South Carolina Technical Proposal for

Electronic Voting Accessibility Tool for Uniformed and Overseas Citizens

<table>
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<th>12.217</th>
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<td>H98210-BAA-11-0001</td>
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Proposed Period of Performance
September 2011 – August 2012

Submitted by:
South Carolina State Election Commission
Marci B. Andino, Executive Director
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# Table of Contents

## Contents

I. Technical Approach and Justification

1) Executive Summary

2) Goals and Objectives

   2.1 Electronic Voting Accessibility Tool Description

   2.2 Key Factors of the Electronic Accessibility Tool

3) Schedule and Milestones

II. Reports

III. Management Approach

   1) Qualifications

IV. Budget Proposal
I. Technical Approach and Justification

1) Executive Summary
South Carolina has historically been a leader in facilitating voting opportunities for uniformed service personnel, their dependents, and overseas civilian voters covered by the Uniformed and Overseas Citizens Absentee Voting Act of 1986 (UOCAVA). To further provide accessibility to the voting process by these voters, the South Carolina State Election Commission (SCSEC) will create an electronic tool for eligible UOCAVA voters to access, complete and securely deliver a ballot to their local election official (LEO) prior to the deadline for any election in the State.

The Electronic Voting Accessibility Tool (EVAT) will be accessible 24/7 via the SCSEC website www.SCvotes.org for all UOCAVA voters in the State. South Carolina conducts approximately 250 elections per year in addition to the statewide primary and general election. EVAT would allow UOCAVA voters to participate in any elections for which they are eligible.

After accessing www.SCvotes.org, the voter can view their voter record information continually maintained by all county voter registration offices through the Statewide Voter Registration and Election Management System (VREMS). The voter can choose an election in the near future for which they are eligible to vote and be prompted through the absentee voting process.

Voters will have the capability of viewing the status of their ballot at any time and will receive automatic acknowledgement at the time their application and ballot are received. All notification and acknowledgements will be via an email or phone text message per voter preference.

This innovative, seamless approach will allow a UOCAVA voter, no matter where they are in the world, to cast and deliver their ballot and receive receipt confirmation in a matter of minutes. Through the use of modern technology and the EVAT application, the reduction in failure rates and the increased percentage of ballots returned by Election Day will be significant.

2) Goals and Objectives
- Increase the successful rate of return ballots from 71% to 100%
- Build the tool in time for use in the June 2012 statewide primaries
- Reduce costs associated with mailing ballots to UOCAVA voters

2.1 Electronic Voting Accessibility Tool Description

A UOCAVA citizen will access the system through the SCSEC website, www.SCvotes.org where they will be presented with an option for UOCAVA voting information. In addition to South Carolina voting regulations and UOCAVA entitlements, the citizen will be presented with an option to download a voter registration application and/or complete an online request for absentee ballot.

If the citizen chooses the option to register to vote, the system will utilize name and birth date to ensure that they are not already registered to vote and will present them with a voter registration form which can be completed online. After completing the form, the citizen will download the form, sign it, scan it, and send via mail, email, or fax to their county voter registration office for processing. Another option, which is currently in place, is for the citizen to complete an FPCA form which serves as an absentee application and a voter registration application.
2.1.1 View Voter Information Details

If the citizen is already a registered voter, does not currently have an application on file for absentee voting, and selects to apply for an absentee ballot, they will be presented with their personal voting information, voting districts, and a list of elections for which they are eligible. See upper portion of Figure 1 below.

Prior to completing an absentee application, the voter will be presented with options for accessing the application and ballot online or by mail. See lower portion of Figure 1 above.

2.1.2 View Candidates for Upcoming Elections

Voters will be allowed to view candidates for upcoming elections by selecting a specific election. Once the election is selected, the system will determine what offices the voter is eligible to vote for and display the candidates associated with those offices. This enhancement will have significant value to UOCAVA voters who may not have access to local media and candidates’ campaigns. See Figure 2 below.
2.1.3 Completing Absentee Application

When the voter has selected the election, or elections, for which they are eligible, they will be presented with an absentee ballot application. This application will be completed online. Background program edits built into this process will significantly enhance the success rate of applications as they will be verifying that the voter has not already received a ballot for this election, and in addition, the edits will eliminate current issues experienced with legibility which is an important factor for UOCAVA voters who are not easily contactable. When the absentee ballot has been completed, the voter will have the option of printing the application and mailing it in, or, sign, scan and attach the application to an email message to the LEO.

2.1.4 Application Status Notification

A key component of this project involves personalized communication directly with the UOCAVA voter to provide notification of key events of interest. The first of such notifications is the status of a voter’s application. Once the absentee application has been received and processed by the LEO, the voter will automatically receive an email or short message service (SMS), or phone text.
message, notifying them that their ballot is ready to view. This SMS feature is an innovative solution for communicating with the UOCAVA voter who may not remember to follow-up on their application status as well as for those who may not use the Internet daily. The impact of this personal communication will be realized by encouraging the UOCAVA voter to continue the absentee process by connecting to the SCVotes.org website and casting their ballot.

2.1.5 Ballot Status Notification

After receiving notification that their absentee application has been approved the voter will receive notification that their official ballot is available. They may then return to the SCVotes.org website where the official ballot can be accessed. Instructions will be presented to the voter that indicate they can select their voting choices online and that they must save the voted ballot to their computer and send it to their LEO by email or regular mail.

When the ballot is visible on the screen, the voter will be allowed to:

- Cast a straight party vote if voting in the General Election
- Select individual candidates for each office (see Figure 4 below)
- Write in candidates for offices which allow write-in votes
- Vote for any referenda or question on the ballot

![Figure 4](image)

When the entire ballot has been marked and reviewed, the voter will then have the option to print the ballot and return it by fax or mail to the LEO or, save it as a PDF and attach it to an email to the LEO. Specific instructions on security of the ballot will be presented to the voter before their ballot is printed or saved on the computer.

An automatic acknowledgement to the voter that their ballot has been received by their LEO, whether the ballot was mailed, faxed or emailed, is the second key event triggering voter communication. The voter will receive a confirmation message via SMS or email that their ballot was received. This is significant to the voter because it informs them that their ballot was received at the LEO office.

2.1.6 UOCAVA Voters with an Absentee Application on File for the Year

Voters who have completed an absentee application for all elections during the calendar year will receive notification as soon as ballots for any election for which they are eligible are available.
See Ballot Status Notification above. The message will be received based on the preferred communication method given by the voter when the application was originally processed. At the time of this notification, the voter will also have the opportunity to request notifications via SMS in addition to the other available methods of communication.

### 2.2 Key Factors of the Electronic Accessibility Tool

<table>
<thead>
<tr>
<th>Factor</th>
<th>System Capabilities</th>
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</table>
| Significance | • Immediate voter controlled access and system notifications will ensure that ballots are returned.  
• Seamless application in that the voter can check their voting information, apply for an absentee application, receive a ballot, complete the ballot, and return the ballot in a matter of minutes and the voter is not required to branch to other websites. All functions associated with absentee voting will reside on SCVotes.org.  
• SCVotes.org is very user friendly and will have front page notification for UOCAVA voters. This site recently won the Notable State Document award by the S.C. State Library for the most user friendly website.  
• Voter receives notification for every step of the process. These notifications confirm success or failure and are delivered via email or SMS.  
• Alleviates current obstacles such as the time required for voter registration applications and absentee ballot materials to travel through the postal system.  
• Allows voting up to the last minute on Election Day. Alleviates current problem of voter unaware that their ballot was not received until it is too late to receive another one in the mail. Now, they can receive a duplicate ballot via the website.  |
| Sustainable | • Once the system is developed, there will be no future charges for its use. This system will be a module of the current statewide voter registration system.  
• Data on use and attempts to use can be generated at any time.  
• For ballots returned via email or fax, no postage/envelope/ballot costs will be incurred.  
• Surveys and UOCAVA voter comments will be encouraged and the results will be used to improve and enhance the system in the future. Once improvements and enhancements are made, there are no future costs associated.  
• The most used method of access, i.e. Internet via computer, phone, PDA, etc., will be evaluated.  
• No change in existing personnel job functions to support new capabilities.  |
| Impact | • There is potential to reach over 80,000 citizens who are eligible for UOCAVA status. 41,000 of those citizens are military or their dependents.  
• In the 2010 General Election, only 1,241 UOCAVA ballots were returned. Potentially, this tool could reach an additional 79,000 voters. |
### Strategic Approach

- Develop, as part of the VREMS, an online UOCAVA voter registration and absentee balloting tool that allows UOCAVA voters to log into SCVotes.org and view educational information, register to vote, check their status and voter details if they are already registered to vote, apply for an absentee ballot, vote a ballot for any election, receive notification of the status of their ballot at any time.
- This tool will leverage the VREMS for obtaining districts, offices and candidates to display a ballot for which the voter is eligible.
- This tool will allow more UOCAVA voters to participate in the voting process and will provide valuable data to share with other states who have the same process.

### Innovation

- Use of text messaging and email to provide status updates and notifications to UOCAVA voters.
- Use of social media – Twitter, Facebook, etc., to let UOCAVA voters know when ballots are available, notification of upcoming elections, changes in candidate names on the ballot, etc.
- Use of smartphone, PDA, tablets, e-readers, computes and Google TV to provide notifications.
- Utilize the most advanced, C# and ASP.net, computer languages to develop an application which will generate a ballot based on any voter’s S.C residence address and eligible offices and candidates associated to that address.
- Other jurisdictions with a statewide voter registration system could use this application and connect with their system by using interface software currently available to connect the two systems.
- Four states in the U.S. have shown interested in the SC VREMS and would benefit from this additional module.

### Scalability

Scalability is the ability to handle increasing demands at an acceptable performance level. The VREMS is built with scalability in mind. VREMS is architected to support both scaling-up and scaling-out. Scaling-up is achieved by adding more resources to the existing infrastructure, for example, adding memory, cores, and disk storage. Scaling-out is achieved by a robust and flexible VREMS application design that enables splitting the roles of servers into tiers (for example, separating web servers from application servers from database servers) and allowing tiers to run in load-balanced environments. This form of scaling also increases security and maintainability.

### Collaborative

- All 46 counties in South Carolina will have access to this system. Any UOCAVA voter in the State will have the ability to cast an absentee ballot for any election in the State.

### Cost Benefit Analysis

- In 2010, $5300.00 was spent on balloting materials and postage.
- In 2008, $36,896.00 was spent on balloting materials and postage.
- These costs, in addition to any personnel costs to prepare the materials for mailing, would be eliminated.
- Return on Investment would be priceless because UOCAVA voters will participate without having to use the postal service and can be assured their ballot arrived.
- VREMS is already funded and nearly complete. This module would have to be initially developed and implemented with no future costs incurred.
3) Schedule and Milestones

3.1 Schedule

The schedule for this project will be based on award date and funding availability. The estimated completion time for this project is 313 days or 10 months. If award and funding occur prior to August 2011, the EVAT may be deployed and used in the June 2012 statewide primary for Federal, State, and County level offices. The schedule for this project is outlined in Diagram 1 below:

![Diagram 1](image)

3.2 Milestones

Outlined below in Diagram 2, are milestones associated with this project. After the planning and designing phase, additional milestones may be added. The system will be assessed at each milestone through alpha testing by state and county election officials:

<table>
<thead>
<tr>
<th>Project Work / Milestone</th>
<th>Time Required</th>
<th>Milestone</th>
<th>Award to Milestone Completion</th>
</tr>
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<tbody>
<tr>
<td>Perform application design and create work breakdown structure for individual tasks</td>
<td>28 days</td>
<td>Yes</td>
<td>28 days</td>
</tr>
<tr>
<td><strong>Milestone: Finalize application design and planning</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Make changes to existing system to support online ballot retrieval and perform testing (Phase 1)</td>
<td>100 days</td>
<td></td>
<td></td>
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<tr>
<td><strong>Milestone: Complete changes and system testing of existing system to support online ballot retrieval</strong></td>
<td>Yes</td>
<td></td>
<td>128 days</td>
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<tr>
<td>User Acceptance Testing and Rollout Phase 1</td>
<td>25 days</td>
<td>Yes</td>
<td>153 days</td>
</tr>
<tr>
<td><strong>Milestone: Phase 1 Deployed</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Work / Milestone</td>
<td>Time Required</td>
<td>Milestone</td>
<td>Award to Milestone Completion</td>
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<tr>
<td>Implement and system test online ballot retrieval user interface (Phase 2)</td>
<td>90 days</td>
<td></td>
<td></td>
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<tr>
<td><strong>Milestone: Complete implementation and system testing of online ballot retrieval user interface</strong></td>
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<td>Yes</td>
<td>243 days</td>
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<tr>
<td>User Acceptance Testing (UAT) and Rollout Phase 2</td>
<td>25 days</td>
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<td></td>
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<tr>
<td><strong>Milestone: Phase 2 Deployed (Small Elections Only)</strong></td>
<td></td>
<td>Yes</td>
<td>268 days</td>
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<tr>
<td>Make final updates to system</td>
<td>45 days</td>
<td></td>
<td></td>
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<tr>
<td><strong>Milestone: Total System Deployed</strong></td>
<td></td>
<td>Yes</td>
<td>313 days</td>
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II. Reports

The following reports will be provided:

- EVAT will produce a report containing the number of absentee applications and ballots for any election held in the State. These numbers will be broken down by county into the following categories: 1) applications requested, issued, and returned; 2) ballots requested, issued, returned before election, returned after election. This is an on-demand report that will be monitored daily prior to a statewide election and will be delivered to the FVAP weekly prior to a statewide election and 30 days after any election held in the State.
- EVAT will produce a report containing a list of the voters participating in any election and the status of their ballot. Voter personal information, except private information protected by law, will be included in this report.
- System reports will be monitored for performance and response time on a monthly, weekly, and daily basis depending on the amount of activity. If activity increases, SCSEC staff will ensure that response time to users does not suffer.
- Project status reports will be provided on a bi-weekly basis. These reports will list tasks accomplished, tasks proposed, and risks associated with the project.
- Financial progress reports containing expenses paid and account balances will be provided on a quarterly basis and within 30 days after the reporting period.
III. Management Approach

The SCSEC remains dedicated to supporting the voting rights of an estimated 82,000 UOCAVA voters and considers these voter rights a priority when changing programs and drafting legislation affecting voting. In 1998, the State participated in the Voting Over the Internet (VOI) pilot program managed by the FVAP. Of the states chosen to participate, South Carolina was the only state participating on a statewide basis. In 2001, South Carolina was invited, and readily accepted, to participate in the Secure Electronic Registration and Voting Experiment (SERVE) also managed by the FVAP. Unfortunately, this program was cancelled by the Department of Defense shortly before the 2002 Presidential election.

Following the South Carolina voting motto of “Every Vote Matters, Every Vote Counts” the SCSEC would like to continue in its goal to improve registration and voting access to UOCAVA voters by developing an EVAT as part of the statewide VREMS used by all 46 counties in the State. This tool, fully integrated with the voter registration database and list of offices/candidates for any election held in the State, will provide the UOCAVA voter with instant access to request an absentee application, view their candidates on the screen, receive a ballot, mark the ballot and send it to the appropriate LEO via email or postal services.

To manage development and implementation of this tool, SCSEC will contract with a project manager who will work closely with SCSEC staff, the Director and Matthew Guzzi, Information Resource Consultant, independent consultants, and consultants with NWN Corporation’s Application Development Center of Excellence. NWN can immediately deploy a highly qualified South Carolina based project team with in-depth knowledge and experience of South Carolina’s state and county election operations. Rollout of this tool will be straightforward because all counties in South Carolina currently use the same voter registration system.

NWN uses the iSOLUTION© Methodology to ensure success throughout the project. The iSOLUTION© Project Management Methodology, certified by the South Carolina Division of State Information Technology and used successfully in multiple projects including 3 at the SCSEC, defines a comprehensive, orderly, and consistent process that incorporates multiple dimensions within project management: scope, resources, schedule, cost, configuration, communication, reporting, risk, and quality.

NWN’s iSOLUTION© Suite of software, widely used in South Carolina state agencies, streamlines complex application development choices into an architected application framework for secure, robust, and high-performing applications. This software provides high-usage application capabilities that have been thoroughly tested and are production ready. Utilizing these components saves significant design/development/test time that would otherwise be required to develop this needed functionality from scratch. The time and effort saved by using NWN’s iSOLUTION© framework means a lower cost and shorter time to completion for the solution.

1 The current statewide voter registration system in South Carolina is under development by NWN Corporation and will be implemented in the Fall of 2011. It is anticipated that this company would develop the Electronic Voting Accessibility Tool for Uniformed and Overseas Citizens as well since the two will interact.
Financial management will follow strict Federal and State guidelines. The SCSEC will be responsible for accounting for all expenditures, funding levels, program controls, and outcomes. Working with the State Budget Office, State Treasurer, and State Comptroller General, SCSEC will develop and use standard financial reporting for all funding associated with this grant. SCSEC will be prepared for periodic federal audits. The State Auditor’s Office will also conduct periodic audits to ensure that the SCSEC complies with all Federal and State laws, regulations, and program compliance requirements. Funds will be distributed based on program progress and delivery.

Measurement for success and performance of this tool will take place numerous times during user acceptance testing (UAT) periods and during the 2012 General Election. During the UAT phases, a parallel system will be deployed to allow UOCAVA voters to participate in local elections via the tool being developed and the current voting process in South Carolina. The results of this parallel test will provide significant data to measure the success of the tool. Each process step of the tool will be closely monitored to ensure proper performance such as response time to voters, making sure the voter receives the correct ballot, and bandwidth is available to handle the amount of Internet traffic associated with the use of this tool.

South Carolina has approximately 82,000 voters covered by the UOCAVA. Many of these voters reside in remote locations with impediments and difficulties that prohibit the receipt of their ballots in a timely manner. In the 2008 Presidential election, of the 12,137 ballots issued to UOCAVA voters, only 8,668 were returned resulting in a 71% successful rate of return. The successful rate of return for non-UOCAVA voters for the same election was 97%. The primary goal of this project is to provide instant access to the voter registration and absentee voting process for UOCAVA voters and to significantly increase the successful rate of return for ballots to a percentage that is equal to that of the general absentee voting population. It is projected that this tool will increase the successful rate of return by 21% or higher.

Costs associated with mailing ballots, such as postage, envelopes, and ballots, will be significantly lower with the Voting Accessibility tool. Costs to mail ballots to 12,137 voters in 2008 were $36,896. If all 82,000 UOCAVA voters participated by mail in an election, the costs would be an estimated $250,000 per election. These cost savings, coupled with the time savings and guarantee that a UOCAVA ballot is delivered to the voter and received at the local county election office by Election Day, are invaluable to the voting process.

Potential risks and mitigating strategies:

<table>
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<tr>
<th>Risk</th>
<th>Mitigating Strategy</th>
</tr>
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<tbody>
<tr>
<td>EASE Grant Not Received</td>
<td>Continue with current process in State.</td>
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<tr>
<td>2012 Presidential election year presents SCSEC personnel resource challenges</td>
<td>Utilize independent consultants and temporary personnel.</td>
</tr>
<tr>
<td>Award received after September, 2011 prevents test use of EVAT in</td>
<td>Continue with program development with no test in June primaries but have available</td>
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</table>
June primaries. for November General Election.

The process for UOCAVA voters in South Carolina currently used, allows participation via fax and email; however, this process is cumbersome and time consuming. By modifying the current process with the EVAT, UOCAVA voters will have the capability to apply for an absentee ballot, mark the ballot, and return the ballot without waiting on their local LEO for processing. This will also allow the voter to participate in the process 24 hours per day.

The scope of this project is to design and implement EVAT based on the following objectives:

- Confirm the SCSEC’s high-level, fundamental requirements.
- Discuss potential implementation approaches for the custom solution and determine the optimum approach for the SCSEC.
- Design the solution, including changes to VREMS system and creation of new online ballot retrieval interface.
- Make changes to VREMS system to support online ballot retrieval and perform testing.
- Implement and test online ballot retrieval user interface.
- Provide application support during rollout into production for small elections.
- Make final application updates to resolve issues, as needed.
- Provide application support during rollout into production for General Election.
- Provide 1 year of post-election application support.

Deliverables of the project include:

- A Project Charter (document) that confirms the business needs to be addressed; the scope, timeline, and approach of the custom implementation; and the budget for the custom implementation.
- A Requirements Document detailing the functional requirements and business rules for the proposed Absentee Voting System.
- A Functional Design Document that defines the user interface specifications of the proposed Absentee Voting System.
- A Technical Design Document that defines the technical specifications of the proposed Absentee Voting System capabilities.
- A Database Document that defines the database structure and entity relationships.
• A Test Scenario Document that identifies scenarios to be tested during the user acceptance testing. This document focuses on identifying the scenarios to be tested and does not include step by step test cases.

• A User’s Guide Document that provides assistance and helps users explore the proposed Absentee Voting System capabilities.

• Source Code for the EVAT and the changes to the VREMS system to support online ballot retrieval and the creation of the new online ballot retrieval user interface.

• Executable applications for the EVAT and the changes to the VREMS system to support online ballot retrieval and the creation of the new online ballot retrieval user interface.

1) Qualifications
The SCSEC will utilize current staff, augment staff with independent consultants, and also engage NWN Corporation’s Application Development Center of Excellence to design and develop the EVAT.

NWN Corporation provides clients with an end-to-end set of services that range from business systems strategy and design to IT architecture, implementation, and remote management. NWN delivers solutions to state and local government agencies and to private sector clients in almost every line of work nationally and internationally – banks, universities, manufacturers, hospitals, and more.

The SCSEC’s business relationship with NWN has extended for over 10 years, during which time NWN has developed in-depth knowledge of South Carolina’s state and county election operations and systems. NWN services for the SCSEC have ranged from executive consulting and project management to business analysis and application design and development.

NWN is currently working with the SCSEC to complete VREMS which is planned for rollout in the Fall of 2011. The VREMS system will offer comprehensive functionality for voter registration and maintenance, election administration, and election workers. The system will also include new capabilities to support county operations, accommodate redistricting changes needed after the 2010 Census, and enhance service to the State’s voters. The new system will deliver a critical prerequisite to successful elections and the strategic foundation on which the EVAT tool will be built.

Key members of the SCSEC and NWN team are profiled below.

**State Election Commission:**

| BRIAN LEACH | PROJECT ROLE: |
| INFORMATION RESOURCE CONSULTANT | SUBJECT MATTER EXPERT |

**CORE STRENGTHS**
PROFESSIONAL EXPERIENCE
Brian is a self motivated individual with considerable knowledge of the voting process in South Carolina. He has been employed with the SCSEC for 5+ years and worked closely with all aspects of office automation, computer equipment, the statewide voter registration system, and the statewide voting system.

EDUCATION AND CERTIFICATION
BS, Computer Science

CORE STRENGTHS
✦ Subject matter expert in voter registration and election management systems, including South Carolina’s new Voter Registration and Election Management System.
✦ Over 10 years of experience in software development, testing and server setup
✦ Worked on both small and large scale software development projects for a fortune 500 company
✦ Served as the Lead Software Quality Assurance Analyst on mission critical enterprise custom software applications and infrastructure management implementation projects.
✦ Served as the Technical Lead for the South Carolina Department of Archives and History and coordinated our development efforts with the seven other State Partners and their Technical leads.
✦ Experienced with Hardware and Software installation, setup and maintenance.

PROFESSIONAL EXPERIENCE
Matt is a self motivated individual with considerable Information Technology knowledge. He has been employed with the SCSEC for 2+ months. Prior to joining the SCSEC he worked for Blue Cross Blue Shield of South Carolina, and the South Carolina Department of Archives and History where he served as the technical lead for South Carolina on the Persistent Digital Archives and Library System.
EDUCATION AND CERTIFICATION

BA History
Pennsylvania State University

Certificate in Applications Programming
Midlands Technical College
NWN Corporation:

<table>
<thead>
<tr>
<th>PIERRE ABDEL-MALAK</th>
<th>PROJECT ROLE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>VICE PRESIDENT CLIENT SERVICES</td>
<td>PROGRAM DIRECTOR</td>
</tr>
</tbody>
</table>

**CORE STRENGTHS**

- Subject matter expert in voter registration and election management systems, including South Carolina’s new Voter Registration and Election Management System.
- Management of multimillion-dollar mission critical enterprise custom software application and infrastructure management implementation projects on time and under budget.
- Business consulting to help customers formulate the vision, mission, and business objectives resulting in streamlined implementations.
- Implementation of project management and software development life cycle methodologies leading to consistent delivery of quality solutions.
- Administration of QA / QC and audits as well as development of plans to rescue troubled projects.
- Aptitude for anticipating and managing crisis, trouble-shooting, and problem-solving.
- Pierre has enjoyed a 10 year career with NWN Corporation and worked with a high performance established team on designing and implementing custom technology solutions using project management and software development methodologies and best practices leading to consistent delivery of quality solutions for customers.

**PROFESSIONAL EXPERIENCE**

Pierre has enjoyed a 25 year career in the information technology industry and is an experienced Program Director with proven success in leveraging information technology and business consulting to innovatively solve business problems. Pierre couples extensive technology expertise with strong leadership skills to optimize organizational processes and maximize results.

Pierre is a self-motivated achiever who leverages technology and business consulting expertise to add value for customers; a creative thinker who draws upon exceptional analytical skills to effectively architect efficient solutions to fulfill business objectives; and a leader adept at combining strategic vision with tactical execution.

**EDUCATION AND CERTIFICATION**

BS, Computer Science
Senior State (SC) Certified Project Manager
ANGELA JACKSON  
PROJECT MANAGER  

<table>
<thead>
<tr>
<th>CORE STRENGTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager for South Carolina’s new Voter Registration and Election Management System.</td>
</tr>
<tr>
<td>Subject matter expert in voter registration and election management processes with conceptual vision for a new web-based, centralized system.</td>
</tr>
<tr>
<td>Customer-focused business consulting on mission-critical enterprise systems.</td>
</tr>
<tr>
<td>Management of large-scale ($1M+) projects utilizing a variety of project management and software development life cycle methodologies.</td>
</tr>
<tr>
<td>Effective leadership and personnel management resulting in good employee morale and retention.</td>
</tr>
<tr>
<td>Ability to coach project teams in the use of agile development methods.</td>
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<tr>
<td>Angela has worked with the NWN</td>
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<table>
<thead>
<tr>
<th>PROFESSIONAL EXPERIENCE</th>
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<tbody>
<tr>
<td>Angela has enjoyed a 30-year career as an IT and Project Management professional with specific experience in Voter Registration and Election Management, Benefits Management, Customer Relationship Management, Supply Chain Management, and Enterprise Management systems.</td>
</tr>
<tr>
<td>Angela is a team player whose strong technical and professional background and experience in performing a variety of roles make her uniquely qualified to deliver effective solutions for business needs while providing exceptional service and quality.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EDUCATION AND CERTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS, General Business</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROJECT ROLE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROJECT MANAGER</td>
</tr>
</tbody>
</table>
### CORE STRENGTHS

- Subject matter expert in voter registration and election management systems, including South Carolina’s new Voter Registration and Election Management System and South Carolina’s Electronic Voter Registration List poll book application.
- Over 14 years’ experience developing business software solutions in various fields such as government, financial, insurance, sales and nonprofit.
- Technical management of multiple large scale projects for state government agencies such as the Department of Probation, Parole and Pardon Services and the Secretary of State’s Office.
- Deep knowledge of NWN Corporation’s iSOLUTION code framework.
- Strong knowledge of software architecture and design principles.
- Extensive knowledge and experience with design and development technologies such as UML, C#, ASP.Net, SQL, JavaScript, HTML, XML.
- Ability to work closely with customers to develop systems that meet requirements and provide a solution to their business needs.

### PROFESSIONAL EXPERIENCE

Rob has a 14 year career in the information technology industry with numerous successfully completed projects. Majority of project work has been large client server or web-based line of business applications. This background combined with Rob’s training in management and accounting allows him to truly understand the client’s needs from both a business and technical perspective.

Rob’s early background as a commissioned military officer along with his work on many software projects has given him valuable problem solving skills and leadership experience. He is a team player who is comfortable performing the many roles required of a development lead in order to deliver quality solutions for customers.

### EDUCATION AND CERTIFICATION

BS, Management, United States Coast Guard Academy
Post-Baccalaureate Certificate in Accounting, Portland State University
Passed all sections, Certified Public Accountant Exam
JOE FESER  
SENIOR ARCHITECT  

PROJECT ROLE: ARCHITECT

CORE STRENGTHS

♦ Over 17 years of experience developing software solutions in various fields: voter registration (including South Carolina’s new Voter Registration and Election Management System), finance, retail, auditing, distribution, warehousing, mortgage services and code quality and analytics.

♦ Key focus and experience with designing, building and tuning high load large scale web and windows based applications.

♦ Deep knowledge of NWN Corporation’s iSOLUTION code framework.

♦ Strong knowledge of software architecture and design principles.

♦ Extensive knowledge and experience with design and development technologies such as C#, ASP.Net, SQL, JavaScript, HTML, XML, XSLT and WPF.

♦ Ability to work closely with customers to develop systems that meet requirements and provide a solution to their business needs.

PROFESSIONAL EXPERIENCE

Joe has a 17 year career in the information technology industry with numerous multi-million dollar successful production applications. One of Joe’s largest involvements includes the development of a large scale auditing application that is used by 60,000 auditors throughout the world. This background combined with Joe’s training in management and accounting allows him to truly understand the client’s needs from both a business and technical perspective.

Joe has had an extensive career working with and migrating large systems. These skills along with his attention to detail enable him to quickly debug and adapt to the needs of any size project.

Joe also works on many open source projects and has performed training for large teams over the course of his career. His project diversity enables him to adapt to any role on the project.

CERTIFICATIONS AND OPEN SOURCE

XML MVP
Lead Developer Google Checkout .NET
**PATRICIA HARGIS**  
**SENIOR BUSINESS ANALYST**

## PROJECT ROLE:  
**LEAD BUSINESS AND QUALITY ANALYST**

### CORE STRENGTHS

- Subject matter expert in voter registration and election management systems, including South Carolina’s new Voter Registration and Election Management System and its Electronic Voter Registration List application.
- Ability to translate defined requirements into conceptual screen designs detailing screen features, behaviors, and navigation.
- Focus on quality assurance by completing QA plans for custom application development projects, performing intensive rounds of system testing, and supporting clients during user acceptance testing.
- Knowledge of report development tools to design and create custom reports.
- Patricia has enjoyed a 13 year career with NWN Corporation as an analyst in a multitude of large-scale projects using project management and software development methodologies for customers ranging from state government to private sector manufacturing.

### PROFESSIONAL EXPERIENCE

Patricia has had an 18 year career in the information technology industry and is an experienced IT Business Analyst who has contributed to the successful completion of large and small-scale projects beginning with requirements definition through customer support and training. Patricia’s early technical background in application development coupled with her business experience makes her an expert in effectively defining customer needs and delivering solutions that enhance business processes and user experiences.

Patricia is a versatile team player who strives to deliver quality solutions for customers while performing a multitude of roles as required from business analyst defining requirements to design and quality assurance to training and implementation.

### EDUCATION AND CERTIFICATION

BS, Business Management (Management Information Systems)
CHESLEY MARTIN
PROJECT MANAGER

PROJECT ROLE:
LEAD BUSINESS AND QUALITY ANALYST

CORE STRENGTHS

♦ Subject matter expert in voter registration and election management systems, including South Carolina’s new Voter Registration and Election Management System.

♦ Management of multiple multimillion dollar custom development projects in the areas of Supplier Relationship Management, Health Insurance and Higher Education.

♦ Over 23 years of experience integrating systems with disparate technologies and platforms.

♦ Three years of experience leading the Product Management organization for a 200 person software company.

♦ Over five years of experience migrating multiple applications from legacy technologies to web-based applications including multiple IDMS-based applications for Clemson University.

♦ Introduced Agile development processes into two organizations and championed it through implementation.

♦ Over 23 years of experience working in high volume applications from mainframe-based university course registration systems to web-based procurement applications processing purchase orders at rate of 45 purchase orders a minute 365x24.

PROFESSIONAL EXPERIENCE

Ches’s focus throughout his 23 year career has been customer satisfaction. Ches has balanced the objectives of internal constituents as well as external customers to deliver projects on time and within budget while maintaining a high degree of customer satisfaction.

Ches’s 18 years as a software engineer in both mainframe technologies and object-oriented web technologies gives him unique perspectives to problems enabling him to define solutions for applications being migrated from one platform to another. Additionally, Ches’s architectural experience leading and designing high volume applications adds to his unique qualification set.

EDUCATION AND CERTIFICATION

BS, Computer Science
MICHELLE LEVEY  
PROJECT MANAGER  

PROJECT ROLE:  
BUSINESS AND QUALITY ANALYST

CORE STRENGTHS

♦ 19 years of experience in Information Technology: programming, database administration, project management, business analysis, quality assurance; in particular, business analysis and quality assurance for South Carolina’s new Voter Registration and Election Management System.

♦ 14 years of experience leading teams through the entire development lifecycle including opportunity identification, cost benefit analysis, project definition, and all stages of the project life cycle from project kickoff to implementation and on-going maintenance planning.

♦ Proven leadership skills and management expertise gained from managing large complex projects, managing entire units of development staff, leading successful teams and communicating with all levels of management.

♦ Managing application development in multiple industries including finance, insurance, and manufacturing.

♦ 6 years of experience leading and managing development and QA staff, DBAs and Project Managers for a Fortune 500 company.

♦ Developed and instituted project management practices for resource allocation, change management, issue management and implementation management for a Fortune 500 company.

PROFESSIONAL EXPERIENCE

Michelle’s career focus has been Project Management and Effective Leadership of teams. Michelle has led and mentored junior project managers for 10 years; she has led highly successful teams for the last 14 years, and has worked with resources across the globe.

Michelle’s experience in the IT area encompasses financial, insurance, and manufacturing systems in both the mainframe and web environments. Michelle’s experiences as a business analyst, quality assurance analyst, developer, DBA, and project manager as well as the diverse types of environments in which she has worked, allow Michelle to pull from a wide range of experiences to offer creative solutions for clients and teams.

EDUCATION AND CERTIFICATION

BS, Computer Science, 1987
PMP and IBM Leadership Program Graduate, 2002
IBM Certified Senior Project Manager, 2004
## ALAN HARDY
**PROJECT MANAGER**

### PROJECT ROLE:
**BUSINESS AND QUALITY ANALYST**

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## CORE STRENGTHS

- Subject matter expertise in eligibility determination systems and voter registration systems, including South Carolina’s new Voter Registration and Election Management System.
- Management of multimillion-dollar mission critical enterprise custom software application and infrastructure management implementation projects on time and under budget, utilizing a variety of project management and life cycle development methodologies.
- Implementation of project management and software development life cycle methodologies leading to consistent delivery of quality solutions.
- Successfully mentored project teams in agile development methods.
- Aptitude for anticipating and managing crisis, trouble-shooting, and problem-solving.
- Alan has worked with NWN Corporation since 2010 with a high performance established team on designing and implementing custom technology solutions using project management and software development methodologies and best practices leading to consistent delivery of quality solutions for customers.

## PROFESSIONAL EXPERIENCE

Alan has enjoyed a 10-year career as an IT and Project Management professional with specific experience in Enterprise Management, Eligibility Determination, Global Inventory and Test Management, Claims Adjudication, and Process Re-engineering systems. Over this period, Alan has acted as Project Manager for multiple SC state agency enterprise application projects. Alan has experience in interfacing with Federal agencies.

Alan is a strong leader and team player whose varied technical and professional background makes him uniquely qualified to deliver effective solutions, adding value, and providing exceptional service and quality for the customers.

## EDUCATION AND CERTIFICATION

- BA, Management Information Systems
- Certified Project Management Professional by the Project Management Institute (PMP)
- The Program & Portfolio Management Certification (PPMC)
CORE STRENGTHS

✦ Over 14 years of experience developing business software solutions in various fields such as government, financial, insurance, construction, manufacturing, and in particular, South Carolina’s new Voter Registration and Election Management System.

✦ Extensive knowledge of designing large databases for optimal query performance, report performance.

✦ Highly experienced in designing transactional databases, implementing database mirroring, clustering, replication for load balancing and high availability.

✦ Vast experience in extracting, cleaning, and loading data from different types of sources (DB2, Access, text files) to Oracle and SQL server databases.

✦ Deep knowledge of NWN Corporation’s iSOLUTION code framework.

✦ Strong knowledge of software architecture and design principles.

✦ Ability to work closely with customers to develop systems that meet requirements and solve problems within the scope of a project.

✦ Excellent analytical problem solving skills. Very skillful in identifying and solving very difficult problems efficiently.

PROFESSIONAL EXPERIENCE

Ram has had a 14 year career in the information technology industry with numerous successfully completed projects. Majority of project work has been designing and developing databases for client server or web-based transactional applications. Developed strategies for data cleansing before loading into SQL Server for several SC State agencies.

Ram has also been involved in every stage of a project from requirement gathering to training the end users and always ensures that services provided to clients are focused on their needs.

EDUCATION AND CERTIFICATION

Bachelor of Engineering, India
Master of Engineering, Lamar University, Texas
Microsoft SQL Server 2000 Certified Professional
Oracle 7.3, 8.0, and 8i Certified Database Administrator
Certified PowerBuilder Developer (CPD)
AMANDA POSEY
SENIOR APPLICATION CONSULTANT

PROJECT ROLE:
DEVELOPMENT TEAM LEAD

CORE STRENGTHS

♦ Over 9 years of experience developing web based business software solutions for various South Carolina state government agencies, and in particular, South Carolina’s new Voter Registration and Election Management System.

♦ Deep knowledge of NWN Corporation’s iSOLUTION code framework.

♦ Strong knowledge of software architecture and design principles.

♦ Extensive knowledge and experience with design and development technologies such as VB/COM, HTML, SQL, C#, ASP.Net, ASP, JavaScript, Flash, XML/XSL/XSLT, PowerBuilder, SQL Server, Oracle, MS Access.

♦ Ability to adapt quickly and learn new technologies.

♦ Ability to work closely with customers to develop systems that meet requirements and provide a solution to their business needs.

PROFESSIONAL EXPERIENCE

Amanda has had an 11 year career in the information technology industry with numerous successfully completed projects. Majority of project work has been with large web-based line of business applications, while also completing several smaller scale applications for various government and non-government clients.

Amanda is a versatile team player who strives to deliver quality solutions for customers while performing a multitude of roles as required from business analyst defining requirements, to lead technical architect through design and development.

EDUCATION AND CERTIFICATION

BS, Psychology, Furman University

Certificates in Advanced Information Technology, Rushing Center for Advanced Technology at Furman University

Microsoft Certified Professional, Developing and Implementing Web Applications with Microsoft® Visual C#™.NET and Microsoft® Visual Studio®.NET
LYUDMIL IVANOV  
SENIOR APPLICATION CONSULTANT  

<table>
<thead>
<tr>
<th>PROJECT ROLE:</th>
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<tbody>
<tr>
<td>DEVELOPMENT TEAM LEAD</td>
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<table>
<thead>
<tr>
<th>CORE STRENGTHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Over 17 years of experience developing business software solutions in various fields such as government, banking, ecommerce, insurance and sales.</td>
</tr>
<tr>
<td>♦ Excellent knowledge of voter registration and election management system gained while serving as development team lead for South Carolina’s new Voter Registration and Election Management System.</td>
</tr>
<tr>
<td>♦ Over 7 years of experience developing large scale projects for state government agencies such as South Carolina Department of Probation, Parole and Pardon Services and the South Carolina Department of Revenue.</td>
</tr>
<tr>
<td>♦ Extensive knowledge of NWN Corporation’s iSOLUTION code framework.</td>
</tr>
<tr>
<td>♦ Strong knowledge of software architecture and design principles.</td>
</tr>
<tr>
<td>♦ Extensive knowledge and experience with design and development technologies such as UML, C#, ASP.Net, SQL, JavaScript, HTML, XML.</td>
</tr>
<tr>
<td>♦ Ability to work closely with customers to develop systems that meet requirements and provide a solution to their business needs.</td>
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<table>
<thead>
<tr>
<th>PROFESSIONAL EXPERIENCE</th>
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</table>

Lyudmil has had a 17 year career in the software development industry with numerous successfully completed projects. Majority of project work has been custom software development specializing in the design and development of large scale browser based applications. This background combined with Lyudmil’s training in computer science and economics allows him to deliver projects on time and within budget while maintaining a high degree of customer satisfaction.

Lyudmil is highly adaptable in quickly changing technical environments with very strong organizational and analytical skills. He is a team player who is comfortable performing the roles required of a team lead and senior application developer/analyst in order to deliver quality solutions for customers.

<table>
<thead>
<tr>
<th>EDUCATION AND CERTIFICATION</th>
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MS, Computer Science, University of World Economy, Sofia Bulgaria. Minor: Economics  
Microsoft Certified Professional
SCOTT BURKE  
SENIOR APPLICATION CONSULTANT  

PROJECT ROLE:  
DEVELOPER/ANALYST  

CORE STRENGTHS

♦ Over 16 years of experience developing business software solutions for organizations in diverse industries, including manufacturing, software, financial, nonprofit, and government, in particular, South Carolina’s new Voter Registration and Election Management System.

♦ Strong knowledge of NWN Corporation’s iSOLUTION code framework.

♦ Extensive knowledge and experience with design and development technologies such as Microsoft .NET, C#, ASP.Net, SQL, JavaScript, HTML, XML.

♦ Ability to work closely with customers to develop systems that meet requirements and provide a solution to their business needs.

PROFESSIONAL EXPERIENCE

Scott has a proven track record of successful software projects over the span of his 16 year career in the information technology industry, the majority of which has been spent using Microsoft technologies to develop client server and web-based line of business applications. This background, combined with Scott’s training and experience in finance and accounting allows him to truly understand the client’s needs from both a business and technical perspective.

Scott is a team player who enjoys using his problem-solving abilities and strong technical skills to create exceptional, high-quality solutions for his customers.

EDUCATION AND CERTIFICATION

BS, Accounting

Microsoft Certified Application Developer for .NET (MCAD.NET, C# track)
CORINNA HYMAN
SENIOR APPLICATION CONSULTANT

PROJECT ROLE:
DEVELOPER/ANALYST

CORE STRENGTHS

♦ Over 15 years of experience developing business software solutions for various industries including financial, sales, manufacturing, nonprofit, and government, in particular, South Carolina’s new Voter Registration and Election Management System.

♦ Experience in development of large projects including an Embassy Foreign Visit System and Commodity Control License and Munitions System for the Office Under the Secretary of Defense for Policy (OUSDP).

♦ Extensive knowledge and experience with C#, VB.Net, ASP.Net, SQL, JavaScript, HTML and XML development technologies.

♦ Comprehensive knowledge and experience with designing and development of reports using SQL Server Reporting Services (SSRS) 2005 and 2007; Crystal Reports for .Net, 8.0, 8.5, 9.0, 10, 11 and 2008.

♦ Ability to work closely with customers to develop systems that meet requirements and provide solutions for their business needs.

PROFESSIONAL EXPERIENCE

Corinna’s 15 year career in the information technology industry has produced numerous successful projects. Her project work ranges from large client server and web-based line of business applications to small-scale office applications. Corinna’s technical background in application and database development along with her previous business experience in defining customer needs in both government and private industries shows that she is a valuable team player who is comfortable performing the many roles required to develop and deliver quality solutions for customers.

EDUCATION AND CERTIFICATION

BS in Mathematics and Computer Science, Francis Marion University
MS Great Plains Core Financials Implementation and Customization Certification
MS CRM Implementation And Customization Certification
Knowledgeable DBA. Experienced in designing/creating SQL Server databases for development, test, and production, including setup of SQL Agent jobs for backup and database maintenance. Over 7 years of experience in creating all types of database objects for data access, batch jobs, enforcing business rules, auditing, performance tuning the SQL Procedures. Thorough knowledge of Extract, Transform, Load (ETL) process using Microsoft SQL Server Integration Services.

Extensive knowledge and experience with SQL Server (2000, 2005, 2008), ORACLE (7.3, 8.0, 8i), Sybase 12.0, and with database tools, software tools, graphical user interface tools, and web development tools.

Experienced in working with business users to specify reports, followed by report creation/deployment using multiple tools like SQL Server Reporting Services and Crystal Reports.

Multiple projects with the State Department of Insurance, including easy-to-use licensing for private insurance agents and companies, monitoring and enforcement of complex regulations, and database import/export/migration.

Manufacturing applications for large manufacturing companies. Applications include resource administration, order administration, inventory, packing slips, invoicing, purchasing, finance, general ledger.

Jyothi is organized, dedicated, and quick to become productive. Her solid DBA and developer/analyst skills are enhanced by her experience in working with end users to understand and define their business requirements for new applications, customization, and reporting. Her application experience spans both public and private sectors. As a result, her broad-based professional capabilities make her a strong contributor to each project.

Bachelor of Engineering, India
Advanced Diploma in Computer Applications, India
CORE STRENGTHS

♦ Over 4 years of experience developing software solutions in various fields such as finance, order processing, development tools, and education. Current experience as a developer/analyst for South Carolina’s new Voter Registration and Election Management System.

♦ Strong knowledge of software architecture and design principles.

♦ Knowledge and experience with design and development technologies such as C#/C++, SQL, JavaScript, HTML, XML, WPF, and ASP.NET.

♦ Ability to work closely with customers to provide a solution that meets their technical and business needs.

♦ Ability to work closely with customers to develop systems that meet requirements and provide solutions for their business needs.

PROFESSIONAL EXPERIENCE

Stephen has had a 4 year professional career in the information technology industry working on projects in multiple fields. He has worked at all levels of the product development lifecycle. This broad experience gives him a wide perspective from which to solve client needs.

Stephen’s background in the product development and education fields after being an independent developer has equipped him to approach problems and solutions from a unique perspective. In addition, his experience at all levels of product development allows him to apply holistic solutions that best fit technical and business requirements.

EDUCATION AND CERTIFICATION

BS, Computer Science, Bob Jones University
MCTS, .NET Framework 4 Data Access
MARY DE MONTEREY  
PROJECT MANAGER  

PROJECT ROLE:  
PMO CONTROLLER AND ANALYST

CORE STRENGTHS

♦ Extensive experience with the SC State Election Commission:
  ♦ Created User Guides for South Carolina’s new Voter Registration and Election Management System to enable county users to become productive quickly with their new system.
  ♦ Analysis/documentation of Absentee Voting process for absentee and UOCAVA voters.
  ♦ Project management and analysis for the Help America Vote Act (HAVA) State Plan. The HAVA State Plan established a framework for achieving compliance with the federal mandates, drew on combined efforts of state and county organizations in the State, and reflected strategic objectives of great importance to every voter in the state.
  ♦ Client-side project management, business process, and systems analysis consultation to assist State Election Commission’s evaluation of a Voter Registration System prototype. Developed User Acceptance Testing approach and defined test cases for the first component.
  ♦ Project management for state primary election. Supported state team and communicated with county teams. Established tracking methodology to keep executive team informed. Election completed smoothly.

♦ Accomplished Business Analyst with broad industry background and excellent communication skills. Extensive experience in feasibility studies leading to major projects for custom software development. Works closely with client to build a clear understanding of business environment and challenges, envision solution options and benefits, and communicate recommendations to executives.

♦ Successful Project Manager in the information technology industry. Certified Project Management professional by the Project Management Institute.

PROFESSIONAL EXPERIENCE

Mary has worked with the NWN Application Development Center of Excellence core team since 1997 as a Program Manager, Project Manager, and Business Analyst. Her career includes almost 30 years with IBM, during which her leadership ability was recognized by multiple IBM Regional Manager and Pacesetter awards.

EDUCATION AND CERTIFICATION

BA, Double Major in Mathematics and English, Furman University  
Certified Project Management Professional by the Project Management Institute (PMP)
IV. Budget Proposal

The investment of the cost of this project will be proven, over time, as a voting accessibility increase rather than a monetary return on investment (ROI). It is impossible to attach a monetary value to the ability of a voter to have his/her vote counted. During the 2008 Presidential General Election, 3469 ballots from UOCAVA voters were not returned prior to the deadline. The EVAT tool would have provided a means for those ballots to travel to the LEO quickly and be received by the deadline. Also, an estimated 68,000 UOCAVA voters did not participate in the 2008 General Election and this tool will provide them with a guarantee that their ballot is returned on time.

With implementation of this tool, and the connectivity it provides, it is expected that the following efficiencies will be realized:

<table>
<thead>
<tr>
<th>Current</th>
<th>Expected</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>New registered voters (year)</td>
<td>2,500</td>
<td>5,000</td>
</tr>
<tr>
<td>Informational inquiries</td>
<td>0</td>
<td>40,000</td>
</tr>
<tr>
<td>Absentee ballot applications issued</td>
<td>12,137</td>
<td>50,000</td>
</tr>
<tr>
<td>Ballot transmissions</td>
<td>2,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Ballot markings</td>
<td>0</td>
<td>50,000</td>
</tr>
<tr>
<td>Ballots returned</td>
<td>8,668</td>
<td>50,000</td>
</tr>
</tbody>
</table>

The cost of this project will be $3,102,318.61. SCSEC and NWN Corporation consultants will be managing the development of the software and implementation of hardware. Below is an itemized budget for the project.

Travel $9,600

Project meetings and reviews as required by Part II, Section VII, B Project Meetings and Reviews of the grant application, will be held in Washington, DC. We estimate that two people will travel once per quarter from Columbia, SC to Washington, DC for approximately two days at an estimated cost of $1,200.00 per person per trip.

Consultants $2,725,000 $1,712,500

A project of this scope and complexity requires multiple skills and disciplines. NWN Corporation will provide senior resources as needed on a just-in-time basis at a standard rate of $125 per hour for an estimated 20,000 hours.

- Project Managers
- Developer/Analysts
- Business Analysts
- Quality Analysts
- Application Architects
- Database Architects

The SCSEC will utilize current personnel and augment staff as needed with qualified consultants from a staffing agency on State contract at a rate of $75 per hour for an estimated $3,000.00.
Materials and Supplies  $367,719 (Includes five year recurring costs)

Each of the 46 county offices will need one document scanner to capture applications sent via fax and mail. These scanners will be purchased from a vendor with an approved State contract price of $485 each for a total of $21,825.

The following computer equipment will be installed at DSIT to house the EVAT software. DSIT will monitor and maintain this equipment 24 hours per day and ensure that users have access to the EVAT program at any time. All equipment will be purchased from vendors with an approved State contract.

<table>
<thead>
<tr>
<th>Initial Purchase:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1—DL580 G7, 4 Processor, 8 Core, 256G Ram, 146GB Hard Drives, 2 HBA’s</td>
<td>$30,000.00</td>
</tr>
<tr>
<td>1—Windows Server 2008 Enterprise Software</td>
<td>1,676.01</td>
</tr>
<tr>
<td>4—Microsoft SQL Server 2008 R2 Enterprise Software</td>
<td>78,181.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$109,857.01</strong></td>
</tr>
</tbody>
</table>

DSIT Charges for 1st Year:

<table>
<thead>
<tr>
<th>DSIT Charges for 1st Year:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4—DSIT Server Management</td>
<td>$11,568.00</td>
</tr>
<tr>
<td>2—DSIT Network Connections</td>
<td>384.00</td>
</tr>
<tr>
<td>1—DSIT Netscaler</td>
<td>2,148.00</td>
</tr>
<tr>
<td>2—DSIT Rack Space</td>
<td>768.00</td>
</tr>
<tr>
<td>2—DSIT Virtual Machines</td>
<td>8,640.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$23,508.00</strong></td>
</tr>
</tbody>
</table>

Yearly Recurring:

<table>
<thead>
<tr>
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</tr>
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<tbody>
<tr>
<td>1—DL580 G7, 4 Processor, 8 Core, 256G Ram, 146GB Hard Drives, 2 HBA’s</td>
<td>$1,250.00</td>
</tr>
<tr>
<td>1—Windows Server 2008 Enterprise Server</td>
<td>17,375.00</td>
</tr>
<tr>
<td>4—Microsoft SQL Server 2008 R2 Enterprise Software</td>
<td>372.72</td>
</tr>
<tr>
<td>4—DSIT Server Management</td>
<td>11,568.00</td>
</tr>
<tr>
<td>2—DSIT Network Connections</td>
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<tr>
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<tr>
<td>2—DSIT Virtual Machines</td>
<td>8,640.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$42,505.72</strong></td>
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</table>