Technical Proposal

1. Catalog of Federal Domestic Assistance (CFDA) Number: 12.217

2. BAA Number: H98210-BAA-11-0001

3. Title of Proposal: Proposal to Enhance Capabilities for UOCAVA Voters in California

4. CAGE Code: [redacted]

5. DUNs Number: [redacted]

6. Applicant: County of San Bernardino

7. Partner Contractor: None

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10. Period of Performance: Date of Award to December 31, 2012

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TECHNICAL APPROACH AND JUSTIFICATION:

Executive Summary

San Bernardino is a county with approximately 2 million residents, 800,000 registered voters and three major military installations, and it is pleased to submit this application for a grant from the Electronic Absentee Systems and Elections (EASE) program in an effort to support our efforts to make the voting process easier and more efficient for absent military and overseas citizens to request, receive and return their ballots. We believe that UOCAVA voters deserve the same chance to vote privately, independently, securely and in a timely fashion as all voters and that the program that we will build with grant funds will help us achieve this goal. In addition, we believe that our research will provide meaningful research data for FVAP now and in future elections over the years.

The tools developed with the EASE grant will address each mandate as required by UOCAVA, including easing the registration and absentee ballot sign up process, transmitting the ballot electronically, providing UOCAVA voters with the opportunity to electronically track their ballot, ensuring that ballots are transmitted a full 45 days prior to an election, and, finally, providing reporting on the data collected.

Specifically, it will allow for ballots to be delivered, received and processed more quickly. As a result, we foresee an increase in the number of UOCAVA voters served. Our project approach is based upon data from EAC and FVAP, which demonstrates that ballots delivered by mail are less likely to be received and mailed back in time to be counted. Initial research demonstrates that electronic transmission and various methods for returning ballots reduce the risk that the ballots will not be counted. In addition, electronic marking of ballots ensures that fewer ballots are spoiled, and, therefore, more ballots are counted.

Through the use of new technologies, processes will be replicable so that other jurisdictions may also serve their important UOCAVA population in a similar manner. These jurisdictions may include those of similar size from the same state or those utilizing the same VRS or EMS solutions. There is a clear cost benefit and return on investment with regard to sustainability and scalability. This program will reduce the cost of serving voters over time, and, at the same time, it will increase the number of UOCAVA voters who have access to a ballot that can be reliably counted.

Goals and Objectives:

Research Module 1: Online Ballot Access

Problem: Failure rates experienced by UOCAVA voters associated with ballot delivery

- **Current Process for UOCAVA Absentee Registration and Ballot Delivery**
    - UOCAVA voters register to vote, typically by using a Federal Form 76, FPCA or State Absentee Registration forms. These forms serve as both a registration document and as well as a request for an absentee ballot.

- Facsimile ballots are mailed via United States Postal Service no later than 45 days prior to election. Return envelopes are provided. Upon request, facsimile ballots are emailed (PDF) or faxed to voters. Replacement or follow-up ballots are emailed or faxed as well.
- Voter returns voted facsimile ballot by mail or by fax, pursuant to state law. The votes on the facsimile ballots are manually duplicated onto official ballots prior to counting.
- Assistance to UOCAVA voters is provided via our website and webmail address, as well as by telephone.

Goals of Online Ballot Access

- Compliance: Provide a full, Section 508, and HAVA compliant ballot to UOCAVA voters
- Advanced Availability: Ensure the availability of the election on-time, in compliance with the MOVE Act's 45 day voting period requirement
- Ballot Accuracy: Ensure all of the ballot styles, contests, and candidates are correct
- Preference marking accuracy: Eliminate human error by preventing voter marks which spoil ballots
- Reliability: Ensure the availability and accuracy of the election remain in place for the full 45 day time period
- Participation: Higher percentage of ballots included in the final count due to lower error rates. We derived this by comparing to a similar, previous election. Our estimation of the reduction of failure rates for UOCAVA voters is: 35% (800 UOCAVA voters)
- Simple Receipt Tracking: Allow voters to track their ballot online at each stage in the process

Process Description

- Provide a full, Section 508, and HAVA compliant website for UOCAVA voters to identify themselves
- Upon authenticating, the voter is provided with their unique ballot style, based on their registration
- Provide voter with interface to mark ballot, including logic preventing over-voting and warning of under-voting
- Provide voter with the opportunity to confirm their ballot
- Provide voter with ability to print their marked ballot, oath and return instructions. Return of ballots would be allowed through the mail system or through a toll free fax number
- Voter will be provided with an optional survey to provide feedback about their voting experience
- Voter will be provided the opportunity to track the progress of their ballot in the system

Justification for Pursuing this Strategic Approach

Ballot delivery has proved to be difficult for Election Officials serving their UOCAVA voters. Research in San Bernardino County has shown that approximately 35% of UOCAVA voters requesting absentee ballots never return their ballots. We assume that a certain percentage of these voters did not cast their vote because of their inability to receive mail in a timely manner, particularly for voters who are deployed in remote and/or hostile areas. With the electronic delivery of ballots, the time a ballot is in transit will be greatly reduced.

Scalable, Sustainable, and Successful

- Scalable: Delivery of ballot will be fully automated providing a highly scalable platform
- Sustainable: After setup, the reoccurring cost should be maintainable by count
- Sustainable: As a fully-hosted and monitored solution, there will be no need for dedicated county IT staff, servers, software upgrades, etc., resulting in lower cost
- Success: Multiple vendors have successfully implemented the online delivery of ballots in the past with little or no problems

Security measures

- Transmission: All information transmitted between the voter's browser and the election server will be secured utilizing the encrypted Secure Socket Layer (SSL).
- Encrypted Storage: All voter-related data will be stored in encrypted containers
- Secure Policies: The National Institute of Standards and Technology's (NIST) guidelines for encryption, threat modeling, physical server security, and tamper-detection will be followed
- Physical Security: All hardware systems associated with an election will be located within a secure facility with redundant power supplies, internet connections, and environmental protections
- Voting preferences will never be stored or saved on the server
- Election material will never be transmitted over the Internet

Research Module 2: Automated Ballot Remaking

Problem: Paper ballots returned to San Bernardino require a manual transcription process.

Ballot remaking drives higher staff, time, and cost requirements to serve UOCAVA voters, and is more prone to human error than an automated process.

Solution: Implementation of commercially available software and hardware tools.
We intend on purchasing and implementing one of the many commercially available software and hardware tools that allow for the elimination of the time-intensive process of remaking ballots. These tools automate the process of the remaking of ballot print-outs returned to our office from our UOCAVA voters.

Goal: Reduce staff, time, and costs for ballot remaking

Process Description

- Commercially available software tools automate the process of reading a mailed absentee ballot and translating it to language that can allow for the automated reprinting of the voted ballot.
- Commercially available ballot on demand printers allow for the automated reprinting of the voted paper ballot onto a 110 lb. ballot card that is optically scanable.
- The reprinted 110 lb. ballots will be run through our Dominion ballot scanners

Justification for Pursuing this Strategic Approach

- Paper ballots returned to the jurisdiction currently require a time-consuming manual transcription process

Scalable and Sustainable

- Scalable: Commercially available barcode scanning will allow us to process more UOCAVA ballots with less staff and lower costs
- Sustainable: The one time purchase of ballot printers will allow for their use in future elections

Security measures

- All digital barcodes on voted paper ballots will be required to be encoded with ballot preferences only. No personal information will ever be stored within any digital barcodes

Module 1 & 2 Project Information

Schedule and Milestones

Milestones in the project shall consist of the following for each election during the EASE grant time period:

- RFP from vendors
- Awarding of contract to selected vendor
- Kickoff Meeting - the first meeting after the contract has been awarded, during which team members are introduced, stakeholders documented, and key election project properties defined
- Data Delivery - San Bernardino County provides vendor with data
- Election Logic and Accuracy Testing - the completion of client User Acceptance Testing, after which the election is locked for voters
- Election Go Live - the first day when voters can vote in the online election
- Election Close - the final day of voting in the election
- Reporting - upon close of the election, the research data will be aggregated and a final report will be written

Reports:

- Voter Activity: The Voter Activity Report provides insight into system use. This includes:
    - Voting Activity / Hour
    - Voting Activity / Day
    - Total Voting Activity (within date range)
- Voter Participation: This report provides
    - Turnout by District
- Voter Locations: Report showing the source location of voting activity. Reports are based on the IP address, Source City, Source Domain

MANAGEMENT APPROACH:

Data Analysis
Upon the conclusion of all elections, data will be analyzed to measure the effectiveness of each election.

Project Management Reports
Regular reports on project management milestones, as well as reports regarding financial progress of the project, will be provided to FVAP as key milestones are reached.

Measurement of Performance
- Increase in percentage of ballots successfully returned by UOCAVA voters will be measured by comparing UOCAVA return rates from the 2008 Primary and General Elections to the 2012 Primary and General Elections and performing a statistical analysis of whether any change in ballot return has been statistically significant.
- Reduction of staff, time, and costs associated with ballot remaking will be measured by comparing the same against manual transcription.

Financial Management
This project will include financially-based milestone deliverables. Payment to the vendor will be due upon successful completion of predefined acceptance tests for each milestone.

Risk Management
Risks for this project will be maintained using a risk register, with identified risks listed along with impact, probability, and mitigations.

BUDGET PROPOSAL

Itemized Budget

• Direct Labor	$0
• Administrative and clerical labor	$0
• Fringe Benefits and Indirect Costs (F&A, G&A,etc.)	$0
• Travel	$0
• Subcontracts/sub awards:	
o Electronic Ballot Delivery Software License	$100,000
o Annual Maintenance	$ 20,000
o Software/Hardware for Automated Ballot Remaking	$ 60,000
o Annual Maintenance/licensing	$ 6,000
o Vendor support	$ 4,000
• Consultants	$0
• Materials and Supplies	$0
• Other Direct Costs:	
o Voter Education	$10,000
TOTAL COSTS PROPOSAL	**$200,000**

CONSIDERATIONS

Debarment and Suspension

One of the elected members of the San Bernardino County Board of Supervisors is Supervisor Neiland Kenneth Derry. On or about April 26, 2011, the California Attorney General's Office filed a criminal case entitled People v. Neiland Kenneth Derry, FSB1101877 in San Bernardino County Superior Court. The charges are violations of the following code sections: Penal Code section 118 – Perjury (felony); Penal Code section 115 (a) – Procuring or offering false or forged instrument for record (felony); and Penal Code section 84302 – Contributions by intermediary or agent (misdemeanor). As a result of these charges Supervisor Derry has been suspended by the Federal Highway Administration (FHWA) as of May 19, 2011. By way of correspondence dated May 19, 2011, Supervisor Derry has voluntarily recused himself from any participation with any items or actions involving federal funding. By way of correspondence dated May 25, 2011 from Special Counsel to FHWA, Supervisor Derry's recusal is sufficient and the County's ability to participate in federal programs and projects is not affected.