

**1. Technical Proposal**

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**Applicant:** New York State Board of Elections

**Sub Contractors:** Election Systems and Software, Inc, Scytl USA LLC, Hewlett Packard, NTS Data Services, N-Tier Technologies, Essex, Schoharie & Suffolk Counties

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### **3. Technical Approach and Justification**

#### **3.1. Executive Summary**

The New York State Board of Elections (NYSBOE) is conscious of the challenges facing our military and overseas voters and is committed to growing and adapting our services and supporting technologies to meet their continuing needs. New York's participation in the Electronic Absentee Systems for the Elections Grant initiative will allow the New York State Board of Elections to continue efforts to research and evaluate innovative technologies and associated services that we believe will improve and increase the successful level of participation of military and overseas voters. The New York State Board of Elections intends on addressing these challenges as well as others through the establishment of the New York State UOCAVA System Enhancement (USE) Program.

The New York State Board of Elections' key program objectives include establishing and successfully improving electronic systems for UOCAVA voters that are sustainable, affordable and reduce the failure rates for UOCAVA voters in each stage of the absentee voting process. The New York State Board of Elections also believes the efficacy of our efforts can be shared and will benefit other jurisdictions. New York intends on implementing a full-scale integration and enhancement effort which will enhance the front facing services provided through *BALLOTsafe*, and enhance the support, data transfer, and back office features of other IT systems which support it. This includes enhancements to the state's NYSVoter voter information system and the county-based voter registration (VR) systems with which it currently interacts.

Considering New York's background and current UOCAVA solution, we believe that working with our current vendors at the state and local level to enhance their services and interfaces will best address our unique requirements and result in the most effective, innovative, repeatable, documented, and sustainable solution for New York. Our vendors - ES&S, Scytl, Hewlett Packard, NTS Data Services and N-Tier - along with Essex, Schoharie & Suffolk counties who maintain their own proprietary voter registration systems, have committed themselves to providing a unique solution customized to fit the requirements of New York.

Overall, we view the collaboration of NYSBOE, our vendors, and other stakeholders as the best solution to overcome and eliminate any barriers which now face the UOCAVA voters of New York. This program's robustness, flexibility, usability, and innovation will pave the way to ensuring that the number of ballots sent equals the number of ballots returned, successfully addressing our goals and objectives detailed in the following section.

#### **3.2. Goals and Objectives**

##### **3.2.1. New York State UOCAVA System Enhancement (USE) Program Overview**

The New York State Board of Elections proposes a New York State UOCAVA System Enhancement (USE) Program where state of the art secure online tools will be used to assess the ability of such tools to improve the participation and voter experience of the military and overseas voter community. At the same time, the program will propose and analyze the implementation of efficient and innovative technology and processes to reduce the error rate associated with the ballot return process. Local voter registration systems and the statewide voter registration system will also be enhanced to support full data flow between the voter, local election officials, state election officials, and the Scytl *BALLOTsafe* system. Where possible, the

USE Program will establish automated data transfer through web services to increase the efficiency of the processes which affect the voting experience of the military and overseas voter.

### **3.2.2. Factors Achieved**

The New York State Board of Elections believes that our unique assets, capabilities, locations, and personnel through the New York State UOCAVA System Enhancement (USE) Program will foster and develop products and processes which will lessen the impediments that exist for the UOCAVA voter and will strongly address the Evaluation Factors stipulated in the FVAP EASE Grants program. For example, these factors are achievable through the deployment and use of the *BALLOTsafe* solution complimented with customizations to NYSVoter and the local voter registration systems. Our research and resulting reports will provide statistics and findings related to the progress towards achieving these factors.

#### **3.2.2.1. Significance**

Knowing that research indicates that UOCAVA voters experience a higher failure in every stage of the voting process than comparable populations in the general electorate, the NY USE Program will address each phase through greater information dissemination, monitoring, increased operational efficiencies, and multi-channel confirmation of voter success or failure at each stage of the voting process. These phases/stages include:

- Voter Registration – *BALLOTsafe* will work in coordination with NYSVoter and the New York local VR systems to provide information to voters, enhance their voter registration interaction, and track the progress of the registration process.
- Absentee Ballot Application – *BALLOTsafe* will provide an online absentee ballot application wizard which will guide the voter through the completion and return by mail of the Federal Post Card Application (FPCS) registration/absentee ballot application to their local board of elections. Further, this process will also allow the voter to create an account on *BALLOTsafe* to track the return and processing of their request. With an account, the voter will also be able to setup email reminders to complete requests for each election as needed. Voter information and the absentee ballot request tracking notifications will be exchanged through the automated interface between *BALLOTsafe*, NYSVoter, and the local voter registration systems.
- Absentee Ballot Delivery – *BALLOTsafe* will utilize the ballot data from any New York election management system, as confirmed by the respective county board of elections officials, to deliver the precinct-specific ballots via its secure and accessible online portal. Voters that have indicated a preference to receive their voting materials electronically will be notified by email of ballot availability. To assist in the ballot delivery, the *BALLOTsafe* online portal provides instructions for all screens, a help and support section to assist with multiple help topics, a secure messaging service to the voter's local election official and other helpful tools.
- Absentee Ballot Return and Tracking – *BALLOTsafe* will provide voters with exact state and county specific return instructions along with the ballot and will help facilitate the correct return. To provide faster and more accurate processing, *BALLOTsafe* will also use security envelope tracking barcodes to assist in the correct receipt and tracking of returned ballots. Furthermore, *BALLOTsafe*, NYSVoter, and the local voter registration systems will communicate via an automated data transfer channel to communicate ballot tracking information. This will include status updates for ballot download, ballot

received, and ballot rejected which will be provided to voters as soon as the local election official updates the local VR system.

#### **3.2.2.2. Sustainable**

The New York State Board of Elections is focused on constructing cost-effective and sustainable solutions which successfully enhance voter awareness consistently across multiple election cycles. There are multiple factors in New York's assessment of sustainability shown below. The New York State Board of Elections believes these factors are achievable through a unique approach using lean principals and incorporating a research evaluation of improvements to sustainability.

- The program and solution will be **financially sustainable**. New York will see a future cost savings in the overall cost of UOCAVA absentee balloting through the execution of the NY USE Program.
- The program and solution will be **logistically sustainable**. The NY USE Program will seek to realize operational efficiencies over the current processes through enhancements to the integration and technology services which will provide a lower level of effort which can be sustained even with decreasing budgets. Examples of this include easier exchange of ballot and voter information between technology systems, less effort and cost in the delivery of ballots electronically, quicker processing of returned absentee ballots and reporting efficiencies.
- The program and solution will be **technologically sustainable**. The *BALLOTsafe* solution is designed with an advanced technology platform which relies on advances in cryptographic protections, advances in Java-based web platform technologies, and a redundant, robust, and reliable infrastructure setup to ensure sustainability.

Furthermore, by incorporating the cost for the NY USE Program through the year 2016, New York is ensuring a consistent and sustaining offering to its voters and election officials. Also, utilizing multiple election cycles to gather and analyze statistics and feedback will strengthen the NY USE Program's findings and allow for a greater impact and significance. Specifically, the New York State Board of Elections expects to support the following through 2016:

- Maintain *BALLOTsafe* services with ES&S and Scytl through an annual Right to Use License
- Ongoing research and evaluation of *BALLOTsafe* for each election cycle
- Generation of Election Analysis and Assessment Reports (EAAR) after major elections

#### **3.2.2.3. Impact**

The ease of use and intuitive nature of *BALLOTsafe* in concert with its consistent availability over multiple election cycles will result in increased familiarity and expectation for its usage which provides for the broadest impact to voters and election officials. Local election officials will also be provided with an easier to manage system and will only be required to input data into their local VR systems. This data will then be propagated to NYSVoter and *BALLOTsafe* for immediate consumption. Some advanced concepts which will provide greater impact to voters are:

- Sample Ballot – The sample ballot feature of *BALLOTsafe* permits voters to have the opportunity to access their specific sample ballot before the election. Accessibility –

BALLOTsafe has been purposefully constructed to be in compliance with the applicable web accessibility standards and to provide an intuitive interaction when being understood or controlled through personal assistive devices. Below are the usability and accessibility standards which BALLOTsafe follows:

- Web Content Accessibility Guidelines (WCAG) 2.0
- User Agent Accessibility Guidelines (UAAG) 1.0
- Section 508 of the US Rehabilitation Act, Web-based Intranet and Internet Information and Applications (1194.22)

#### **3.2.2.4. Strategic Approach**

The New York State Board of Elections has presented a credible hypothesis and will provide a well-defined and appropriate plan to test that hypothesis. The plan is further defined in 3.3 Schedule and Milestones and the Management Approach, Section 4. We believe the hypothesis advances the body of knowledge needed to alleviate the obstacles faced by UOCAVA voters in their absentee voting process. It also identifies risk areas and provides mitigating strategies and controls as well as benchmarks for success.

#### **3.2.2.5. Innovation**

The NY USE Program presents an innovative research and development approach that utilizes the best and most innovative technology component in the market with a credible research and analysis component. The New York State Board of Elections believes this will lead to further development of processes, technology, products and techniques that will be replicated in other jurisdictions. Included below are some of the innovative technological concepts of the USE Program:

- Automated data transfer – New York State is planning on bringing a large collection of IT systems into direct communication with one another, to greatly enhance the level of services provided to UOCAVA voters. This includes the online BALLOTsafe system, New York’s voter registration system NYSVoter, and each of the voter registration systems used by the local boards of elections. This interface will communicate UOCAVA voter data, FPCA registration/absentee ballot request data, and ballot tracking information. This increases the speed and accuracy of data which is provided to voters and decreases the burden on local and state election officials.
- Security. The groundbreaking cryptographic protocols inherent in BALLOTsafe provide elections with the highest levels of security, in terms of voter privacy, voter verifiability, election integrity, system availability, and access control. BALLOTsafe provides security through the use of a physically secure data center, complete redundancy of critical resources, and the application of cryptography at multiple levels that ensure authenticity, integrity, and confidentiality.

#### **3.2.2.6. Scalability**

The NY USE Program has been established with respect for the variances in election cycles, the electorate and changes in election statute, law or rules. Thus, BALLOTsafe has been designed to meet a broad range of voter and election official needs now and in the future without impact to its level of performance or efficiency. BALLOTsafe is constructed using a modular architecture with dynamic lifecycle management technology similar to OSGi. This allows for enhanced flexibility and scalability. The BALLOTsafe solution is the most scalable in terms of:

- Usage – increases in the number of voters and number of ballot styles it can support;
- Impact – changes to and increases in the types of voters and the respective requirements it can support (i.e. extendable to other types of voters);
- Security – changes to and increases in the types and number of changing threats it can mitigate and protect against; and
- Scope – changes to and increases in the features and functionality which it employs.

### **3.2.2.7. Collaborative**

The New York State Board of Elections has designed the NY USE Program to be a collaborative program involving key election technology providers in New York – ES&S, Scytl, Hewlett Packard, NTS Data Services, N-Tier, and the IT support staff of Essex, Schoharie and Suffolk counties. This consortium of vendors have agreed to integrate their systems under the following goals and scope for this grant effort:

#### **Goals**

The integration effort is established with the following goals:

- Streamline the effort required of the local New York election officials to be in compliance with the MOVE Act by removing duplicate data entry where possible
- Alleviate the need for the manual interaction by New York State Board of Elections to forward information to *BALLOTsafe* from NYSVoter
- Increase speed at which Military/Special Federal voter and ballot tracking data is updated in *BALLOTsafe* and provided back to the voter
- Improve reporting capabilities within NYSVoter with regards to the activity of Military/Special Federal voter and ballot tracking data.

#### **Scope**

The scope of the integration effort will consist of the following efforts:

- Automate the communication of Military/Special Federal voter registration and ballot request information between local voter registration systems, NYSVoter and *BALLOTsafe*
- Automate the communication of Military/Special Federal voter ballot tracking status updates between local voter registration systems, NYSVoter and *BALLOTsafe*
- Make required modifications to NYSVoter to capture, store, and forward the necessary voter registration, ballot request, and ballot tracking updates of Military/Special Federal voters from the local voter registration systems to *BALLOTsafe*
- Expand the web service interface between the local voter registration systems and NYSVoter to provide for the automated transfer of voter registration, ballot request, and ballot tracking information of Military/Special Federal voters
- Make necessary modifications to the local voter registration systems to capture, store, and forward information related to the Military/Special Federal voter registration, ballot request, and ballot tracking information of voters
- Expand reporting functionality within NYSVoter to allow for various reporting criteria to be run against the Military/Special Federal voter and ballot tracking data.



### 3.2.2.8. Cost Benefit Analysis

Each major component the USE Program can separately, or in total, be evaluated for Return On Investment (ROI) against current processes and associated costs. The ROI analysis is provided in the Budget Proposal.

### 3.2.3. Security Measures

The NY USE Program will provide administrative, technical, and physical controls to protect each voter's personal identifying information (PII) and sensitive election material. At a minimum, **administrative** security controls include personnel training and awareness, adherence to written privacy policies, separation of duties, use of tamper evident seals, and document control.

**Technical** and **physical** security controls include protections afforded by all vendors in the storage and transmission of data.

First, the *BALLOTsafe* application is hosted in a secure Tier III data center behind a layer of redundant firewalls and where it is under 24/7 physical and application monitoring to ensure the security, health and integrity of the system around the clock. The infrastructure, including all hardware, software, and security controls are also monitored by trained onsite professionals. Physical and logical access control is also extremely limited to authorized personnel and is properly logged.

Second, *BALLOTsafe* is run on hardened operating systems updated with the latest security patches. The *BALLOTsafe* application is also digitally signed to ensure its integrity and is executed using Java Virtual Machines that require the software to be free of any maliciously inserted source code. At the application level, each connection over the Internet is required to utilize the HTTPS protocol to establish a separate authentic and encrypted communication channel with each user. This also allows the voter's web browser to seamlessly verify the authenticity of the web domain. Sensitive election materials such as ballot definitions are digitally signed to protect integrity and are encrypted while in transit. All personal identifying information (PII) is also protected through application level encryption and digital signatures. Furthermore, advanced routines are employed to protect a voter's identifying information from ever being associated with their ballot selections.

### **3.3. Schedule and Milestones**

The New York State Board of Elections has identified the following as the initial schedule assuming an award date of August 1, 2011. During Phase 1, a detailed schedule will be agreed upon by the program team.

#### **1. Initiation and Planning Phase**

Start Date: August 1, 2011    Duration: 45 days

The initiation and planning phase will initialize the project and introduce all stakeholders. During this phase, full project management and quality management plans will be developed. These will include a detailed schedule, work breakdown structure, statement of work with each sub-contractor, incremental project goals and approach to achieve them, and risk management plan.

Milestones/Deliverables:

- a) Completion of Project Management Plan
- b) Completion of Quality Management Plan

#### **2. Background Research and Specification Phase**

Start Date: September 15, 2011    Duration: 60 days

With the program stakeholders, this phase will first consider the procedural and technological measures currently being employed to address UOCAVA voting barriers and establish a benchmark of success in this area. According to this analysis, the project team will conduct research into technological, legal, and logistical requirements which affect the development, feasibility, sustainability, and acceptance of an improved UOCAVA voting solution amongst the stakeholders. The approach will lead into a detailed requirements gathering and specification development effort to capture the analysis into quantifiable measures necessary to improve the UOCAVA voting process. This will result in procedural and technological requirements and specific information will be identified for each phase of the UOCAVA voting process. Much of this will be addressed directly through *BALLOTsafe* and technology enhancements while others may be addressed through policy review.

Milestones:

- a) Completion of Requirements Specification Document
- b) Completion of Technology Modernization and Sustainability Plan
- c) Completion of initial test plan and test cases for technology modernization

#### **3. Technology Modernization**

Start Date: November 14, 2011    Duration: 305 days

The technology modernization phase will provide for customization, activation, and outreach efforts in preparation for the first election and continuously through the 2012 election cycle.

- Customizations – Based on requirements and the specification developed in Phase 2, *BALLOTsafe* and other systems will be customized to address New York’s requirements such that UOCAVA voters are best supported.
- Voter Education – During this phase, voters will be notified of the modernization and how it impacts them through multiple communication channels.
- Integration and Testing – The technology modernization effort will include an integration and test period where each component of the solution is tested and individual test cases are verified to achieve the proper results prior to going live to voters. This will include

testing of the new interfaces between NYSVoter, *BALLOTsafe*, and the local VR systems.

Milestones:

- a) Technology Modernization Completion – Presidential Preference Primary
- b) Technology Modernization Completion – Primary Election
- c) Technology Modernization Completion – General Election

#### **4. Election Operations and Analysis Phase**

Start Date: January 9, 2012                      Duration: 305 days

The election operations and analysis phase consists of iterations of elections followed by a period of analysis and reporting. Specifically, each 2012 Federal Election will be supported by the NY USE Program to enhance the technology and services provided to UOCAVA voters. Each progressive election will include greater enhancements to achieve the incremental goals established in Phase 1. The incremental goals are designed to progress toward achieving the full program goals and objectives. After each election, the program team will collect data, analyze statistics and trends, consider environmental and circumstantial factors, and determine findings against the incremental and overall goals and objectives of the program. Based upon these findings, the team may decide to continue with the current approach or to make alterations to the program plan.

Milestones:

- a) Presidential Preference Primary Completion
- b) Completion of Election Analysis and Assessment Report – Presidential Preference Primary
- c) Primary Election Completion
- d) Completion of Election Analysis and Assessment Report – Primary Election
- e) General Election Completion
- f) Completion of Election Analysis and Assessment Report – General Election

#### **5. Final Analysis and Reporting**

Start Date: November 12, 2012                      Duration: 90 days

At the conclusion of the 2012 election cycle, the final analysis and reporting phase will collect the relevant data from the 2012 General Election(s) as well as reports and data from the previous elections. This will include data related to the financial, programmatic, technological, and procedural factors of the program. During this phase, the final data will be analyzed by the program team to identify trends and ascertain important data points which will be used for generating findings and conclusions. This analysis will include considerations of environmental and circumstantial factors as well as an audit of anomalies reported. The findings and conclusions will include a comparison of the results against the goals and objectives, a report on lessons learned, and a final cost-benefit analysis.

Milestones:

- a) Completion of NY USE Program Final Report

### **3.4. Reports**

#### **1. Programmatic and Financial Progress Reports**

Beginning with the fourth quarter of 2011 and concluding with the first quarter of 2013, the New York State Board of Elections will prepare quarterly programmatic and financial progress reports. For the purposes of the NY USE Program, these reports will be prepared separately.

The programmatic report will provide

- Overall status
- Goals and Objectives progress
- Highlights during current reporting period. This includes current activity, accomplishments, and major and minor milestones met
- Highlights scheduled for next reporting period.
- Milestones. This is a log of major milestones, the goal date, and the current status
- Risk Log. This is a log of project risks, each with a description, probability, mitigation approach, and current status.
- Open Issues. This is a list of open issues and actions items being managed during the reporting period.

The financial progress report will be provided in compliance with the Federal financial reporting guidelines and the requirements of the grant announcement.

The following programmatic and financial progress reports will be prepared:

- a. Fourth Quarter 2011 Programmatic and Financial Progress Reports
- b. First Quarter 2012 Programmatic and Financial Progress Reports
- c. Second Quarter 2012 Programmatic and Financial Progress Reports
- d. Third Quarter 2012 Programmatic and Financial Progress Reports
- e. Fourth Quarter 2012 Programmatic and Financial Progress Reports
- f. First Quarter 2013 Programmatic and Financial Progress Reports

#### **2. Data collection points reports**

There will be several data collection point reports prepared throughout the NY USE Program. For the purposes of the program, these will be called Election Analysis and Assessment Reports (EAAR). Each EAAR will contain the data collected for each election, environmental and circumstantial factors considered, an anomaly report, and findings and conclusions. The types of data collected will provide sufficient detail for analysis at each phase in the UOCAVA voting process. This includes:

- Total number of voters with accounts
- Number of first time voters accesses
- Number of ballot requests
- Number of ballot styles supported
- Number of ballot styles downloaded
- Number of ballots successfully returned
- Number of ballots not returned
- Types and number of problems incurred

- Number and type of email notifications sent successfully/unsuccessfully
- Voter feedback through survey

The following EAAR's will be prepared:

- a. Presidential Preference Primary EAAR
- b. Primary Election EAAR
- c. General Election EAAR (will be incorporated in the Final Report)

### **3. Final Report**

The NY USE Program Final Report will be prepared during the Final Analysis and Reporting Phase and delivered at the conclusion of the grant performance period. The final report will include the final data collected, an analysis of the data, a report of important technological, environment, procedural, and circumstantial factors, findings; and conclusions for each of the following areas:

- Overall
- Financial
- Security
- Significance
- Sustainability
- Impact
- Strategy
- Innovation
- Scalability
- Collaboration
- Cost vs. Benefits

## **4. Management Approach**

### **4.1. Introduction**

New York has formed this USE Program to provide the necessary technology and tools to allow New York to meet the proposed research goals and grant evaluation factors for the purpose of assisting UOCAVA voters. The New York State Board of Elections intends on using an organized project management methodology to achieve these goals in a sustainable and organized way. The approach will incorporate formal financial management and project management principles. Furthermore, the program will incorporate important stakeholders and experienced researchers to help guide the direction of the program and analyze the results. At a minimum, stakeholders will include military and overseas voters, along with state & local election personnel. This cooperative of the New York State Board of Elections, election officials and election service and system providers will provide an important steering committee for the direction and execution of the project. Furthermore, this approach will utilize six-sigma principles for improving existing business processes:

- **Define** the problem, the voice of the customer (i.e. the voter), and the project goals.
- **Measure** key aspects of the current process and collect relevant data.
- **Analyze** the data to investigate and verify cause-and-effect relationships. Determine what the relationships are, and attempt to ensure that all factors have been considered. Seek out root cause of the issue under investigation.
- **Improve** or optimize the current process based upon data analysis to create an improved, future state process.
- **Control** the future process to ensure that any deviations from goals and objectives are corrected before they result in issues. Implement control systems and monitor the process.

### **4.2. Project Organization**

#### **4.2.1. Project Directors**

The Co-Executive Directors of the New York State Board of Elections will serve as the project directors. The project directors manage the strategic aspects of the project, oversees the steering committee, review major deliverables, and provide direction to the project manager.

#### **4.2.2. Project Steering Committee**

The project steering committee will be comprised of the project directors, project manager, key personnel from Scytl, HP and the local VR system vendors, as well as local elections officials. The steering committee will provide guidance to the project directors and will ensure alignment of project with the strategic goals and objectives and key factors in Section 4.4.

#### **4.2.3. Project Manager**

The IT Director of the New York State Board of Elections will serve as the project manager. The project manager will coordinate and facilitate the necessary communication and interaction with and between the vendors to accomplish the goals of the NY USE Program.

#### **4.2.4. Project Research Team**

The Project Research Team will consist of researchers from Cal Tech University and University of Utah and election research experts from Scytl. The research team will coordinate with the project directors and will be responsible for data collection and analysis. The research team will

form hypotheses and will report findings. All research products will be validated with the steering committee which will prepare the conclusions.

### **4.3. Project Resources**

#### **4.3.1. Scytl**

Scytl is a software company specializing in the development of highly secure election modernization solutions. These solutions incorporate unique cryptographic protocols that enable election administrators to carry out all types of election processes in a completely secure, transparent and auditable manner. For the NY USE Program, Scytl will provide the *BALLOTsafe* solution, election experts, and contribute to the research and analysis efforts with their dedicated research and development (R&D) department

#### **4.3.2. ES&S**

ES&S is the local voter registration vendor for 4 local boards of elections, covering more than two million voters. Their staff will participate throughout the development process, providing input and identifying the changes to their system software necessary to accommodate the goals of the NY USE Program.

#### **4.3.3. NTS Data Services**

NTS is the local voter registration system vendor for 50 local boards of elections throughout New York State. They will be providing key personnel and input throughout the development of the NY USE program. In addition, they will be instituting the necessary programmatic and procedural changes to their software in order to provide the majority of New York counties, and the military and overseas voters they serve, the ability to take advantage of the system and procedural efficiencies characteristic of the goals of the NY USE Program.

#### **4.3.4. N-Tier Technology**

N-Tier is the local voter registration system vendor for the New York City Board of Elections. Their staff will provide important input throughout the development of the NY USE program and will focus on instituting the necessary programmatic and procedural changes to their software in order to provide the military and overseas voters of New York City access to the benefits of the NY USE Program.

#### **4.3.5. Hewlett Packard**

Hewlett Packard helped develop New York State's NYSVoter system, as well as the original enhancement which allowed it to communicate with the local voter registration systems. They are currently contracted with the State Board to provide additional enhancements to the system. Their staff's experience and knowledge of the existing systems will be invaluable to the success of the NY USE Program.

#### **4.3.6. Essex, Schoharie & Suffolk County Board of Elections IT Staff**

These three counties utilize home-grown voter registration systems, which already communicate with the state's NYSVoter system. They will be involved throughout the process of the NY USE Program to allow them to make any and all necessary adjustments to their existing systems so that they too can benefit from the scope and impact of this project.

#### **4.4. Project Strategic Goals**

The New York State UOCAVA System Enhancement (USE) Program will deploy state of the art secure online tools and will assess the ability of such tools to improve the participation and voter experience of the overseas voter community. At the same time, the program will propose and analyze the implementation of efficient and innovative technology and processes to reduce the costs and the error rate at each point in the absentee voting process, particularly in the processing of documents and ballots received from voters.

**Goal:** Provide successful, sustainable, and affordable electronic tools that will improve absentee balloting success rates for voters covered by UOCAVA.

#### **Objectives:**

- Increase the percentage of ballots successfully returned by UOCAVA voters to be either equal to, or greater than the percentage of ballots returned by the general absentee voting population in the jurisdiction.
- Improve the rate of completed UOCAVA voting transactions from registration to ballot return.
- Increase the percentage of UOCAVA voters participating and voting in Federal elections.
- Reduce the failure rates for UOCAVA voters experienced in each of the various stages of the absentee voting process.
- Provide tools and services that can benefit other jurisdictions.
- Provide security measures to protect users' personal identifying information and any transmitted election material.
- Provide evidence and findings generated from authoritative and documented research efforts to measure and report on the success of the previous objectives.

**Hypothesis:** By providing a repeatable and consistent portfolio of innovative tools and services over multiple election cycles to support overseas voters (independent variable), New York will see an increase of ballots successfully returned by overseas voters either equal to, or greater than the percentage of ballots returned by the general absentee voting population (dependent variable).

**Plan:** Implement tools and services in an integrated and phased fashion to baseline, research and test their utility, functionality, risks, benefits and costs for improving New York's capabilities to support our overseas voter population.

#### **4.5. Research Methodology**

The NY USE Program will provide for a research effort in parallel and in collaboration with the technology innovation and election support aspects. As a critical component, the research effort will extract data from and provide inputs into the overall project. Primarily, the project research team will analyze and measure the data points of current processes, identify each process and the elements which are related to it, provide suggestions for improvements, project the effectiveness of modifications, and measure and report on progress throughout the project. The following sections outline the primary concepts in the research methodology.

##### **4.5.1. Analysis and Reporting**

The project research team will be responsible for preparing the Election Analysis and Assessment Reports (EAAR) and the final report. This will include the data collection, analysis,



considerations, and findings. The research team will work together with the steering committee to draw conclusions and finalize each report.

#### 4.5.2. Analysis and measurement of current processes

Part of the research approach is to conduct analysis and measurement of the current processes. The project research team is already conscious of the challenges facing overseas voters and is prepared to suggest ways to grow and adapt services and support technologies to better meet their needs. As a starting point, the New York State Board of Elections knows firsthand that the logistics of overseas absentee voting is inherently difficult. Delays and limitations in traditional mail service can slow and, in some case, prevent mail delivery and return. Traditional mail cannot always reach military voters involved in rapid troop movements or find overseas citizens who are located in remote locations. In addition, although active duty military members complete Federal Post Card Absentee (FPCA) voting requests, sometimes this process cannot keep up with multiple address changes over the course of a year.

Furthermore, New York citizens are likely to experience widely divergent voting experiences depending upon their country of residence. Worldwide postal delivery systems vary, and U.S. postal system coordination with other countries also varies widely. The aforementioned are but a few of the well known challenges faced by our overseas voters. These challenges will be addressed and cataloged by the research project team in an effort to design and deploy the most impactful and meaningful technology solution for voters.

#### 4.5.3. Technology Enhancements

While New York is already aware of many areas where *BALLOTsafe* and other technology enhancements can alleviate the difficulties faced by voters, this portion of research effort will seek to refine and propose exactly how *BALLOTsafe* can reach voters and provide them tools to fully participate in the absentee voting process. This effort will focus on meeting the specific needs of New York’s voters in a significant, sustainable, impactful, innovative, and scalable way. The expectation is that the use of *BALLOTsafe* will mitigate or eliminate almost all registration and ballot delivery difficulties faced by UOCAVA voters. The following provides a description of proposed modification with *BALLOTsafe*, the justification, and the projection for the modification for each stage in the absentee voting process.

Stage	Description of Modification	Justification	Projection
Voter Registration	<i>BALLOTsafe</i> will work in coordination with NYSVoter and the local VR systems to provide information to voters and enhance their voter registration interaction.	Some voters experience difficulty completing the registration form correctly. This tool will aid in the accurate completion of registration forms for printing and return by mail to the appropriate county board of elections	The provision of online electronic assistance to voters in an intuitive way will increase the number of voters who successfully register to vote on time.
Absentee Ballot	<i>BALLOTsafe</i> will provide an online absentee ballot	Traditional postal delivery and return of	The provision of an online

Application	<p>application wizard which will guide the voter through the completion and return by mail of the Absentee Ballot Application. Further, this process will also allow the voter to setup an account on <i>BALLOTsafe</i> to track the return and processing of the Absentee Ballot application. With an account, the voter will also be able to setup email reminders to complete applications for each election, as necessary. This information will be synchronized across <i>BALLOTsafe</i>, <i>NYSVoter</i>, and the local VR systems.</p>	<p>absentee ballot applications introduce unpredictable delays into the process which delay future steps. Voters can often forget when an absentee ballot application is due for an election or may incorrectly complete it.</p>	<p>electronic ballot application wizard will help ensure voters complete them correctly for return by mail to their local board of election.</p>
Absentee Ballot Delivery	<p><i>BALLOTsafe</i> will provide online ballot delivery of precinct specific ballots via its secure and accessible online portal. Voters will be notified by email of ballot availability. To assist in the ballot delivery, the <i>BALLOTsafe</i> online portal provides instructions for all screens, a help and support section to assist with multiple help topics, a secure messaging service to the voter's local election official, a newsfeed to provide the latest important news items, and other helpful tools.</p>	<p>Traditional postal delivery of ballots is lengthy and unpredictable. It is also costly in terms of logistics, printing, and mailing. Voters who often move or are in inaccessible areas receive ballots late or not at all.</p>	<p>The electronic delivery of ballots through a secure internet based portal will provide consistent access to eligible voters which will improve the successful completion and return rates of ballots.</p>
Absentee Return and Tracking	<p><i>BALLOTsafe</i> will provide voters with exact state and county specific return information along with the ballot and will help facilitate the correct return. To provide faster and more</p>	<p>Voters can get confused or have misunderstandings about how and when to return their ballot. Voters are often not aware of when their</p>	<p>The use of an online electronic portal to provide correct return information and return documents will improve the</p>

accurate processing, BALLOTsafe will also use ballot tracking barcodes to assist in the correct receipt and tracking of ballots. There will also be an automated data transfer system established to assist in the real-time communication of ballot tracking data between the local election official and the BALLOTsafe system.

ballot is returned and if it was accepted.

Furthermore, without automated interfaces, there are delays in the processing and tracking of ballots. The automated interfaces will greatly enhance the level and speed of services provided to voters.

ease and rate of successful return of ballots.

Automated interfaces and the use of barcodes will shorten the processing delay and shorten the time it takes to provide tracking information to voters.

## 4.6. Performance Management

### 4.6.1. Performance Management Approach

To ensure that the project is developing as expected, Performance Management measures will be used during the project life cycle. The project performance objectives are as follows:

- To achieve the NY USE Program goals and objectives while testing the hypothesis in a quantifiable and reportable way
- To deliver the agreed project outcomes on schedule and within budget.
- To manage the project using a defined and documented methodology.

There are three major processes in performance management:

- **Performance Planning:** Performance planning is a process that supports overall project planning and should be performed regularly throughout the project lifecycle. Performance planning is performed in parallel with other planning processes and establishes a performance threshold for each major project milestone.
- **Performance Assurance:** Performance assurance is the planned activities of a project that monitor all other performance management processes to ensure that the project will meet the performance objectives. The project steering committee will be responsible for performance assurance.
- **Performance Control:** Performance control is the monitoring and analysis of certain project results and data to determine if they comply with the relevant performance standards and performance objectives such as meeting the project goal and objectives in Section 4.4. Analysis is performed to determine ways to eliminate causes of unsatisfactory results. The performance control activity will also include taking remedial steps to address unsatisfactory results and progress toward the project goals.

### 4.6.2. Performance Measurements

The following are the initial performance measurements indicated for each of the project objectives. These measurements will be defined in greater detail during the performance planning.

Objective	Measurement of Success
Improve the rate of completed UOCAVA voting transactions from	At each step in the absentee voting process, the number of voters who complete each phase of the process

registration to ballot return.	increases. This will be measured on a per election basis, comparing previous election of that type to the current election. For example, the 2012 Primary Election will be compared with the 2008 Primary Election.
Increase the percentage of UOCAVA voters participating and voting in Federal elections.	For each Federal Election, there is an increase in percentage of UOCAVA voters who participate in at least one portion of the voting process.
Reduce the failure rates for UOCAVA voters experienced in each of the various stages of the absentee voting process.	Based on a comparison of the average failure rates for each stage in the absentee voting process with the failure rates of the current election, there is a decrease in the failure rate in each stage.
Provide tools and services that can benefit other jurisdictions.	The solution provided supports the legal, procedural, and technical requirements of other jurisdictions.
Provide security measures to protect users' personal identifying information and any transmitted election material.	Data collected through system audit logs, internal auditing, and interactions with voters does not indicate that any user's personal identifying information or sensitive election material was compromised in any way.
4.6.3. Provide evidence and findings generated from authoritative and documented research efforts to measure and report on the success of the previous objectives	4.6.4. Reports provided through the NY USE Program include reliable data, complete analysis, and discerning conclusions for each of the objectives above.

## 4.7. Risk Management

### 4.7.1. Risk Management Plan

A Risk Management Plan, including procedural and security risks, will be implemented in order to identify the risks that could prevent voters from participating in the voting process. These risks will be focused on identifying possible obstacles in the process, design, logistics and implementation of different procedural steps during the election process. Risk management activities will be conducted to minimize negative risk impacts and maximize the positive (opportunity) risks identified for the project in order to meet the project's objectives.

The purpose of the Risk Management Plan is to describe how risk management activities will be organized and performed during the project's life cycle. Risk management activities are:

- **Risk Management Planning.** Determine the approach to risk management
- **Risk Identification.** Identify all known project delivery risks, system security risks, etc.
- **Risk Analysis.** Perform an assessment of the probability of occurrence and potential impact of each risk
- **Risk Response Planning.** Create action plans to manage the identified risks
- **Risk Monitoring and Control.** Monitor, review and update risk status and plans
- **Risk Closeout.** Document lessons learned

The risk management plan does not address the responses to individual risks – these are documented in the Risk Log.

Risk planning is an iterative process, beginning as early as possible in the project and concluding at project close-out. The approach to and appropriateness of risk management activities should be reviewed throughout the project at the regular project status meetings, as defined above.

The risk identification activity will:

- **Commence at the Project planning stage**, be repeated at intervals as defined by the project and conclude at Project Closeout.
- **Identify a comprehensive list of potential risk** events that have a negative (threat) or positive (opportunity) impact.

The identification of risks will be based on several sources, including:

- Examining each element of the project work breakdown structure
- Comparing the current project with previous similar experiences
- Interviews with the stakeholders

Analyzed risks will be prioritized to identify the top ten risks with threats and opportunities. When selecting the top ten risks, consideration will be given to those risks with overall rating of “HIGH” as well as risks that are important to the customer or other stakeholders. The remaining risks that will not be the focus of immediate risk management effort will be reconsidered at monthly intervals.

Risk Response plans (Risk mitigation plans) will be developed for both threats and opportunities for each of the top 10 risks selected from the prioritization process.

Deliverables:

- **Risk Management Plan:** This document describes how risk management activities will be organized and performed during the project’s life cycle.
- **Risk Log:** This document contains the details of all the risks identified, especially the ones with higher impact. This document will contain the following for each specific risk identified:
  - The risk owner who is the person responsible for managing the response plan
  - The risk response strategy that will be used
  - The description of the mitigation or contingency plan
  - Any stakeholders impacted by the risk
  - The cost of the risk response
- **Risk Mitigation plans:** This document, one for each of the high priority risks detected, describes the risk details, planned mitigation actions and possible contingency plan(s).

#### **4.7.2. Security Risk Assessment**

Security risks are also considered for detecting possible issues that could damage the election accuracy or voter privacy. A security risk assessment will be performed to ensure that security risks are properly considered and mitigated against.

To perform the Security Risk Assessment, the following steps will be executed:

- a. Assets Identification: The assets managed or accessed by the election processes shall be identified as well as the interactions with them and their importance/value (e.g. voter credentials, votes, ballot box, election configuration ...).
- b. Issues/Threats Identification. Identification of the adverse actions, such as workflow execution problems or security threats that could affect the assets of the election. This includes the analysis of the context that generates these issues.
- c. Issue/Threat Assessment. An estimation of the complexity of the issue, the occurrence probability, and the impact in case it happens.
- d. Controls/Countermeasures identification. Identification of measures that are reducing the issue/threat probability or the impact level. The effectiveness of these controls shall be evaluated in order to estimate the issue probability/impact mitigation.
- e. Risk Assessment: Finally, an estimation of the risk level that the voters are facing is evaluated combining the issues/threats assessment and the implemented controls/countermeasures studies.

#### **4.8. Current and pending project proposal submissions**

NOT APPLICABLE

#### **4.9. Qualifications**

##### **4.9.1. Introduction**

To assist personnel from New York, the New York State Board of Elections has selected ES&S and Scytl to provide operational, research and technology support with their key personnel list below. New York believes ES&S and Scytl have the best product and personnel to provide the services and support sought for the EASE grant execution in New York.

##### **4.9.2. Key Personnel**

##### **George Stanton, Chief Information Officer, New York State Board of Elections**

Mr. Stanton has been the CIO of the Board of Elections for the past eleven years. He was Project Director for the NYSVoter statewide voter database project which won the Best of New York award for best IT collaboration among organizations.

##### **Ingrid Giordano, Scytl Regional Sales Manager, Scytl USA LLC**

Ms. Giordano serves Scytl as a Sales Manager and Elections Specialist for its U.S. based electoral modernization projects. She has 20+ years of experience working for voting systems industry leaders. She was previously the Election Services Manager and Public Relations Manager for Global Elections Systems (Diebold/Premier). She was the Virginia Regional Sales Manager for Advanced Voting Solutions and Sales Director for Vote Here of Bellevue, WA. Ms. Giordano has also served Sequoia Voting Solutions and Dominion Voting Systems as Elections Specialist and Customer Service Manager in New York State. Ingrid has certified, sold, implemented, installed and supported election solutions in 25 US states and Canada.

##### **Aaron Wilson, Project Engineer, Scytl USA, LLC**

Mr. Wilson serves Scytl as a project manager and engineer for its U.S. based electoral modernization projects. He has managed multiple electoral modernization projects for a dozen counties and states in recent years. Mr. Wilson joined Scytl from a background in both the elections and defense industries. He was previously an auditor for the Florida Division of Elections' Bureau of Voting System Certification and, before joining Scytl, was an embedded software engineer for Lockheed Martin's information assurance department. With the Florida Division of Elections, Aaron tested various voting systems at the state and county level and is an expert in a variety of election and voting technologies. Mr. Wilson is a Systems Security Certified Practitioner (SSCP) and received his Bachelor of Science in Computer Engineering from Florida State University.

## New York State Budget

### New York State UOCAVA System Enhancement (USE) Program

The New York State UOCAVA System Enhancement (USE) Program consists of two components which will be implemented statewide. The first component is enhancements to and license costs (through 2016) for the online absentee ballot management software which provides services to both voters and election officials. The second component is enhancements to a number of systems which support the MOVE Act services provided to voters at each step in the absentee balloting process. The combined budget for each of shown below:

Program Component	Budget
I. BALLOTsafe Service	\$ 1,160,582.00
II. MOVE ACT DATA AUTOMATED TRANSFER Project	\$ 1,320,015.60
<b>TOTAL BUDGET</b>	<b>\$ 2,480,597.60</b>

#### I. BALLOTsafe Service

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##### A. DESCRIPTION

BALLOTsafe is being provided as a software as a service (SaaS). This model has several price components: Activation and Implementation Services Fees, Annual Right-To-Use License and Service Fees during the Research Program, and ongoing Right-To-Use License Fees and Per Ballot Processing Fees after the Research Program is completed.

For the initial Program, which includes the 2012 Election Cycle, the following deliverables will be provided:

Activation and Implementation Services	Software License and Services - 2012
System Activation & Initial configuration	Right-to-use license of BALLOTsafe
Definition of specifications	Election Specific System Configuration
Customization to meet specifications	Secure Primary and Backup Hosting
Installation and deployment	Help-desk / Technical Support
Integration with existing EMS	Enhancements, New Releases & Upgrades
Training & Documentation	Account Management
Project management	



## B. Budget

The budget to the State of New York for the setup and use of the *BALLOTsafe* service is \$520,227.00, as set forth in the table below. This budget includes the Activation and Implementation Services and Annual Right-To-Use License and Service Fees through the 2012 General Election Year.

<b>Activation and Implementation Services:</b>	
Activation, Configuration, Customization, and Documentation	\$229,520.00
System Integration	\$50,000.00
Acceptance Testing	\$10,000.00
Project Management and Research Support	\$63,000.00
Training and Documentation	\$7,875.00
<b>Total Activation and Implementation Services</b>	<b>\$360,395.00</b>
<b>Software License and Services – 2012:</b>	
Right-to-use license of <i>BALLOTsafe</i> , Secure Primary and Backup Hosting, Help Desk/Technical Support, Software Maintenance and Support for all elections through Nov 2012	\$152,355.00
Overseas Vote Foundation State Hosted System License	\$140,227.00
Account Management and Research Data Support	\$47,250.00
Election Specific System Configuration	\$20,000.00
<b>Total Annual License Fees and Services - 2012</b>	<b>\$359,832.00</b>
<b>Less: Existing Customer Discount</b>	<b>(\$200,000.00)</b>
<b>Total Fees (2012)</b>	<b>\$520,227.00</b>

### Ongoing Fees

Following the conclusion of the 2012 grant program, *BALLOTsafe* is available for use in supporting UOCAVA voters, as well as disabled voters and absentee-by-mail voters. The ongoing Annual Software License and Service Fees will consist of a fixed price per year as follows.

Description	UOM	2013	2014	2015	2016
Annual Right-To-Use Software License	License	\$152,355.00	\$160,000.00	\$160,000.00	\$168,000.00

### The above fees entitle the State to the following:

- Right-To-Use License
- Upgrades, Enhancements, New Releases, and Bug Fixes (Except State-mandated changes)
- Help Desk & Troubleshooting Support
- Primary and Backup Secure Hosting

<b>Item</b>	<b>Budget</b>
<b>BALLOTsafe 2012</b>	\$ 520,227.00
<b>BALLOTsafe 2013-2016 RTU License</b>	\$ 640,355.00
<b>TOTAL</b>	\$ 1,160,582.00

## II. MOVE ACT DATA AUTOMATED TRANSFER (MADAT) Project

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### A. DESCRIPTION

#### Introduction

The Military and Overseas Voter Empowerment Act (MOVE Act) was passed by Congress on October 22nd, 2009. In order to comply with the MOVE Act for the 2010 Primary elections, New York worked together with the local election jurisdictions, the statewide voter registration system, FVAP and Scytl to build a compatible solution. Now the New York State Board of Elections is seeking to develop an enhanced long term solution which seeks to unify and automate the MOVE compliance as much as possible. Therefore, the Board of Elections is coordinating the MOVE Act Data Automated Transfer (“MADAT”) Project. The MADAT effort is the creation of a broad technology solution which will provide for the automated transfer of both Military voters & Special Federal voters, as well as their ballot status data from the county voting registration systems through NYSVoter (Statewide voter registration system) to the Scytl *BALLOTsafe* platform (Internet based MOVE Act solution).

#### Goals

The MADAT project is established with the following goals:

- Streamline the effort required of the local New York election officials to be in compliance with the MOVE Act by removing duplicate data entry where possible
- Alleviate the need for the manual interaction by New York State Board of Elections to forward information to *BALLOTsafe* from NYSVoter
- Increase speed at which Military/Special Federal voter and ballot tracking data are updated in *BALLOTsafe* and provided back to the voter
- Improve reporting capabilities within NYSVoter with regards to the activity of Military/Special Federal voter and ballot tracking data.

#### Scope

The scope of the MADAT project will consist of the following efforts:

- Automate the communication of Military/Special Federal voter registration and ballot request information between NYSVoter and *BALLOTsafe*
- Automate the communication of Military/Special Federal voter returned ballot tracking status updates between NYSVoter and *BALLOTsafe*

- Make required modifications to NYSVoter to capture, store, and forward the necessary voter registration, ballot request, and ballot tracking updates of Military/Special Federal voters from the local voter registration systems to *BALLOTsafe*
- Expand the web service interface between the local voter registration systems and NYSVoter to provide for the automated transfer of voter registration data, ballot request, and ballot tracking information of Military/Special Federal voters
- Make necessary modifications to the local voter registration systems to capture, store, and forward information related to the Military/Special Federal voter registration, ballot request, and ballot tracking information of voters
- Expand reporting functionality within NYSVoter to allow for various reporting criteria to be run against the Military/Special Federal voter and ballot tracking data.

### **Data/Functionality Requirements**

Absentee Application Status – Military/Special Federal voters who have a current & valid application on file should have some flag denoting them as being an active absentee voter. This information will be passed to *BALLOTsafe* through NYSVoter to allow for access to the *BALLOTsafe* system. If a previously active absentee voter who had access to the *BALLOTsafe* system no longer has a current and valid absentee application on file at their home board, they will receive a notification when they try to login to *BALLOTsafe* that their application has expired and that they should fill out a new one (which would then point them to the OVF site).

Voter's Ballot Transmittal Preference – When applying for an absentee ballot, a voter can declare a preference for how they would like their ballot and voting materials sent (by mail, email or fax). This preference should be tracked throughout all three systems.

Voter Email – Since Military/Special Federal voters can request to receive their ballot information by email, we will need to make sure that this information can be stored across all three platforms. Additionally, local VRs should have staff enter an email address twice to verify it being entered correctly. There should also be a field to signify the validity of an email address. By default, we would assume that the email address is correct and valid. Currently, when a new account is created on *BALLOTsafe* (currently a manual process but will become automated with this upgrade), Scytl's system sends out a welcome email. We would be looking to Scytl for some sort of system to flag any email messages that get bounced back with an error (invalid email, mailbox full, etc.). This information would then be passed along to NYSVoter and the county boards could review any records for absentee voters who have been flagged with an email error. The process within NYSVoter would be similar to the way they can review Felon Maintenance.

Voter Fax Number – Since Military/Special Federal voters can request to receive their ballot information by fax, we should have a place for this information throughout all three systems (as Scytl can accommodate those voters through email-to-fax).

Voter Ballot Style – In the majority (if not all) local VRs, an absentee voter somehow has a ballot style designated to them. This may be done directly by a ballot style field or through some

other process (by precinct where each precinct has a single specific ballot style). This information will need to be communicated to *BALLOTsafe* through NYSVoter so that the identification of a voter's ballot style (currently done by manually uploading a table that pairs a ballot style id with a voter id) can be automated.

Ballot Issued Date(s) – For tracking purposes, the date that a ballot is issued should be communicated to *BALLOTsafe* through NYSVoter so that a voter can be aware of when their ballot was sent (if by mail). Re-issue dates should be a topic of discussion for how best to handle this information (as a separate field, a table of dates, or a replacement of the initial issued value).

Ballot Returned Date(s) – Similar to the Ballot Issued Date(s), this information will need to be communicated to *BALLOTsafe* automatically (it is currently done between *BALLOTsafe* and local boards manually). The same issue would exist for re-returned date(s).

Ballot Download Status – Since Scytl can track when a voter downloads a ballot, this information should be communicated back to NYSVoter. Should discuss if/how we track multiple downloads or downloads of multiple ballot versions.

Ballot Counted Status – The system should have the capability to track whether or not a voter's absentee ballot was counted or rejected within the local VR and that data be communicated to NYSVoter. It may or may not need to be communicated to *BALLOTsafe* as well.

Overseas vs. Domestic Military Voter – Since the Department of Justice often asks us to further break down data for Military voters into those with overseas or domestic addresses, as well as data on the countries being represented. This information should be tracked in the local VRs and communicated to NYSVoter. This could be done with something as simple as a “country” field.

### **NYSVoter Reporting Requirements**

NYSVoter's reporting capabilities need to be significantly expanded, specifically with regard to the new data that will be tracked for Military / Special Federal voters. We will need to be able to run queries based on the election year and type (2010 General Election, 2008 Primary Election, etc.), voter type (Military / Special Federal), military type (overseas or domestic), transmittal preference (mail, email or fax) and county. The other information described in the functionality requirements (ballot counted status, rejection reasons, etc) should be available as well, within these reports. Specific report structures will be identified in the near future and described in more detail.

## B. Budget

The budget for the MADAT project has been determined by estimates provided from each of the vendors.

<b>Vendor</b>	<b>Budget</b>	<b>Description of Services</b>
<b>Scytl</b>	\$200,000.00	Scytl will provide the web service interface for <i>BALLOTsafe</i> to communicate with NYSVoter to automatically transfer voter and ballot data as required in the MADAT scope and goals listed above.
<b>Hewlett Packard</b>	\$300,000.00	HP will provide the web service interface for NYSVoter to communicate with <i>BALLOTsafe</i> to automatically transfer voter and ballot data as required in the MADAT scope and goals listed above. HP will also enhance the current interfaces with each of the county systems to allow for additional data to be transfer. This data is required to support the MOVE Act requirements.
<b>NTS</b>	\$650,000.00	NTS will modify its voter registration application and its interface with NYSVoter to support the additional data and logic required for supporting the MOVE Act requirements. NTS is used in a large majority of New York's 62 counties.
<b>Election Systems &amp; Software</b>	\$38,500.00	ES&S will modify its voter registration application and its interface with NYSVoter to support the additional data and logic required for supporting the MOVE Act requirements.
<b>Essex</b>	\$7,515.60	Essex County will modify its voter registration application and its interface with NYSVoter to support the additional data and logic required for supporting the MOVE Act requirements.
<b>Schoharie</b>	\$14,000.00	Schoharie County will modify its voter registration application and its interface with NYSVoter to support the additional data and logic required for supporting the MOVE Act requirements.
<b>Suffolk</b>	\$10,000.00	Suffolk County will modify its voter registration application and its interface with NYSVoter to support the additional data and logic required for supporting the MOVE Act requirements.
<b>N-Tier</b>	\$100,000.00	N-Tier will modify New York City's voter registration application and its interface with NYSVoter to support the additional data and logic required for supporting the MOVE Act requirements.
<b>TOTAL</b>	\$ 1,320,015.60	

## New York State Budget

### New York State UOCAVA System Enhancement (USE) Program

The New York State UOCAVA System Enhancement (USE) Program consists of two components which will be implemented statewide. The first component is enhancements to and license costs (through 2016) for the online absentee ballot management software which provides services to both voters and election officials. The second component is enhancements to a number of systems which support the MOVE Act services provided to voters at each step in the absentee balloting process. The combined budget for each of shown below:

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Customization to meet specifications	Secure Primary and Backup Hosting
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Integration with existing EMS	Enhancements, New Releases & Upgrades
Training & Documentation	Account Management
Project management	

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<b>Activation and Implementation Services:</b>	
Activation, Configuration, Customization, and Documentation	\$229,520.00
System Integration	\$50,000.00
Acceptance Testing	\$10,000.00
Project Management and Research Support	\$63,000.00
Training and Documentation	\$7,875.00
<b>Total Activation and Implementation Services</b>	<b>\$360,395.00</b>
<b>Software License and Services – 2012:</b>	
Right-to-use license of <i>BALLOTsafe</i> , Secure Primary and Backup Hosting, Help Desk/Technical Support, Software Maintenance and Support for all elections through Nov 2012	\$152,355.00
Overseas Vote Foundation State Hosted System License	\$140,227.00
Account Management and Research Data Support	\$47,250.00
Election Specific System Configuration	\$20,000.00
<b>Total Annual License Fees and Services - 2012</b>	<b>\$359,832.00</b>
<b>Less: Existing Customer Discount</b>	<b>(\$200,000.00)</b>
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### Ongoing Fees

Following the conclusion of the 2012 grant program, *BALLOTsafe* is available for use in supporting UOCAVA voters, as well as disabled voters and absentee-by-mail voters. The ongoing Annual Software License and Service Fees will consist of a fixed price per year as follows.

Description	UOM	2013	2014	2015	2016
Annual Right-To-Use Software License	License	\$152,355.00	\$160,000.00	\$160,000.00	\$168,000.00

### The above fees entitle the State to the following:

- Right-To-Use License
- Upgrades, Enhancements, New Releases, and Bug Fixes (Except State-mandated changes)
- Help Desk & Troubleshooting Support
- Primary and Backup Secure Hosting

<b>Item</b>	<b>Budget</b>
<b>BALLOTsafe 2012</b>	\$ 520,227.00
<b>BALLOTsafe 2013-2016 RTU License</b>	\$ 640,355.00
<b>TOTAL</b>	\$ 1,160,582.00

## II. MOVE ACT DATA AUTOMATED TRANSFER (MADAT) Project

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### A. DESCRIPTION

#### Introduction

The Military and Overseas Voter Empowerment Act (MOVE Act) was passed by Congress on October 22nd, 2009. In order to comply with the MOVE Act for the 2010 Primary elections, New York worked together with the local election jurisdictions, the statewide voter registration system, FVAP and Scytl to build a compatible solution. Now the New York State Board of Elections is seeking to develop an enhanced long term solution which seeks to unify and automate the MOVE compliance as much as possible. Therefore, the Board of Elections is coordinating the MOVE Act Data Automated Transfer (“MADAT”) Project. The MADAT effort is the creation of a broad technology solution which will provide for the automated transfer of both Military voters & Special Federal voters, as well as their ballot status data from the county voting registration systems through NYSVoter (Statewide voter registration system) to the Scytl *BALLOTsafe* platform (Internet based MOVE Act solution).

#### Goals

The MADAT project is established with the following goals:

- Streamline the effort required of the local New York election officials to be in compliance with the MOVE Act by removing duplicate data entry where possible
- Alleviate the need for the manual interaction by New York State Board of Elections to forward information to *BALLOTsafe* from NYSVoter
- Increase speed at which Military/Special Federal voter and ballot tracking data are updated in *BALLOTsafe* and provided back to the voter
- Improve reporting capabilities within NYSVoter with regards to the activity of Military/Special Federal voter and ballot tracking data.

#### Scope

The scope of the MADAT project will consist of the following efforts:

- Automate the communication of Military/Special Federal voter registration and ballot request information between NYSVoter and *BALLOTsafe*
- Automate the communication of Military/Special Federal voter returned ballot tracking status updates between NYSVoter and *BALLOTsafe*



- Make required modifications to NYSVoter to capture, store, and forward the necessary voter registration, ballot request, and ballot tracking updates of Military/Special Federal voters from the local voter registration systems to *BALLOTsafe*
- Expand the web service interface between the local voter registration systems and NYSVoter to provide for the automated transfer of voter registration data, ballot request, and ballot tracking information of Military/Special Federal voters
- Make necessary modifications to the local voter registration systems to capture, store, and forward information related to the Military/Special Federal voter registration, ballot request, and ballot tracking information of voters
- Expand reporting functionality within NYSVoter to allow for various reporting criteria to be run against the Military/Special Federal voter and ballot tracking data.

### **Data/Functionality Requirements**

Absentee Application Status – Military/Special Federal voters who have a current & valid application on file should have some flag denoting them as being an active absentee voter. This information will be passed to *BALLOTsafe* through NYSVoter to allow for access to the *BALLOTsafe* system. If a previously active absentee voter who had access to the *BALLOTsafe* system no longer has a current and valid absentee application on file at their home board, they will receive a notification when they try to login to *BALLOTsafe* that their application has expired and that they should fill out a new one (which would then point them to the OVF site).

Voter's Ballot Transmittal Preference – When applying for an absentee ballot, a voter can declare a preference for how they would like their ballot and voting materials sent (by mail, email or fax). This preference should be tracked throughout all three systems.

Voter Email – Since Military/Special Federal voters can request to receive their ballot information by email, we will need to make sure that this information can be stored across all three platforms. Additionally, local VRs should have staff enter an email address twice to verify it being entered correctly. There should also be a field to signify the validity of an email address. By default, we would assume that the email address is correct and valid. Currently, when a new account is created on *BALLOTsafe* (currently a manual process but will become automated with this upgrade), Scytl's system sends out a welcome email. We would be looking to Scytl for some sort of system to flag any email messages that get bounced back with an error (invalid email, mailbox full, etc.). This information would then be passed along to NYSVoter and the county boards could review any records for absentee voters who have been flagged with an email error. The process within NYSVoter would be similar to the way they can review Felon Maintenance.

Voter Fax Number – Since Military/Special Federal voters can request to receive their ballot information by fax, we should have a place for this information throughout all three systems (as Scytl can accommodate those voters through email-to-fax).

Voter Ballot Style – In the majority (if not all) local VRs, an absentee voter somehow has a ballot style designated to them. This may be done directly by a ballot style field or through some

other process (by precinct where each precinct has a single specific ballot style). This information will need to be communicated to *BALLOTsafe* through NYSVoter so that the identification of a voter's ballot style (currently done by manually uploading a table that pairs a ballot style id with a voter id) can be automated.

Ballot Issued Date(s) – For tracking purposes, the date that a ballot is issued should be communicated to *BALLOTsafe* through NYSVoter so that a voter can be aware of when their ballot was sent (if by mail). Re-issue dates should be a topic of discussion for how best to handle this information (as a separate field, a table of dates, or a replacement of the initial issued value).

Ballot Returned Date(s) – Similar to the Ballot Issued Date(s), this information will need to be communicated to *BALLOTsafe* automatically (it is currently done between *BALLOTsafe* and local boards manually). The same issue would exist for re-returned date(s).

Ballot Download Status – Since Scytl can track when a voter downloads a ballot, this information should be communicated back to NYSVoter. Should discuss if/how we track multiple downloads or downloads of multiple ballot versions.

Ballot Counted Status – The system should have the capability to track whether or not a voter's absentee ballot was counted or rejected within the local VR and that data be communicated to NYSVoter. It may or may not need to be communicated to *BALLOTsafe* as well.

Overseas vs. Domestic Military Voter – Since the Department of Justice often asks us to further break down data for Military voters into those with overseas or domestic addresses, as well as data on the countries being represented. This information should be tracked in the local VRs and communicated to NYSVoter. This could be done with something as simple as a “country” field.

### **NYSVoter Reporting Requirements**

NYSVoter's reporting capabilities need to be significantly expanded, specifically with regard to the new data that will be tracked for Military / Special Federal voters. We will need to be able to run queries based on the election year and type (2010 General Election, 2008 Primary Election, etc.), voter type (Military / Special Federal), military type (overseas or domestic), transmittal preference (mail, email or fax) and county. The other information described in the functionality requirements (ballot counted status, rejection reasons, etc) should be available as well, within these reports. Specific report structures will be identified in the near future and described in more detail.

## B. Budget

The budget for the MADAT project has been determined by estimates provided from each of the vendors.

<b>Vendor</b>	<b>Budget</b>	<b>Description of Services</b>
<b>Scytl</b>	\$200,000.00	Scytl will provide the web service interface for <i>BALLOTsafe</i> to communicate with NYSVoter to automatically transfer voter and ballot data as required in the MADAT scope and goals listed above.
<b>Hewlett Packard</b>	\$300,000.00	HP will provide the web service interface for NYSVoter to communicate with <i>BALLOTsafe</i> to automatically transfer voter and ballot data as required in the MADAT scope and goals listed above. HP will also enhance the current interfaces with each of the county systems to allow for additional data to be transfer. This data is required to support the MOVE Act requirements.
<b>NTS</b>	\$650,000.00	NTS will modify its voter registration application and its interface with NYSVoter to support the additional data and logic required for supporting the MOVE Act requirements. NTS is used in a large majority of New York's 62 counties.
<b>Election Systems &amp; Software</b>	\$38,500.00	ES&S will modify its voter registration application and its interface with NYSVoter to support the additional data and logic required for supporting the MOVE Act requirements.
<b>Essex</b>	\$7,515.60	Essex County will modify its voter registration application and its interface with NYSVoter to support the additional data and logic required for supporting the MOVE Act requirements.
<b>Schoharie</b>	\$14,000.00	Schoharie County will modify its voter registration application and its interface with NYSVoter to support the additional data and logic required for supporting the MOVE Act requirements.
<b>Suffolk</b>	\$10,000.00	Suffolk County will modify its voter registration application and its interface with NYSVoter to support the additional data and logic required for supporting the MOVE Act requirements.
<b>N-Tier</b>	\$100,000.00	N-Tier will modify New York City's voter registration application and its interface with NYSVoter to support the additional data and logic required for supporting the MOVE Act requirements.
<b>TOTAL</b>	\$ 1,320,015.60	