Acceptance Analyst	QAA1	$42.58	$43.45	$46.49
Quality Acceptance Analyst	QAA2	$47.44	$48.40	$51.79
Quality Acceptance Analyst	QAA3	$58.65	$59.84	$64.04
Senior Product Specialist	SPRS1	$77.79	$79.38	$84.94
Senior Product Specialist	SPRS2	$87.59	$89.38	$95.63
Senior Product Specialist	SPRS3	$98.56	$100.55	$107.60
Senior Project Management Specialist	SPMS1	$75.49	$77.03	$82.42
Senior Project Management Specialist	SPMS2	$81.00	$82.65	$88.43
Senior Project Management Specialist	SPMS3	$87.87	$89.66	$95.94
Senior Technical Architecture Specialist	STAS1	$74.97	$76.51	$81.86
Senior Technical Architecture Specialist	STAS2	$84.65	$86.37	$92.42
Senior Technical Architecture Specialist	STAS3	$93.69	$95.61	$102.30
Service Desk	SD2	$31.82	$32.47	$34.74
Service Desk	SD3	$37.31	$38.07	$40.73
Software Process Engineer	SPS1	$45.42	$46.35	$49.59
Software Process Engineer	SPS2	$50.19	$51.21	$54.80
Software Process Engineer	SPS3	$66.48	$67.84	$72.59
System Administrator	SA1	$41.94	$42.79	$45.79
System Administrator	SA2	$46.16	$47.09	$50.39
System Administrator	SA3	$63.04	$64.33	$68.82
System Specialist	SS1	$41.00	$41.83	$44.76
System Specialist	SS2	$45.68	$46.62	$49.88
System Specialist	SS3	$55.00	$56.11	$60.03
Technical Architecture Specialist	TAS1	$53.73	$54.82	$58.66
Technical Architecture Specialist	TAS2	$60.39	$61.62	$65.93
Technical Architecture Specialist	TAS3	$66.93	$68.29	$73.08
Video Conference Specialist	VCS1	$51.85	$52.91	$56.62
Video Conference Specialist	VCS2	$59.06	$60.26	$64.49

Non-Affiliated Job Title	Level	Bill
CADD/GIS Administrator	CGA1	$53.26
CADD/GIS Administrator	CGA2	$60.85
CADD/GIS Administrator	CGA3	$80.01
Data Entry Operator	DE1	$18.68
Data Entry Operator	DE2	$20.35
Database Administrator	DBA1	$54.69
Database Administrator	DBA2	$59.84
Database Administrator	DBA3	$78.46
Database Architect	DA1	$78.87
Database Architect	DA2	$90.75
Database Architect	DA3	$96.61
Project Manager	PM1	$72.02
Project Manager	PM2	$85.62
Project Manager	PM3	$104.5
Quality Assurance Specialist	QAS1	$49.12
Quality Assurance Specialist	QAS2	$54.13
Quality Assurance Specialist	QAS3	$69.58
Senior Architect	SAR1	$115.2
Senior Business Subject Matter Expert	SME1	$103.6
Senior Project Manager	SPM1	$116.7
Team Lead	TL1	$70.78
Team Lead	TL2	$76.01
Technical Writer	TW1	$34.67
Technical Writer	TW2	$40.27
Technical Writer	TW3	$45.28
Telecom Engineer	TE1	$46.23
Telecom Engineer	TE2	$52.45
Telecom Engineer	TE3	$61.10
Tester	TEST1	$42.76
Tester	TEST2	$49.17
Tester	TEST3	$56.51
Voice/Data Engineer	VDE1	$44.87
Voice/Data Engineer	VDE2	$51.80
Voice/Data Engineer	VDE3	$61.48