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**California Online Voter Registration (COVR) Project**  
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**TABLE OF CONTENTS**

**VOLUME 1 – NARRATIVE**

**I. TECHNICAL APPROACH AND JUSTIFICATION.....1**

- A. Executive Summary.....1**
- B. Goals and Objectives.....2**
- C. Schedules and Milestones.....6**
- D. Reports.....7**

**II. MANAGEMENT APPROACH.....8**

- A. Strategic Goals.....8**
  - 1. Enfranchise More UOCAVA Voters.....8**
  - 2. Open the Door to Online Voter Registration in California.....8**
- B. Personnel.....9**
- C. Collaborative Activities.....9**
  - 1. Past and Present Projects.....9**
  - 2. Proposed Collaboration for this Project.....9**
- D. Methodology: Steps in Development of Online Voter Registration Tool.....9**
- E. Financial Management.....10**
- F. Analysis and Measurement of Current Processes.....10**
  - 1. Current Paper-based Voter Registration Process.....10**
  - 2. Current Voter Registration Card Receipt.....11**
- G. Analysis and Measurement of Proposed Processes.....11**
  - 1. Online Voter Registration Process.....11**
  - 2. Online DMV Check Process.....11**

3. Electronic Signature Transfer.....	12
4. Online Voter Registration Data Receipt.....	12
H. Potential Risks and Mitigating Strategies.....	12
I. Performance Indicators for Each Proposed Process.....	14
1. Online Voter Registration Application Process.....	14
2. Online DMV Check Process.....	14
3. Electronic Signature Transfer.....	14
4. SOS Transfer of Online Voter Registration Data to Counties.....	14
J. Justification for Moving to Online Voter Registration.....	15
K. Projections of the Effectiveness of Online Voter Registration.....	15
L. Performance Measurements.....	15
M. Current and Pending Project Proposal Submissions.....	16
1. Parallel Request to EAC to use HAVA funds for the COVR Project....	16
2. California Counties Application to FVAP for Complimentary Project.	16
N. Qualifications.....	16

## **I. TECHNICAL APPROACH AND JUSTIFICATION**

### **A. Executive Summary**

California has 90,000 uniformed and overseas citizen absentee voters (UOCAVA voters). Many more citizens who are eligible to vote and living abroad have not yet registered to vote. The Federal Voting Assistance Program (FVAP) estimates the number of military and overseas citizens from California to be 672,686. UOCAVA voters – particularly military personnel – live, work, and serve our country from locations all over the world, yet California’s paper-based voter registration system makes it difficult for them to participate in our democracy. To better serve citizens who live and work in remote locations of the world, California needs to develop a fast voter registration system, not one reliant on the mail delivery of hand-marked paper voter registration cards. Fortunately, California law is changing. The State Legislature has authorized online voter registration to coincide with the rollout of a new statewide voter registration database in 2015, and Senate Bill 397 (SB 397) is moving through the Legislature this year to require the Secretary of State (SOS) to begin online voter registration as early as 2012.

While California is poised to remove the legal barriers to online voter registration, California’s state budget circumstances are dire. The SOS has experienced severe budget cuts since 2008 and state and local agencies in California face further cuts this year and in coming years, making the development and rollout of new projects extremely difficult. An infusion of FVAP funding for the proposed California Online Voter Registration (COVR) Project would help make online voter registration a reality for UOCAVA and other voters in next year’s Presidential Election.

The SOS proposes to develop and implement online voter registration for UOCAVA voters and other California citizens in time for the 2012 General Election. The COVR Project involves creating an interactive voter registration website to serve military and overseas citizens and other California citizens. The website will include key questions from the Federal Postcard Application (FPCA) for military and overseas voters, so that UOCAVA voters can both register to vote and request a special absentee ballot online. To provide online voter registration, the SOS proposes to create an electronic, interactive connection between the California Department of Motor Vehicles (DMV) and the SOS in order to match records and transfer signature images from the DMV to the SOS. The DMV has electronic signature images on file for an estimated 94% of California citizens, eliminating the need for voters to sign a paper voter registration card.

The COVR Project will allow UOCAVA voters located anywhere in the world to complete their voter registration application online and receive instant confirmation of a DMV match. The SOS will receive online voter registrations immediately and forward them to the 58 county elections officials in California for processing. The COVR Project will greatly expedite voter registration and – for the tens of thousands of voters who register in the final weeks before Election Day – will drastically shorten the time between registering to vote and receiving a ballot. Once built, the COVR Project will be sustainable within existing SOS budget resources for future elections. Therefore, the SOS is seeking only one-time funding from FVAP to develop, test, and roll out online voter registration in the coming months, so that California can cover UOCAVA voters’ needs for the 2012 Presidential General Election and beyond.

## **B. Goals and Objectives**

While California has systems in place to transmit blank ballots and voting materials by email and fax, our paper-based voter registration system remains a barrier for overseas citizens. California law still requires all voters to sign a paper voter registration card by hand and mail that card back to California to register to vote. Using paper and the international postal service means lengthy delays before elections officials can receive and process new voter registrations.

UOCAVA voter mobility complicates matters further. According to the 2010 U.S. Census, about 15% of Californians move every year. Military personnel and their families, however, move much more often. Military officers move to new bases about every three years, which means about 33% of the officer population moves every year. Others in the military move even more frequently. In the first year or two of service during military training, and again during deployment in active military engagements, service personnel may move locations several times during the course of one year. In addition, since UOCAVA only provides for the automatic transmission of ballots for two election cycles to voters who register an overseas address using the FPCA, UOCAVA voters must re-apply for special absentee status every two years. Paper-based voter registration is cumbersome when it comes to registering and re-registering a mobile population and ensuring that ballots and voter information go to the correct mailing address.

Goal: Strengthen Democracy by Better Serving UOCAVA Voters and other California Citizens

One of the SOS's goals as chief elections officer for California is to strengthen democracy by engaging more people in elections and voting. The SOS has a responsibility to ensure that registering to vote and casting a ballot is as easy as possible for all eligible citizens. Providing online voter registration to UOCAVA voters and other California citizens fits squarely with this larger goal.

In 2009, the SOS created an online fillable voter registration form that voters could fill out, print, sign and mail to their county elections office. In 2011, the SOS developed a means of electronically capturing all the data from the online voter registration form so that elections officials can avoid re-entering the data into their systems when the paper print-outs of those forms containing voter signatures arrive in the mail from voters.

### Objectives

The following is a list of objectives for the COVR Project:

- Establish and operate a reliable, secure, easy-to-use, interactive voter registration website for military and overseas citizens that can also be used by other Californians wishing to register to vote.
- Establish and operate a reliable and secure electronic system to collect and match data, verify voter identity, and transfer signatures from the DMV to the SOS for online voter registration applicants.

- Reduce the amount of time from registration to ballot receipt for UOCAVA voters.
- Reduce the number of UOCAVA ballots sent to the wrong mailing address due to delays in receiving paper voter registration cards.
- Increase the number of military and overseas citizens who are registered to vote in California.
- Increase the percentage of UOCAVA voters who return their ballots by Election Day by removing the delay – caused when paper voter registration forms are sent in the mail to elections offices – in processing registrations, which in turn causes a delay in sending blank ballots to UOCAVA voters.
- Create a successful model for online voter registration replicable in other states.

#### New Electronic Tools to Improve the Voting Process for UOCAVA Voters

The COVR Project involves creating an interactive voter registration website to serve military and overseas citizens and other California citizens. The website will include key questions from the FPCA for military and overseas voters, so that UOCAVA voters can both register to vote and request a special absentee ballot online. To provide online voter registration, the SOS proposes to create an electronic, interactive connection between the DMV and the SOS in order to match records and transfer signature images from the DMV to the SOS. The DMV has electronic signature images on file for an estimated 94% of California citizens. Transferring signature images from the DMV to the SOS eliminates the need for voters to sign and mail a paper voter registration card.

The COVR Project will allow UOCAVA voters located anywhere in the world to complete their voter registration application online and receive instant confirmation of a DMV match. The SOS will receive online voter registrations immediately and forward them to the 58 county elections officials in California for processing. The COVR Project will greatly expedite voter registration and – for the tens of thousands of voters who register in the final weeks before Election Day – will drastically shorten the time between registering to vote and receiving a ballot. Once built, the COVR Project will be sustainable within existing SOS budget resources for future elections.

#### Increasing New UOCAVA Registrations: California Online Voter Registration Drive

In 2012, the SOS plans to conduct a “California Online Voter Registration Drive” using the SOS’s own voter outreach resources and coordinating efforts with FVAP and the Overseas Vote Foundation (OVF). The SOS online voter registration website will be available to both UOCAVA voters and the general public, and the SOS will make its availability known through print, radio, and television news media in California as well as international media outlets, which have U.S. citizen audiences. The SOS will also build on past successes in reaching out to people through global social networking websites, such as Facebook and Twitter. Outreach efforts may be focused around the message: "Not registered to vote? We've got you covered: California Online Voter Registration Drive. [Sos.ca.gov/COVRD](http://Sos.ca.gov/COVRD)."

## Reduction in Failure Rates for UOCAVA Voters

In the November 2010 General Election, California sent out 89,582 ballots to UOCAVA voters. While the overall turnout rate in California for the November 2010 was 60%, only about 28%, or 25,208 UOCAVA voters, returned a voted ballot. The good news is that 95.5% of UOCAVA ballots that were voted and returned were also counted in the November 2010 General Election.

### UOCAVA Voting in the November 2010 General Election

Ballots sent to UOCAVA voters	UOCAVA Ballots voted and returned	UOCAVA Ballots counted
89,582	25,208	24,082
	28% turnout	95.5% success

Certainly many factors contribute to the lower turnout rate among UOCAVA voters, but the SOS believes online voter registration will lead to higher turnout among UOCAVA voters, because elections officials will be able to process voter registrations more quickly, which will allow ballots to go out to UOCAVA voters more quickly, giving UOCAVA voters more time to vote.

While the federal Military and Overseas Voter Empowerment (MOVE) Act requires UOCAVA ballots to be sent 45 days before Election Day, people can register to vote – or re-register at a new address – all the way up to 15 days before each election in California. This means elections officials mail ballots 45 days ahead for all voters registered *at that point in time*, but elections officials continue sending ballots to individual UOCAVA voters as new UOCAVA voters register (or re-register at a new address) between 45 days and 15 days before each election. The lag time caused by the current paper-based voter registration system very likely leaves a significant number of UOCAVA voters without a sufficient opportunity to receive and return a ballot in time to be counted. (Under state law, counties can – and most do – send out ballots 60 days before an election).

With the COVR Project, UOCAVA voters who register up to and on the deadline to register to vote 15 days before the election will still have time to vote, because their registration will be received electronically immediately, their signature on file with the DMV can be transferred immediately, and elections officials can process the registration – without waiting for a signed paper voter registration card to arrive in the mail – and send a ballot to the voter – either by mail, fax, or email as permitted by state law and the MOVE Act. Many counties, including some of California’s largest such as Los Angeles, San Diego, Alameda, Sacramento, Fresno, and San Francisco already let UOCAVA voters download a blank ballot from the county website.

Even if the voter does not have a signature on file with the DMV (about 6% of eligible voters may not have a DMV record), the voter can still print, sign, and mail the voter registration. The SOS will still capture the electronic data the voter enters on the SOS website – including a voter’s request for a special absentee ballot. As soon as the voter registration form with signature arrives in the mail, the county elections official will merely need to add the signature to the voter file, finish the registration process, and send voting materials.

The COVR Project will very likely reduce the existing 5% failure rate California experiences with UOCAVA voters who submit a voted ballot, because: 1) online registration will help ensure UOCAVA voters are properly registered; and 2) online registration will provide UOCAVA voters more time to download, mark and fax back their voted ballot by the close of polls on Election Day. In addition the COVR Project is estimated to increase UOCAVA voter turnout overall, because elections officials will be able to process voter registrations more quickly, which in turn allows UOCAVA voters to receive blank ballots more quickly and creates more time to vote. While it's difficult to project an exact reduction in failure rate or increase in turnout, the SOS estimates an overall reduction in UOCAVA voter failure rates and an overall increase in UOCAVA voter turnout in 2012 as compared to the last presidential election in 2008.

### How the COVR Project Could Benefit UOCAVA Voters in Other States

If FVAP funds the COVR Project, California will become the first large state in the U.S. to offer online voter registration for UOCAVA voters and the general electorate. The COVR Project will become a model for other states considering moving toward online voter registration and online special absentee request services for UOCAVA voters.

To encourage other states to follow California's lead, the SOS plans to: 1) share the COVR Project process and results with elections officials in other states through the National Association of Secretaries of State (NASS) and the National Association of State Election Directors (NASED); 2) provide technical and policy assistance to other states wishing to move to online voter registration; and 3) share the results of the COVR Project with the media and public.

### Security Measures

To protect personal identifying information and to prevent fraud, the following security measures will be built into the COVR Project:

- Registration will not be accepted online if it does not match a real person with a California driver's license or identification card.
- DMV signature images will not be viewable by the online applicant in order to prevent attempts to register using another's identity and then vote by mail. In California, each signature on the vote by mail ballot (or UOCAVA absentee ballot envelope and oath form signed when returning a ballot by fax) is checked against the signature in the voter registration database. If the signature doesn't match, the ballot is not counted. Therefore, even if a perpetrator successfully registered online in someone else's name, the signature they provide when they try to vote in the other person's name will not match the signature image on file, and the ballot will be tossed out.
- Registration will not be complete until the standard registration processes are completed successfully. These processes include checking the registration against the federal Social Security Administration, death records index, felon records, and checking the existing voter registration database for duplicates.



In general, the SOS will employ best practices in establishing website security, such as Secure Sockets Layer (SSL) encryption and dedicated lines between the SOS and the DMV. All SOS technology systems are protected by a firewall to prevent outside access. Finally, the SOS will conduct regular security reviews of the online voter registration system.

### C. Schedule and Milestones

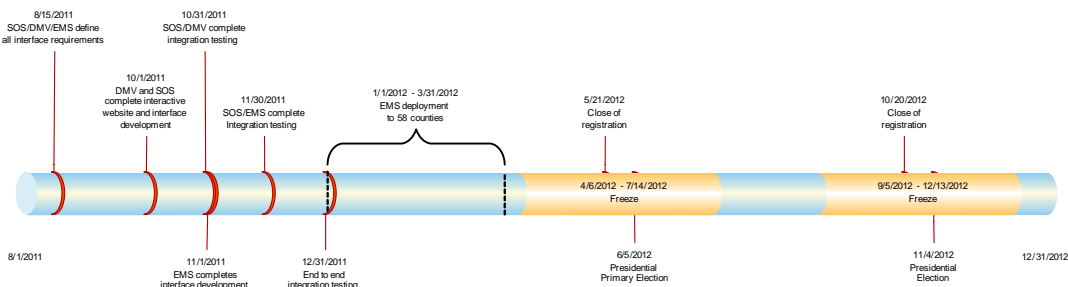
The following schedule describes in detail how the SOS will complete the COVR Project in time for the November 2012 Presidential General Election. In fact, the SOS plans to develop and deploy this project by the beginning of April 2012, 60 days in advance of the June Primary Election. The SOS plans for an April roll out because there are only seven weeks between the June Primary Election certification and 60 days before the November General Election. Seven weeks is typically not a sufficient amount of time to make significant changes to the SOS website and county voter registration systems.

Assuming a project start date of August 1, 2011, the SOS will define, develop, test and deploy an interactive web application for the SOS website and the associated data interfaces between the SOS and DMV during the eight-month period from August 1, 2011 to April 1, 2012.

The SOS and DMV will need to define the interface requirements by August 15, 2011, and the SOS and DMV will each begin their independent application development efforts. The SOS and DMV will complete their development by October 1, 2011, and complete integration testing by October 31, 2011.

The SOS and county Election Management System (EMS) vendors – assuming California counties also receive FVAP funding to create an automated system for receiving online voter registration data – would then complete their development and integration testing by November 30, 2011.

Full end-to-end testing will be complete by December 31, 2011. This provides counties with the opportunity to work with EMS vendors from January 1, 2012 to March 31, 2012, to the extent the 58 counties in California conduct projects to change county EMS systems to allow automated voter registration data transfer.



Note: California counties intend to seek FVAP funding to automate the receipt of online voter registration data – including the digitized signature images from the DMV – from the SOS. California counties intend to use FVAP funding to work with the three EMS vendors doing business in California to develop a method to collect the data from the web service hosted by SOS and import that data into their EMS. To bolster the security of this system, the EMS vendors will need to develop a means of presenting data received through the online registration system to a data analysis tool.

If both the SOS application and the California counties’ application are funded, the SOS will collaborate with the DMV, the counties, and the EMS vendors so that all of these organizations can begin their development efforts concurrently. The SOS and DMV will need to complete their development first. Once the SOS is successfully receiving signature images from the DMV, the EMS vendors can complete their development of system upgrades to collect and import the voter registration data and signature images into the county databases on an automated basis.

#### **D. Reports**

The COVR Project will be designed to allow the SOS to track the number of UOCAVA voter registrations submitted via the online voter registration website, so that the SOS can report to FVAP and the public on the success of the project. In addition to tracking the number of voter registrations received, the SOS will create a baseline report as of April 1, 2012, which shows the number of UOCAVA voters registered before the availability of online voter registration. The SOS will create a “results” report to show how many UOCAVA voters are registered as of January 15, 2013, after voters have had a chance to register online during the 2012 election season.

The SOS will also track and report to FVAP quarterly on the progress of completing the COVR project and on the progress of spending FVAP grant funding and submit a final report to FVAP by April 1, 2013, or sooner as required by FVAP.

The SOS will provide the following reports to FVAP:

- Programmatic and Financial Progress Reports – Quarterly
- Data collection points reports – April 1, 2012 (baseline); January 15, 2013 (results)
- Final Report – April 1, 2013, or sooner as required by FVAP.

## **II. MANAGEMENT APPROACH**

### **A. Strategic Goals**

The SOS has two strategic goals with the COVR Project: 1) enfranchise more UOCAVA voters by providing a web-based, interactive tool to register to vote ahead of the November 2012 Presidential General Election; and 2) open the door to online voter registration in California as a whole.

#### **1. Enfranchise More UOCAVA Voters**

The COVR Project is designed to increase the overall number of overseas citizens registered to vote. According to the United States Census Bureau and the 2009-2010 California Biennial Report to the Election Assistance Commission, California has nearly 90,000 registered UOCAVA voters. The SOS estimates thousands of eligible citizens from California who are living abroad – both military personnel and civilians – are not yet registered to vote. According to FVAP, the number of unregistered but eligible military and overseas citizens is nearly 700,000. The ease of online voter registration will help more citizens living abroad, on domestic military bases, and in California take the step of registering to vote and requesting a vote by mail ballot. Once registered, UOCAVA voters will have the option of receiving their ballot via mail, fax, email or via Internet download (more information below).

#### **2. Open the Door to Online Voter Registration in California**

In 2009, the California Legislature passed SB 381 (Calderon), Chapter 613, Statutes of 2008, permitting online voter registration but requiring it to coincide with the roll out of a new statewide voter registration database, called VoteCal, for California. The current estimated date for completion of VoteCal is mid-2015, four years from now.

In light of the success of online voter registration in other states and the widespread support among voting rights advocacy groups and military and overseas assistance agencies, the SOS is seeking FVAP funding to fast-track for online voter registration in California. California SB 397 (Yee) requires California to establish an online voter registration system in advance of VoteCal and is on track to reach the Governor's desk by the end of this summer. However, SB 397 does not provide funding for the SOS, the DMV or counties to develop and implement online voter registration. SB 397 would allow voters, who have a valid California driver's license or state identification card, to fill out their registration card online and use their DMV signature for voter verification. The SOS estimates that 94% of California citizens eligible to vote have a signature image on file with the DMV.

By establishing an interactive, web-based tool for UOCAVA voters to register online and making the tool available to both UOCAVA voters and the general electorate, the SOS – with the help of FVAP – can successfully open the door to online voter registration in California for the first time ever and do so in time for UOCAVA voters and other eligible citizens to register and vote in next year's Presidential General Election.

## **B. Personnel**

Secretary of State's Office key personnel includes: Chris Maio, Chief of Information Technology Division (ITD); Debbie O'Donoghue, Deputy Secretary of State, Voter Education and Outreach Services; Janice Lumsden, Deputy Secretary of State, Operations; and Dora Mejia, Chief of the Management Services Division. The Department of Motor Vehicles key personnel include: Shamim Khan, Deputy Director, Licensing Operations Division; and Robbie Crockett, Budget and Fiscal Branch Chief, Administrative Services Division.

## **C. Collaborative Activities**

The SOS has collaborated with state and local agencies in California on a number of projects involving compliance with the National Voting Rights Act of 1993 (NVRA), the Voting Rights Act of 1965 (VRA), and the Help America Vote Act (HAVA). Below is a brief description of collaboration with the DMV and with counties specific to improving California's voter registration system.

### **1. Past and Present Projects**

The SOS has collaborated successfully in the past with the DMV to create technological and procedural improvements to California's voter registration database to move toward compliance with HAVA. The past collaboration with the DMV created a system of: 1) checking voter registration applicants' state driver's license and identification card numbers against the DMV database; and 2) checking – via the DMV – applicants' social security numbers against the federal Social Security Administration database. The SOS and DMV are presently collaborating successfully on a multi-year project to procure a new statewide voter registration database system, called VoteCal. The past and present collaborations with the DMV on improving the statewide voter registration database provide a solid foundation for this proposed collaboration. The SOS has collaborated successfully with California's 58 counties on improvements to the statewide voter registration system. Those improvements involved upgrading the CalVoter system and building county interfaces to improve voter list maintenance processes as required by HAVA.

### **2. Proposed Collaboration for this Project**

The SOS proposes to create an interactive system between the SOS and the DMV, which will make online voter registration possible. While the proposed project does not involve collaboration with counties, the SOS anticipates future collaboration with counties to streamline the process of providing counties the new voter registration data collected from the SOS voter registration web interface.

## **D. Methodology: Steps in Development of Online Voter Registration Tool**

There are four major steps in the development of an online voter registration tool for California:

First, the SOS will create a web application that allows military and overseas citizens and the general electorate in California to register to vote. The website will prompt military and overseas citizens to answer the questions needed to request and receive a special absentee ballot (see questions 1, 4.c., 6, and 7 on the FPCA <http://www.fvap.gov/resources/media/fpca.pdf>) The SOS will establish an interactive web service hosted at the DMV to perform matching. Second, the SOS will develop a method to aggregate the information for applicants where a match was made and technological capability to collect signature images from the DMV. Third, the DMV will develop a system to provide signature images to the SOS. The system will involve developing a method to respond to SOS requests for signature images. Based on discussions with the DMV, a batch process has been envisioned as the most efficient route for DMV to develop. Fourth, the SOS will provide voter registration data collected from the online voter registration website together with the DMV signature images to the counties. Counties unable to draw down data from the existing SOS-county web service will have the option of requesting and importing the data via a manual process, e.g., the SOS could provide the data on portable storage media and the county could enter the data manually into its system.

## **E. Financial Management**

The SOS has successfully managed \$380.7 million in federal HAVA funds. The SOS's overall budget for the current fiscal year is \$162,000,000. This grant would represent less than one (1) percent of SOS's overall budget. Key staff members, Janice Lumsden and Dora Mejia, who manage the agency's budget and federal grant funding, will manage all grant funds received from FVAP for this project. The SOS will use the agency's existing administrative and accounting procedures to ensure that FVAP grant funds are properly managed.

## **F. Analysis and Measurement of Current Processes**

### **1. Current Paper-Based Voter Registration Process**

California's current voter registration process for all eligible citizens begins with the individual applicant completing and signing by hand a voter registration application and delivering in person, by mail, or via a third-party voter registration drive to a county elections office, the SOS, the DMV, or an agency designated under the NVRA as a voter registration agency.

UOCAVA voters have the option of using the FPCA to register to vote and request a special absentee ballot. While California accepts and processes faxed FPCA forms, current California voter registration law – which requires a hand signature – requires UOCAVA voters to follow up by mailing the paper FPCA with their signature. UOCAVA provides for the automatic transmission of special absentee ballots for two election cycles to voters who register an overseas address using the FPCA.

The current process is cumbersome for UOCAVA voters, because supplies of paper voter registration applications are not readily available in remote locations of the U.S. or U.S. territories or in foreign countries. UOCAVA voters must, therefore, either contact their county

elections office by mail, phone, or email to request a voter registration application to be mailed or must have access to the Internet as well as a computer attached to a printer to download and print the federal post card application (FPCA). Aside from these barriers, UOCAVA voters may also have difficulty, depending on their location, accessing a postal service to mail the completed and signed application back to the United States. Each of these impediments makes it difficult and time-consuming, if not impossible, for UOCAVA voters to register to vote in time for an upcoming election.

## **2. Current Voter Registration Card Receipt**

Under California's existing voter registration system, each of the 58 counties receives voter registration applications from residents in the county and enters the data from each application into the county database. Currently, each county enters voter registration data by manual key entry or by optical scanning with character recognition. California's statewide voter registration database, "Calvoter," contains a copy of all county voter registration databases and is kept current by daily updates from the counties.

## **G. Analysis and Measurement of Proposed Processes**

### **1. Online Voter Registration Process**

Under the proposed project, the SOS will establish an interactive website that allows UOCAVA voters – and other citizens – to register to vote online. UOCAVA voters will be able to access the website from a remote computer, smart phone, or other electronic device with Internet capabilities. The website will be compatible with common Internet browser software. UOCAVA voters will be able to enter online all information required to register to vote, request a special absentee ballot, will receive immediate notice of whether their information matches a DMV record, will submit their registration via the website, and will receive an electronic confirmation that their application was received by the SOS. Following receipt of the online application, counties will follow up with a voter registration confirmation postcard as is standard practice under California law for all new voter registrations.

### **2. Online DMV Check Process**

The project will allow the SOS to establish an automated process to compare voter registration data an applicant enters against the DMV database immediately – before the applicant finishes the online registration process. If a match is found, the applicant receives an immediate notice via the registration website. The SOS estimates approximately 94% of citizens eligible to vote in California have a DMV record. The DMV estimates that all of its existing records currently contain a digitized signature. If no match is found, the applicant receives an immediate notice that the applicant should print, sign, and mail the registration application. The system will be able to support access by both UOCAVA voters and other citizens during periods of very high workload as is common during the close of registration before a major election.

### **3. Electronic Signature Transfer**

The SOS will create an interface with the DMV to accept digitized signatures from the DMV's database, eliminating the need for UOCAVA voters with a DMV record – and other citizens who use the online voter registration website – to print, sign, and mail a voter registration application.

### **4. Online Voter Registration Data Receipt**

The SOS will capture all data entered on the interactive online voter registration website and couple it with the corresponding digitized signature received from the DMV for each applicant where a match can be made. The data will then be presented to the county elections officials through a web service made available within the SOS/County wide area network. The data for applicants that did not match a DMV record will also be stored and made available to the county through this same web service.

County elections officials will have the option of receiving this data via a manual process (e.g., portable storage media) or through an automated process that would import it into their election management system for further processing. Records that include the signature image can proceed through the voter registration process while records without signature image from the DMV would wait in a queue until the county receives the voter registration application.

Counties unable to import this data via an automated process, will be provided printable reports containing the data, which counties may process manually – either via key entry or optical scanning as with paper voter registration applications.

Note: California counties intend to apply for an FVAP grant to carry out a project to establish an automated electronic transfer of voter registration and digitized signature data from the SOS, thereby streamlining and expediting the online voter registration process.

### **H. Potential Risks and Mitigating Strategies**

The potential risks are substantial and should not be held in second position behind convenience. The data coming from this application should not be treated like a traditional record generated through the current paper process. Since the application is available over the Internet, the records are being generated by an un-trusted source and will be treated as such. Some risks are not easily mitigated or involve manual processes to maintain security.

The level of automation offered by this system will potentially drive the elections officials to take a hands-off approach to managing their data. Budget cuts and the need for efficiency may ultimately drive the county to redirect resources from the voter registration task and trust the system to do the work of humans.

People who have not provided the DMV with a signature for many years may have an increased potential for their ballot to be invalidated due to the differences between their current signature

and the one on file with the DMV. The county may have a more recent signature on file than the one being presented by the DMV and the elections official should ensure the most recent signature remains in the primary position for ballot or petition validation. To mitigate this risk, the SOS has confirmed the DMV can provide the date of when the signature was collected from the registrant and we will be presenting that date together with the signature image to the counties.

The DMV has also indicated that there will be signature quality issues on approximately 10% of the images due to the quality of the digitizer pads used to collect the signature image. These aged image and image quality issues should be addressed over time as people return periodically to renew their licenses when a new image is collected on a more modern digitizer pad.

This application creates a new attack vector for individuals inclined to perpetrate voter registration fraud or mischief. As more states implement similar online voter registration systems this application may become the target of an advanced persistent threat. It should not be unthinkable for an adversarial nation to disrupt an election, attempt to affect its outcome or otherwise cast public doubt about the validity of the results.

As more and more personal information breaches occur throughout government, retail, and banking industries, the likelihood of someone having enough information to register other people to vote increases. Through existing county elections official's websites, it is very easy to determine if an individual is already registered to vote. The attacker would only need to catalog and then register those who are not and then devise a method of casting ballots for them. The attacker may also change information about existing registered voters, perhaps requesting an address change, political party preference change, or opting to become a permanent vote-by-mail voter to potentially intercept a ballot.

Although they will certainly be designed into the system, traditional technical security mechanisms like "Completely Automated Public Turing test to tell Computers and Humans Apart," known as "CAPTCHA," and data encryption may be insufficient to detect or thwart these attack vectors. The skilled attacker will make the registrations appear very real to avoid detection.

To mitigate these risks, new data analysis methods will be developed to identify potentially fraudulent records and this analysis will need to occur regularly at both the state and county level. State elections investigators will be trained to perform this analysis and will coordinate with the counties to pursue their investigations.

Since the web application will behave interactively with respect to DMV matching, it could serve as a fishing tool for the attacker who has no interest in voter registration and is more interested in using the tool to verify identifying information to perpetrate fraud in general. For instance, the attacker may have a list of names and drivers license numbers but does not have the dates of birth. He would simply need to run the list through the application and guess at the birth date until the application indicates a successful match. The use of a CAPTCHA will slow the attacker down but it will not eliminate the ability to misuse the online voter registration system.



## **I. Performance Indicators for Each Proposed Process**

### **1. Online Voter Registration Application Process**

The project will be completed so that military and overseas citizens have access to the SOS Online Voter Registration Application at least 60 days before the 2012 Presidential General Election and for future elections as the system continues to operate

Military and overseas citizens with a matching DMV record are able to submit their application via the Internet 80% of the time. (This performance indicator is set at 80% in anticipation of some potential technological problems which may occur either with the applicant's computer device or Internet access or with the SOS's system due to the likely high volume of applications near the voter registration deadline.)

The SOS online voter registration website gives military and overseas citizens the option of printing, signing, and mailing their application, if they experience technical difficulties with submitting their application over the Internet.

### **2. Online DMV Check Process**

Immediately upon receipt of an online voter registration application, the SOS is able to check DMV records for a match 90% of the time. (This performance indicator is set at 90% in anticipation of potential system difficulties which may occur either during initial roll-out or as volume spikes near the voter registration deadline.)

The DMV check process will be successful for 70% of online voter registration applicants. (The SOS estimates that more than 90% of California citizens eligible to vote have a DMV record, however, this performance indicator is set at 70% in order to anticipate variations or errors in personal information, for example, nicknames, misspellings, or transposed numbers, which may result in no DMV match.)

### **3. Electronic Signature Transfer**

The SOS is able to obtain a digitized signature from DMV records for each new online voter registration within 24-48 hours of receiving the voter registration application data.

### **4. SOS Transfer of Online Voter Registration Data to Counties**

The SOS is able provide online voter registration data to counties 100% of the time, whether this transfer is made manually (via portable storage media) or via an automated electronic transfer to county EMS systems.

## **J. Justification for Moving to Online Voter Registration**

The justifications for moving to online voter registration for UOCAVA voters are straightforward: 1) Remove barriers to registering and voting for UOCAVA voters; and 2) Improve convenience, speed and accuracy of voter registration services for UOCAVA voters.

## **K. Projections of the Effectiveness of the California Online Voter Registration Project**

Increasing UOCAVA Voter Registrations: California voter registration data shows that about 70-75% of people eligible to vote are actually registered to vote. Applying the same percentage to the number of registered UOCAVA voters in California, 90,000, the SOS estimates there are about 30,000 eligible military and other U.S. citizens from California who are living abroad but are not registered to vote. Online voter registration is projected to be extremely effective at the basic goal of registering more people to vote, because online registration is quick, interactive, and accessible anytime from home anywhere around the world. Overseas military personnel stationed abroad and citizens living abroad with a DMV matching record will neither have to request a voter registration form nor will they have to print, sign, and mail the paper form to the United States. Voters who register online can complete their application from home or anywhere they have Internet access and will receive a DMV confirmation immediately from the website. Several states have already implemented online voter registration, including Arizona, Washington, Oregon, and Delaware. Those states have documented the effectiveness of online voter registration both in terms of voter satisfaction and confidence and in terms of cost savings. A study of Arizona and Washington showed people who registered to vote online found it to be convenient and easy to use. People who registered online also tended to vote in higher numbers than those who registered to vote using a paper form.

Reducing Delays in Sending Voter Materials and Receiving Voted Ballots: Speeding up the process of voter registration means voters will receive their ballot and other voting materials more quickly. Therefore, the COVR Project designed to reduce delays in sending voter materials to UOCAVA voters and allowing a timely return of the voted ballots.

Cost Savings: On the potential for future cost savings, a study of Arizona's system found that a Arizona County using the "EZ Voter" online registration system lowered costs to 3 cents per registration compared to 83 cents per paper registration. Online voter registration in California is expected to generate significant savings for the SOS in reduced printing costs, reduced postage costs, and reduced labor needed to receive and forward incoming paper registrations to counties. The SOS expects counties to save labor currently needed to distribute, track, receive, and scan or manually key data from paper voter registration cards into county voter registration databases.

## **L. Overall Performance Measurements**

Overall performance measurements for the COVR Project are: 1) California will register significantly more UOCAVA voters in 2012 than in previous comparable federal elections; and 2) California will be able to send voting materials to UOCAVA voters more quickly as a result of the efficiencies created by online voter registration than in previous federal elections.

## **M. Current and Pending SOS and Related Project Proposal Submissions**

### **1. Parallel Request to EAC to use HAVA funds for the COVR Project**

The SOS has submitted a letter to the Election Assistance Commission (EAC) requesting permission to use existing HAVA section 251(b)(2) minimum requirements payment (MRP) program funds already distributed to the SOS for the purpose of creating online voter registration for California. HAVA MRP funding is currently designated for other uses; however, if no FVAP funding is provided for the COVR Project, the SOS will likely pursue the option of using HAVA MRP funding next year or in the coming years to create online voter registration for California. The EAC has not yet responded to the SOS's request letter.

### **2. California Counties Application to FVAP for Complimentary Project**

Three California counties, Los Angeles County, Orange County, and Trinity County, plan to submit an application to FVAP for grant funding to work with their respective EMS vendors to create a bridge that will allow all counties to receive online voter registration data from the SOS in an automated fashion. While this project is separate from the COVR Project, both projects compliment each other and are necessary to provide the most streamlined online voter registration experience possible for UOCAVA voters.

Contact: Neal Kelley, Orange County Registrar of Voters, (714) 567-7620.

## **N. Qualifications**

### Secretary of State's Office

Chris Maio, Chief of Information Technology Division (ITD), California Secretary of State. Maio has over 21 years in state service, beginning his career in licensing and enforcement at the Department of Consumer Affairs before becoming dedicated to information technology at that department. Maio worked in all facets of information technology both as a senior technical specialist and management before joining SOS. For the last 5 years, Maio has served as a unit and section manager in ITD before being appointed chief in 2009. As ITD Chief, Maio is responsible for the oversight and the day-to-day management of all information technology services, including the statewide voter registration system, for the Office of the Secretary of State.

Debbie O'Donoghue, Deputy Secretary of State, Voter Education and Outreach Services. O'Donoghue has worked for the Secretary of State for 10 years. O'Donoghue oversees all SOS voter outreach activities and has coordinated projects with California's 58 counties involving federal grant programs from the federal Department of Health and Human Services, under Section 261 of the Help America Vote Act (HAVA).

Janice Lumsden, Deputy Secretary of State, Operations. Lumsden has nearly 25 years in state service, beginning her career with auditing, accounting and budget positions in several state departments. For the last 6 years Lumsden has served as the chief operating officer at the SOS, overseeing the Elections, Political Reform, Archives/Museum and Business Programs as well as administration, information technology and project management support activities.

Dora Mejia, Chief of the Management Services Division, California Secretary of State. Mejia received her Bachelor of Science degree in Business Administration, Accountancy and Finance from California State University, Sacramento. She is a Certified Public Accountant with over 25 years experience in accounting and finance. As Chief, Mejia is responsible for the oversight and the day-to-day management of the budget, accounting, human resources, and business service areas for the Office of the Secretary of State, including Federal grant funds.

#### Department of Motor Vehicles

Shamim (Mimi) Khan first joined DMV in February 1997, serving as the Deputy Director of the Administrative Services Division for almost ten years before being appointed as the Deputy Director of the Licensing Operations Division. Prior to her tenure at DMV, Khan worked for the Department of Food and Agriculture, and Chief of Human Resources, and served as the Director of Administrative Services. Additionally she has worked at the Department of Health Services and the State Personnel Board. Khan holds a Masters degree in Public Administration from USC and obtained her undergraduate degree in government from CSU Sacramento.

Robbie Crockett was appointed Chief of the Budgets & Fiscal Analysis Branch. In this capacity, he oversees the Budget Office, which prepares and administers the department's annual budget, and the Cost Accounting/Forecasting Section, which is responsible for the Activity-Based Costing system and the annual forecast of workload indicators. Crockett has a degree in Business Administration with a concentration in Accounting from California State University, Sacramento. During his time at DMV he has been involved in a number of projects including: Vehicle Registration on the Internet, Commercial Vehicle Registration Act, Smog Impact Refund Fee, VLF Refunds, VLF Rebates, Registration Fee Increase, SB 1500, National Motor Vehicle Titling Information System and the Diesel Smog project.

DMV Costs

Unit	Tasks	Staff ISA/PA \$33.26	SSS II \$36.51	Mgr III \$28.13	Mgr V \$35.65	DPM II \$38.40	DPM III \$44.30	Prog Mgr \$41.11	CEA II \$47.40
Computer Operations	Develop and document new JCL and appropriate workorders.	80				10			
Driver Lic. Applications	Develop specifications and code programming modifications. Create new program. Test programming modifications.	500							
E-Gov Design Team	Coordinate SOS project with developers, consultants, analysts, LOD and OTECH. Will work directly with SOS on new proposed transaction and testing of new process.		160			19			
E-Gov Analysis Team	Provide assistance in gathering of new and/or revised requirements, gap analysis and integration testing for the enhanced application.	40				5			
DL Syst Develop. & Policy Units	Write programming request; Prepare publication request for DMV website; prepare memorandum of understanding (MOU) with SOS			90	11				
Consultant	Due to resource contention, consultants will be hired to augment staffing. Assist with programming development and System Testing needs. Document workflow and network architecture and assist with developing specifications document and test plan. Develop use cases. Will provide skill transfer to DMV for ongoing maintenance. (see below item "f" for hours and hourly rate)								
Note: Mid-range salary is used.									
Minimum Hours		620	160	90	11	34	0	0	0
Maximum Hours		1240	320	90	11	34			
Meeting with SOS & project team		40	40	40	40	40	40	40	40

Salary Cost	\$ 42,573	\$ 13,144	\$ 3,657	\$ 1,818	\$ 2,842	\$ 1,772	\$ 1,644	\$ 1,896
<b>a) Total Direct Labor Cost</b>	<b>\$ 69,345</b>							
Staff/Fringe Benefits @ 49.06%	\$ 34,021							
Indirect/Overhead Cost @ 20.88%	\$ 21,583							
<b>b) Total Staff Benefits &amp; Overhead Costs</b>	<b>\$ 55,604</b>							
<b>f) Contractual - 1056 hrs @ \$125/hr</b>	<b>\$ 132,000</b>							
OTech (Storage)	\$ 39,135							
IT Misc Costs (DBA support, CPU proc cost, etc)	\$ 18,700							
<b>h) Total Other Direct Costs</b>	<b>\$ 57,835</b>							
<b>Total One Time Costs (a,b,f,h)</b>	<b>\$ 314,784</b>							