I. COVER PAGE - TECHNICAL PROPOSAL

CFDA Number: 12.217

BAA Number: H98210-FVAP-11-BAA-0001 (previously HQ0034—FVAP-11-BAA-0001

Title of Proposal: Colorado Overseas Voter Project

CAGE Code:

DUNs Number:

Applicant: Colorado Department of State

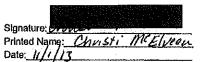
Contractors: To be determined Runbeck Election Systems

Technical Contact: Hilary Rudy, Senior-Legislative and Policy Analyst Colorado Department of State, Division of Elections 1700 Broadway, Suite 200 Denver, Colorado 80290 303-894-2200 ext. 6343 hilary.rudy@sos.state.co.us

Administrative/Business Contact: Judye-Schneider, HAVA Budget & Contracts Administrator Ryan Mole Colorado Department of State 1700 Broadway, Suite 200 Denver, Colorado 80290 303-894-2200 ext. 6321 (303) 869-4909 judye.schneider@sos.state.co.us ryan.mole@sos.state.co.us

Proposed Period of Performance: July/August 2011 December, 2012

22 June 2012 through 30 November 2016



II. TABLE OF CONTENTS

I. (Cover Page – Technical Proposal1
II. 7	Cable of Contents 2
III.	Technical Approach and Justification
Α.	Executive Summary
В.	Goals and Objectives
С.	Schedule and Milestones 11
D.	Reports13
TT7	
IV.	Management Approach
A.	Project Partners
B.	Methodology
<u>C</u> .	How Financial Management and Milestones Will Be Incorporated
D.	Definition and Formalization of Strategic Goals
Ε.	Planned Modifications to Current Processes
F.	Current and Pending Project Proposal Submissions
G.	Qualifications
V.	Budget ProposalAttached separately
1.	Itemized BudgetAttached separately
2.	Budget Narrative/Justification
2. 3.	Return on Investment AnalysisAttached separately
э,	Autored separately
VI.	Independent AuditAttached separately
VII.	Forms and AssurancesAttached separately

III. TECHNICAL APPROACH AND JUSTIFICATION

A. Executive Summary

The Colorado Department of State (CDOS) seeks federal grant funds for the Colorado Overseas Voter Project, which will help overseas voters access election information, register to vote, timely receive ballots, and streamline the tabulation procedures to improve voter privacy.

Colorado is a leader in overseas voting. In the past decade, we have implemented numerous measures to meet the requirements of the Uniform and Overseas Citizen Absentee Voter Act (UOCAVA) and subsequent federal and state laws. Further, Colorado has pursued innovative projects to improve the election experience for our overseas voters. For instance, in 2010 five Colorado counties participated in an electronic ballot delivery pilot led by the Federal Voting Assistance Program (FVAP). A sixth county conducted a pilot with different vendor. Recently, CDOS issued a Request for Information (RFI) based on the lessons learned from these pilots. The goal of the RFI is to identify a vendor capable of implementing a system that will meet Colorado's UOCAVA needs in future elections.

To be a good election office requires more than merely transmitting ballots in a timely manner, however. Instead, it includes all phases of the process, from registration through voting. The federal grant funding requested herein will streamline the registration process, speed ballot delivery and improve the overall electoral experience of Colorado's military and overseas voters in the following ways:

- Enhance online voter registration and voter look-up processes;
- Increase the timeliness and quality of voter information available online;
- Increase distribution options by making downloadable ballots available online and by increasing timeliness of paper ballots sent to voters using ballot-on-demand technology;
- Make more confidential the ballot duplication process to enhance the overseas voters' secrecy by adding a 2D barcode to each paper ballot;
- Improve tracking of issuance and receipt of ballots, as well as improving the notification that
 a ballot has been successfully submitted for tabulation, including issues like under- and
 over-voting; and
- Implement strategies to make post-election reporting more accurate and efficient.

To date, 38 small, medium and large Colorado counties have agreed to partner with the Department of State to test these strategies during the first phase of the project, which will be the November 2011 coordinated election. Phase Two will culminate with the June 2012 primary election, and will include process enhancements based on Phase One findings, implementation of additional strategies, and expansion to all Colorado counties. Phase Three will be the November 2012 general election. In this phase, we will consolidate and implement the aforementioned efforts, analyze our successes and failures, and prepare final reports.

Many of these activities will be wholly or partially supported by existing state resources. Others cannot be accomplished without grant funding. Financial support from the Department of Defense, through the FVAP, will allow CDOS to advance the state of the art in several areas. These achievements will lay the groundwork for the next generation of innovative applications, benefitting military and overseas voters in Colorado and across the nation.

B. Goals and Objectives

1. Background and Overview

Colorado has long been a leader in facilitating registration and voting by military and overseas electors under the provisions of the Uniform and Overseas Citizen Absentee Voter Act (UOCAVA) and subsequent federal and state law. Over the past several years, the state has worked to streamline the registration process for these UOCAVA voters, provide timely access to election information and ballots, and reduce errors that occur during the absentee voting process. For example, Colorado began transmitting ballots by email for overseas military electors in 2006, and registration was extended to citizens who have never resided in the United States in 2007. Just before the passage of the federal Military and Overseas Voter Empowerment Act of 2009 (MOVE), the state adopted additional strategies, including online voter registration, authorizing late registration for military personnel discharged after close of registration, and allowing late return for overseas military ballots. That same year, the Colorado General Assembly passed a bill approving an internet-based voting pilot program for overseas military electors beginning in 2012. However, this legislation specified that the pilot could not be implemented until sufficient funds were obtained through gifts, grants, and donations to cover the costs of implementation. To date, no gifts, grants, or donations have been received to support this voting pilot program.

As part of its response to the MOVE Act and the 2009 state legislation, the Colorado Department of State (CDOS), instituted a research project to identify alternate ways to deliver ballots electronically to military and overseas voters. Five counties participated in a national pilot, through the Federal Voting Assistance Program (FVAP), to provide online ballot delivery for military and overseas electors in the 2010 general election. One additional county conducted an independent pilot with a separate vendor for the 2010 primary and general elections. Both pilots were well received by voters. In addition, the pilots helped state and county election officials identify issues and strategies that lay the foundation for future electronic ballot delivery efforts.

State legislation passed in 2011 provided additional support for efforts to improve the voting process for UOCAVA voters:

- Senate Bill 11-189 adjusted the elections calendar to move the Colorado state primary election to June and changed the state law deadline for mailing ballots to military and overseas electors to no later than 45 days before the election.
- House Bill 11-1219 adopted provisions of the Uniform Military and Overseas Voters Act. This law extended all electronic transmission options and the eight-day late return provision to all military and overseas electors. It also eliminated the state write-in ballot and extended use of the federal write-in ballot for all federal, state, and local issues in federal and state elections. Finally, the bill required the 45-day ballot mailing deadline to apply to all elections coordinated with or conducted by the county clerk and recorder, including all federal, state, and odd-year coordinated elections.

To implement the 2009 and 2011 legislative requirements and to build on the 2010 pilots described above, the Secretary of State's office recently issued an Informal Request for Information to help determine the feasibility of a statewide online ballot delivery pilot to be implemented in the 2011 coordinated (off-year) election. The goal of this statewide pilot is to

allow military and overseas electors to download and mark their ballots online, then print and return the ballots using methods available under state law. This process, described in detail in Sections III.C and IV.B, will be one major component of the project proposed in this application. Through this project, we also plan to test and implement additional innovations that will support Colorado's continued leadership role in serving our UOCAVA voters efficiently and effectively.

2. Project Goals and Objectives

Grant funding from the Department of Defense would allow Colorado to expand the efforts described above and improve access to voter registration and absentee voting by military and overseas electors through the proposed Colorado Overseas Voter Project. Its overall purpose is to *STREAMLINE THE ABSENTEE VOTING PROCESS AND IMPROVE THE VOTING EXPERIENCE OF COLORADO'S MILITARY AND OVERSEAS ELECTORS.* Related goals and objectives include:

- I. Increase timely access to, and the efficiency and accuracy of, the absentee balloting process for military and overseas electors.
- 1. Pilot test and implement a statewide system to provide downloadable ballots online, including the ability to notify electors about the successful completion of their ballots.
- 2. Develop the capacity to use ballot-on-demand technology to print and send paper ballots to UOCAVA voters.
- 3. Test the feasibility of using 2D barcode technology to automatically duplicate and print scanner readable ballots that have been downloaded online.
- 4. Improve existing strategies for tracking the issuance and receipt of ballots.
- 5. Identify and test alternatives for enhancing existing electronic tools to make reporting more accurate and efficient.
- **II.** Enhance existing tools and strategies in all other stages of Colorado's absentee balloting process for military and overseas electors.
- 1. Add functionality to online voter registration, voter record update, and voter look-up to make these processes more intuitive and user-friendly.
- 2. Manage email correspondence more efficiently by creating custom extract capability.
- 3. Improve the usability of Colorado's existing electronic voter interface by:
 - a. creating a one-stop voter portal;
 - b. posting 100-day notices of state and federal offices to be filled;
 - e. providing information about voting by Federal-Write-in Ballot (FWAB); and
 - d. posting updated information after ballots are certified to include district specific sample ballots and links to county-level information where available.

We have designed these goals and objectives to address the FVAP goals of streamlining and improving the voter registration and ballot delivery processes, as well as reducing errors that occur during the voting process itself. Our goals, objectives and planned methodology (described in Section IV.B) represent a natural progression from our previous accomplishments and also build on the smaller scale pilots conducted in 2010. Based on this experience, we believe that a large-scale project is feasible and in the best interests of our UOCAVA voters. In addition, we plan to investigate innovations, including ballot-on-demand and 2D barcode technology, which will further increase access and efficiency, while promoting ballot secrecy.

3. Plan for Establishing Electronic Tools to Improve Voting Systems

The following sections briefly describe our plans for establishing and operating sustainable and affordable electronic tools, as well as enhancing our existing tools, to improve voting systems for those covered by UOCAVA.

Web-Based Voter Interface: In this area, we plan to make improvements to our existing electronic tools to make the registration/voter look up process more efficient, and online voter information more user friendly:

- <u>Registration/Voter Look-Up Process</u>: Planned improvements in this area will include implementing changes required by the 2011 legislation described above, and adding functionality to these online processes to make them more intuitive and understandable for the user. Most UOCAVA voters provide an email address at registration, and we have learned that email is generally the most efficient and effective method of communicating with these voters. Accordingly, we plan to enhance reporting tools so that lists of voter email addresses can be more efficiently generated by county</u>. This will allow counties to perform automated correspondence merges, reducing their need to send individual emails to UOCAVA voters. As a result, correspondence with military and overseas voters will be more uniform, timely, and efficient.
- <u>Online Voter Information:</u> Existing state funding will support plans to create a voter portal that will provide voters with more intuitive access to information and tools for registration and voting, such as online voter registration, ballot request, and federal write-in ballot information. The portal will be developed from a voter perspective and will incorporate recommendations from a recent usability evaluation of the office's website. CDOS is also developing a notice of all state and federal races on the ballot that will be posted on the Department website at least 100 days before the election. The notice will be updated after ballot certification to include candidates for state and federal offices and statewide ballot measures. We plan to develop and implement a tool that will allow voters to obtain information about the races and issues specific to their state-level district, and to link to any available county-level information. Finally, the online ballot system described below will provide help options for voters, including frequently asked questions, links or redirects to county or state websites, and other information.

Ballot On Demand System: The Colorado Overseas Voter Project plans to test and implement a ballot-on-demand system to enable counties to print on site, allowing them to produce and mail ballots by the 45-day deadline more efficiently. Specifically, this approach eliminates the risk of a print vendor failure that could delay ballot mailing, which is especially problematic in Colorado where there are four voting system vendors in use and numerous ballot printing vendors. We will also investigate other uses of the ballot on demand system, such as automating the duplication process by adding a 2D barcode to each ballot. This will decrease the need to duplicate electronically-returned ballots for counting, reducing human error and labor while increasing the secrecy of the voted ballot while protecting the secrecy of the UOCAVA voter's ballot.

Online Ballot System: Building on the results of the 2010 pilot tests described previously, Colorado plans to further test and implement a statewide ballot system that will allow UOCAVA electors to request, receive and mark ballots online. Electors can then print the marked ballots and return them via the methods available under current state law (e.g., by mail, fax, or email). CDOS has determined that the capabilities required to implement this system in Colorado include:

- <u>Voter log-in</u>: The system requires the voter to provide authentication information (i.e., name, date of birth, driver's license or last four digits of Social Security Number, and UOCAVA classification). This information is then used to verify eligibility to use the ballot delivery system and to determine the correct ballot style to be sent to the voter.
- <u>Instructions:</u> These describe how to complete the ballot, notifications about under/over votes, and how to return the voted ballot according to the available methods. Instructions for printing and returning the ballot will be tailored to each return method.
- <u>Cover sheet:</u> This can be customized to the selected method of return, including the voter affirmation.
- <u>Ballot design/layout</u>: The new system will accommodate all requirements for Colorado ballot language and design. All races and issues will be ordered on the ballots as certified by the local jurisdictions. Ballots will be accurate to the unique ballot style/split. Finally, the system will not allow ballot rotation or straight ticket voting.
- <u>Write-in Capability</u>: Ballots will be designed to include write-in votes where there are approved and qualified write in candidates, and will allow write-in candidates only where no other candidate has been selected. The list of qualified write-in candidates will be available for each race for voter review.
- <u>Language:</u> Ballots and instructions will be provided in both English and Spanish for participating counties covered by section 203 of the Voting Rights Act. The number of participating counties to be covered during the project is unknown as we are awaiting U.S. Census data.
- <u>*Printing*</u>: Ballot printing software will support both U.S. and European paper standards. The system will have the ability to interface with ballot-on-demand solutions or other automated ballot duplication technology.
- <u>Ballot data and external interfaces</u>: The new system will allow for flexible data import and will be capable of importing ballot data in the formats customarily used by each county. This includes in house or vendor specific election management system format, Access, Excel, Word, Text, PDF, or CSV files. The ballot data will be provided by the counties and the voter registration data will be provided by the state.
- <u>ADA/HAVA Compliance</u>: The system will interact with, or directly provide, standard accessibility interfaces. It will be designed to disallow overvoting and will notify voters of any overvote, requiring them to make a single selection. It will allow undervoting but will provide notification of any undervotes and offer the opportunity to make a selection. Finally, it will summarize voters' selections, allowing them to make changes before finalizing and printing the ballot for return.
- <u>Support and help desk</u>: The system vendor will provide help desk services for counties during the ballot design phase of each project, as well as help desk services available to both counties and voters during live election periods.

Reporting and Statistics: The proposed system can provide daily, weekly and election use summaries by the counties and voters. These reports will provide a county-level breakdown of ballots accessed and downloaded for printing. The system will also track statistical information about voter access by UOCAVA category (e.g. military, overseas citizen). Finally, the system will ask participating voters to complete a satisfaction survey. Respondents will compare the online voting process with their voting experiences in previous elections and whether there are any enhancements they would like in the future. We are also considering conducting a post-election survey for all UOCAVA voters. This survey would ask similar questions to the planned online survey.

4. Proposed Project Metrics

Achievement of the Colorado Overseas Voter Project project's goals and objectives described above are expected to produce a number of positive outcomes. The table below illustrates metrics and targets for these expected outcomes, along with baselines (where available) from the 2008 and 2010 elections.

Expected	Motric/c)		Baseline/Target			
Outcome		Metric(s)	2008	2010	2012	
Increases in registrations among potential UOCAVA electors	1.	Number of registered military and overseas voters.	16,251	10,650	17,000	
Increased numbers of	1.	Total number of UOCAVA ballots counted:	11,942	4 ,378	14,000	
UOCAVA voters.		a. Military b. Overseas electors	3,304 8,638	1,086 3,292	4,000 10,000	
Improved access to appropriate absentee ballots.	1.	Number of ballots sent (reports will include subtotals by transmission method, i.e., mail, fax, email, online)	16,251	10,650	17,000	
	2.	Number of ballots returned (will include subtotals by transmission method).	13,029	4,645	14,875	
	3.	Number of ballots returned by type: a. State mail-in b. Federal write-in ballots	11,317 1,538	4 ,560 97	13,306 1,569	
Reduced failure rates for UOCAVA	1-	Percentage of returned ballots that are counted.	73.5%	94.3%	96%	
voters in various stages of the	2.	Percentage of rejected ballots by reason.	5.9% (total)	2.9% (total)	2,5%	
absentee balloting	3-	Percentage of undeliverable ballots.	1.4%	8.3%	1%	
process	4.	Number & percentage of ballots spoiled or replaced.	5.6%	5.8%	4%	
	5.	Percentage of ballots not returned as undeliverable that are not returned by the voters (status unknown).	19.2%	40.3%	15%	
Improved voter satisfaction with information, access to	1,	Percentage of voters surveyed who report that the registration and information process was more user friendly than in previous years.	n/a	n/a	60 %	
registration, and the online voting system	2,	Percentage of voters surveyed who report that the online voting system was easier to use.	n/a	100%	90%	

Expected	Matria(a)	Ba	seline/Ta	rget
Outcome	Metric(s)	2008	2010	2012
Increased efficiency in the absentee ballot1. Percentage of county staff surveyed who report that the ballot on demand system reduced "work- arounds" necessary for ballot printing.		n/a	n/a	60%
	 Percentage of county staff reporting lower labor costs due to the new ballot on demand system. 	n/a	n/a	60%
	 Percentage of counties reporting that they used ballot on demand to eliminate the need for a work- around solutions 	n/a	24%	60%
Improved satisfaction among county staff with the	 Percentage of county staff surveyed reporting greater case in communicating with UOCAVA voters. 	n/a	n/a	60%
UOCAVA registration and voting processes.	 Percentage of county staff surveyed who report that the online voting system was more efficient than in previous years. 	n/a	n/a	60%

5. Potential Benefits

Implementation of the new technologies and process improvements described above are expected to benefit Colorado UOCAVA electors by improving access, enhancing informational offerings, and reducing failure rates in every stage of the absentee voting process. The state and counties will benefit from increased efficiency, reduced labor and other costs, and a streamlined process. Although we are aware that many jurisdictions are planning to implement online ballot delivery systems in the coming years, we believe that some of the innovative strategies we plan to test, such as ballot-on-demand technology and 2D barcoding to protect UOCAVA ballot secrecy, will advance development and lay the groundwork for the next generation of these types of creative tools and applications for the UOCAVA voting process across the country.

Each of our initiatives reflects a creative approach to solving real challenges facing UOCAVA voters in the registration and voting process. We have demonstrated that each pilot we have implemented in recent years has led to process and technology enhancements that have resulted in improved system performance in subsequent elections. By developing these technologies through careful pilot testing, and by using a comprehensive approach that addresses all components of the UOCAVA voting process, we believe that the Colorado Overseas Voter Project will result in useful, cost-effective strategies and tools that will benefit jurisdictions across Colorado and the nation.

6. Security Measures

As described above, the new online voting system to be pilot tested in Colorado will incorporate a variety of security protocols to anticipate, detect, and prevent security threats. These will include:

 <u>System and ballot security protocols.</u> The proposed online system will use eneryptions standards that are currently documented and validated for use by agencies of the federal

9

government. The system will employ an industry standard means to detect the presence of an intrusion threat.

• <u>Data security and destruction</u>. The system will not store voter information or voted ballots. No voter information will be eached or retained and all files containing such information will be destroyed at the conclusion of each project. Confidential voter information will be protected from accidental disclosure or breach.

C. Schedule and Milestones

The Colorado Overseas Voter Project will be organized according to the state's three upcoming elections in 2011 and 2012, and will include the following major milestones:

	Milestone	Dates	Responsible
Ph	ase I: Coordinated (Off-Year) Election-	November 1, 20	11
Pro	ject Component: Online ballot delivery		
1.	Vendor selection, contract, statement of work	July/August, 2011	CDOS staff, vendor
2.	Initial/test-data delivery with pilot counties: Voter registration data Ballot-data	August, 2011	CDOS staff Pilot county staff
3-	Build system functionality, cosmetic look & feel, test election	August, 2011	Vendor
4.	Test functionality and accuracy of ballot layout	AugSept., 2011	CDOS/county-staff
5.	Ballot-certification	9/2/2011	CDOS, local govts.
6.	Final data delivery Voter registration data Ballot data	September 9, 2011	CDOS staff Pilot county staff
7.	Ballot creation/election build	Sept. 9-16, 2011	Vendor
8.	Ballot proofing and Logic & Accuracy testing	Sept. 9-16, 2011	CDOS/county staff
9.	GO Live (45 days before election day)	September 17, 2011	CDOS, vendor, pilot counties
10.	-Daily reporting	9/17 11/1/2011	Vendor
11.	-Daily registration data delivery	9/17-11/1/2011	CDOS staff
12.	Post election reporting/survey compilation	Nov. 2-30, 2011	CDOS, vendor, pilot-counties
13.	Analysis & identification of enhancements/ updates/ process improvements for next phase	December, 2011	CDOS, vendor, pilot-counties
Pro	ject Component: Electronic Voter Interface		
1,	Finalize requirements, develop and test web pages and interface enhancements for voter portal, registration and ballot requests.	July, 2011	CDOS-staff
2.	Voter Portal Go-Live	August, 2011	CDOS-staff
3.	Finalize requirements, develop & test district- specific state and federal sample ballots	September- October, 2011	CDOS staff, vendor
4.	Post election voter survey	November, 2011	CDOS staff
5.	Post-election analysis to-identify updates, enhancements and/or-improvements	December, 2011	CDOS staff, vendor
Pro	ject Component: Ballot on Demand		
1.	Issue RFI/RFP	August, 2011	CDOS staff
2.	Vendor selection, contract, scope of work	SeptOct., 2011	CDOS staff, vendor
3,	Develop and finalize requirements for voter registration interface	NovDec., 2011	CDOS staff, vendor
4.	Finalize requirements for custom data extract enhancements	December 2011 –January, 2012	CDOS staff, counties

	Milestone	Dates	Responsible
Ph	ase 2: State Primary Election – June 26	2012	
	line ballot delivery:		
1. 1.	Identify new participating counties and kickoff	March, 2012	CDOS, vendor,
¥ 14	with vendor.		new counties
2-	Milestones 2-11 as described in Phase 1 online	March – June 26,	CDOS, vendor,
	ballot delivery section.	2012	new county staff
3-	Post election reporting/survey and	June 27-July,	CDOS, vendor,
	identification of enhancements.	2012	new counties
Ele	etronic Voter Interface		
1.	Develop and test 100 day notices, custom	January-	CDOS staff
	extract, voter portal, sample ballot and other	February, 2012	
	potential-enhancements		
2.	Provide extract to counties for email	January-	CDOS staff,
	correspondence	February, 2012	counties
3.	100 day notice, sample ballot, etc. Go Live	3/28-4/27, 2012	GDOS staff, vendor
4.	Post election survey, analyses and	June/July, 2012	GDOS staff, vendor
	identification of enhancements		
Ba	llot on Demand:		
1.	Develop voter registration interface	JanFeb., 2012	CDOS staff
2.	Equipment delivery/setup-may be regional	February, 2012	Vendor, counties
3.	Regional training, additional training for auto	February/March,	CDOS staff,
	duplication pilot counties	2012	vendor, counties
4.	Test voter registration interface	March, 2012	CDOS, counties
5.	Logic & Accuracy testing	April/May, 2012	Counties
6.	Print military/overseas ballots for mailing	May, 2012	Counties
7.	Autoduplication of voted ballots	June, 2012	Pilot counties
8.	Post election voter survey, reporting, analyses	June/July, 2012	CDOS staff,
1. Antonia	& identification of enhancements.		vendor, counties
Ph	ase 3: General Election – November 6, 2	2012	
On	line ballot delivery:		
1.	Build and test enhanced functionality based	August, 2012	Vendor
	upon post election reviews		
2-	Milestones 2-13 as described in Phase 1 online	August -	CDOS, vendor,
	ballot delivery	December, 2012	new county staff
Ele	ctronic Voter Interface		
1.	Build and test enhancements/updates	July-Aug., 2012	CDOS staff
2.	Enhancements Go Live dates	8/8-9/7, 2012	CDOS staff
3.	Post election voter survey, reporting, analyses	November-	CDOS staff,
	& identification of enhancements.	December, 2012	vendor, counties
Bal	lot on Demand		
1.	Build and test enhancements/updates	July-Aug., 2012	CDOS/vendor/cites
2.	Implement enhancements/updates	SeptOct. 2012	CDOS/counties
<u>2.</u> 3.	Post election voter survey, reporting, analyses	November-	CDOS staff,
Ј.	& identification of enhancements.	December, 2012	vendor, counties
A I -	PROJECT COMPONENTS:		
		NI	
1.	Post-election analyses of all three phases,	November 7,	CDOS staff,
	compilation of all results, report preparation	2012 – January	counties
	and submission to FVAP	2, 2012	

D. Reports

Project				Submission
Component		Type of Information	Data Sources	Dates
promotion and a second statements and a second s	DA	TA COLLECTION POINTS REPORTS	1	
Voter	4-	Historical comparison of % of	Registration and	12/30/11
Interface		UOCAVA registrants vs. %age	voting records	7/31/12
		for general electorate.		1/31/13
	2.	Percentage UOCAVA voters		
-		active/inactive compared to		
		general-electorate	No. 1 M. G M	Course of the sure
	3-	Percentage of voters satisfied	Voter satisfaction	Same as above
		with the information-they receive from the website	surveys	
Online Ballot	1	Voter traffic (e.g., number of	System reports	Weekly from
Tool	1 24	ballots accessed and	(reported daily,	9/17-11/1/11
		downloaded) by county and	weekly & by	Weekly-from
		UOCAVA category (e.g., military	project phase)	5/12-6/26/12
		or overseas citizen)	F	Weekly from
	2.	Number of ballots sent,		9/11-11/6/12
		returned, counted, and rejected		
		by county, ballot type (FWAB,		
		regular absentee, downloaded),	·	
		type of transmission (mail, fax,		
		email, online), and reasons for		
		rejections	Satisfaction	12/30/11
	3.	Voter satisfaction with the online	surveys	7/31/12
		system compared to previous experiences.		1/31/13
Ballot on	1.	Number of ballots produced to	System/county	Weekly from
Demand		meet 45-day requirement and	reports	5/12-6/26/12
		subsequent requests.		Weekly from
				9/11-11/6/12
DELIVERABLE:		ROGRAMMATIC AND FINANCIAL PR	OGRESS REPORTS	12/30/11 and 7/31/12
Overall	FC	DR PHASE ONE AND PHASE TWO Dates of accomplishment of	Project and	
Project	1 .	Phase One and Phase Two	meeting records	
Progress		activities compared to original	meeting records	
i rogress		timeline.		
	2.	Changes in activities with		
		justifications/ rationales for		
		these changes		
	3-	Expenditures for overall project	Accounting records	
		management compared to	-	
		budget.		
Voter	1.	Phase One and Phase Two	Data collection	
Interface		analyses of voter interface data.	points reports	•
	2.	Report on planned updates,	Records of related	
		enhancements and/or process	project discussions	
	<u> </u> .	improvements for next phase.	and meetings	
Online Ballot	1-	Phase One and Phase Two	Data collection	
Tool	L	analyses of online ballot data.	points reports	

Project Component		Type of Information	Data Sources	Submission Dates
	2.	Report on planned updates, enhancements and/or process improvements for next phase.	Records of related project discussions and meetings	
	3.	Expenditures for online ballot system compared to budget.	Accounting records	
Ballot on Demand	1,	Phase Two analyses of ballot on demand data.	Data collection points reports	
	2.	Report on planned updates, enhancements and/or process improvements for next phase.	Records of related project discussions and meetings	
	3.	Expenditures for ballot on demand compared to budget.	Accounting records	
DELIVERABLE;	· FI	NAL REPORT		1/31/13
Overall	4.	Dates of accomplishment of	Project and	
Project Progress	2.	Phase Three activities compared to original timeline. Changes in activities with justifications/ rationales for these changes	meeting records	
	3.	Expenditures for project mgmt compared to budget.	Accounting records	
	4.	Summary of all project accomplishments	Phase 1-2 progress reports, Phase 3 analyses	
Voter Interface	1-	Phase Three analyses of voter interface data.	Data collection points reports	
	2.	Final report of accomplishments, lessons learned and recommendations for other jurisdictions for this component.	Phase One and Two progress reports, Phase Three analysis	
Online-Ballot Tool	1.	Phase Three analyses of online ballot system data.	Data collection points reports	
	2.	Final report of accomplishments, lessons learned and recommendations for other jurisdictions for this component	Phase One and Two-progress reports, Phase Three analysis	
	3.	Overall expenditures related to online ballot system component compared to budget.	Accounting records	
Ballot on Demand	1.	Phase Three analyses of ballot on demand data.	Data collection points reports	
	2.	Final report of accomplishments, lessons learned and recommendations for other jurisdictions for this component	Phase One and Two progress reports, Phase Three analysis	· · · · · · · · · · · · · · · · · · ·
	3.	Overall expenditures related to online ballot system component compared to budget.	Accounting records	

IV. MANAGEMENT APPROACH

A. Project Partners

Led by the Department of State (CDOS), the partnership during the project's Phase 1 (see following description in the following section) will include approximately 38 small, medium and large Colorado counties. These counties have already agreed to participate in the 2011 pilot test of the online voting system, and other counties may sign on before this phase begins. Colorado plans to have a final list of counties committed to participate by the end of July, 2011. In addition to these jurisdictions, one or more vendors will work with the project to develop the planned online voting system. As described in the following section, we will select from among the five vendors who responded to the Secretary of State's recent RFI.

During Phase 2, which ends with the June, 2012 primary election, we plan to expand implementation of the online voting system technology to all Colorado counties. Further, we expect to roll out the on-demand technology during this phase, with the involvement of all counties statewide. To implement this new technology, we may work with a vendor to develop the online sample ballot. We also plan to issue another RFI for one or more vendors to develop and test the full ballot on demand technology. We expect to receive approximately three responses, with the final list of partnering vendors dependent on our evaluation of the responses to this RFI.

Colorado's proposed approach is a collaboration of the state and all 64 Colorado counties, as well as multiple vendors with a range of expertise in different areas of the voting process. Because our project plans to touch every aspect of the registration and voting process, we would bring the different perspectives of each of the teams/vendors handling the various processes. In our experience, bringing greater diversity of ideas and viewpoints to address a situation often results in the most innovative and effective resolution. And, involving collaborators with different areas of expertise helps identify areas where we may be trying to over think potential solutions.

Colorado has successfully collaborated with other states, counties, vendors, consultants and higher education institutions to improve election processes, not only for military and overseas voters but also for all Colorado electors. One recent example is the 2010 pilot test of the online voting system. In addition to the state, collaborators in this project included FVAP, five Colorado counties, about 17 other states, and 6 vendors. Further, Colorado was recently awarded an Election Assistance Commission grant to research and implement a risk-limiting post-election audit. The state is partnering with six counties with varied voter populations, voting equipment vendors, and technological capability. Colorado has also been actively participating in a Pew Center on the States initiative, where several states and Pew are developing a national database to modernize the voter registration process. The goal of the project is to develop a database to assist states in maintaining more accurate voter registration lists and aiding eligible electors in becoming registered.

B. Methodology

As was described in Sections III.B.1-2, the proposed Colorado Overseas Voter Project will continue and expand a research study launched by the Colorado Department of State, Division of Elections (CDOS), in 2009. To date, its focus has been to investigate the feasibility of implementing an online voting system for UOCAVA voters throughout Colorado. Prior to being notified about this Department of Defense/FVAP funding opportunity, the CDOS had also planned to enhance the electronic voter interface system over the next year by making improvements in online registration, web-based information, ballot request, 100-day notice, and sample ballots. These changes will be accomplished using existing state funding and will be incorporated into the overall project plan. Grant funding from FVAP will allow Colorado to enhance our online voting development process, which is already underway. It will also provide a means through which CDOS and its partners can investigate alternatives and implement strategies using innovative ballot-on-demand technologies, thus advancing the state-of-the-art in serving UOCAVA voters efficiently and effectively.

The Colorado Overseas Voter Project will therefore include three major components: online voting system, web-based voter interface, and ballot on demand. The proposed methodology is to organize these components into phases centered around the next three statewide elections: the Coordinated (odd-year) Election on November 1, 2011; the State Primary Election on June 26, 2012; and the General Election on November 6, 2012. This approach, described briefly in the following sections and in more detail in Sections IV.C-E, will allow the Colorado Department of State to implement, test, and refine our planned strategies across these elections with ever-increasing interest, functionality and participation.

1. Coordinated Election Phase – November 1, 2011

This phase will be characterized primarily by final definitions of goals and objectives in all areas, and pilot testing of the planned strategies in online ballot delivery and ballot on demand printing. These pilot tests will be implemented in a selected group of Colorado counties that have volunteered to participate. We will also roll out many of the voter interface enhancements, including the new voter portal, during this phase.

Online Ballot System: Preparations have already begun for some strategies to be tested in Phase 1. Shortly before this federal grant announcement was issued, CDOS issued a Request for Information (RFI), asking vendors to respond regarding their interest and ability to work with the state to implement an electronic ballot delivery system during the 2011 coordinated election. Responses were received from the following vendors: Democracy Live, Everyone Counts, Konnech, Scytl/ES&S, and Valiant Solutions. CDOS is currently evaluating these proposals using both objective and subjective measures. These evaluation criteria will measure the respondent's capacity to: develop the system functionality described in Section III.B.3; implement required security measures as outlined in Section III.B.6; deliver adequate support and help desk services to both voters and county staff; and provide comprehensive and timely project related reports, including results of any voter satisfaction survey. The RFI evaluation group includes CDOS staff, experts from the Secretary of State's Information Technology division, and county elections employees. After the evaluation, CDOS may invite vendors to submit more information and/or respond to questions, with the eventual goal being the selection of a vendor to work with the state and the participating counties in the 2011 pilot.

Once a contract is executed with the selected vendor and the list of participating counties is complete, CDOS will host an August, 2011, kickoff/orientation meeting with the vendor and pilot county staff to discuss schedules, tasks and any concerns. The online balloting project will then move into the build and test phase. The state and counties will supply voter registration and test ballot data, and the vendor will build functionality and create the initial "look and feel" of the new system. The ballot layout's functionality and general accuracy will then be evaluated using the test data. Feedback from these evaluations will be used to make any needed changes.

Upon certification of the ballots, CDOS and the pilot counties will provide final voter registration and ballot data. The vendor will use this information for ballot creation and the election build. CDOS and the counties will proof the ballots and submit the new system to Logic and Accuracy testing. The final product will be completed in time for the "GO Live" date, September 17, which is 45 days before the 2011 election. From September 17 to election day, CDOS staff will deliver new registration data to the vendor daily. In addition, daily reporting by the vendor will provide ongoing input on the process and allow for troubleshooting if needed. After the election on November 1, the project team will compile results, including election metrics and feedback from surveys of county staff and voters. These results will be used to identify potential process improvements and enhancements for the next election.

Voter Interface: CDOS staff have already begun the planned voter interface enhancements and have identified a vendor to assist with parts of this process. Shortly before this grant announcement was released, CDOS' elections and IT staff met to define improvements to the online voter registration tool for military and overseas voters. These enhancements, which will be designed by the internal IT staff, are expected to include changes in the voter registration and ballot request processes. The staff has also engaged in some initial discussions regarding the development of a voter portal. Additional meetings are scheduled in July to complete the requirements, develop final goals and objectives, and begin development, with an expected Go Live date for the portal of July August, 2011. Finally, staff has conducted some initial discussions with a vendor that will develop the online sample ballot to determine initial feasibility. We plan to hold further meetings to finalize requirements, goals and objectives in this area to enable development of this tool by September October.

Ballot on demand: CDOS plans to issue an informal request for information later this summer asking vendors to respond regarding their interest in and capacity to work with the state to implement a ballot on demand solution statewide and will research and/or pilot an automatic duplication system during the 2012 primary and general elections.

2. State Primary Election Phase – June, 2012

Online Ballot System: During this phase, we will concentrate on two overall tasks for the online ballot system: implementing the process improvements and enhancements that were identified during Phase 1, and rolling out the new system to those counties that were not part of the pilot. In general, the planned activities will mirror those conducted during the 2011 election, with further identification of improvements to be implemented for the general election.

Ballot on Demand: During Phase 2, the vendor will deliver and set up the equipment in each county, and provide training for the state and counties. The counties will conduct a Logic & Accuracy test of the equipment and implement printing of the ballots in time to comply with the 45-day deadline. In 2008, there were four counties that reported no ballot requests by UOCAVA voters. However, we believe it is appropriate to implement Ballot on Demand in these counties because they may have future requests from UOCAVA voters. Further, the enhancements to the voter interface discussed below are likely to have some effect on the number of requests received from UOCAVA voters because we anticipate that these enhancements will reduce the potential for failure in the registration and ballot request process.

During the same time period, we plan to pilot test the feasibility of automatically duplicating ballots that have been downloaded through the online delivery tool using 2D barcode technology. Because the benefits of implementing this technology become greater as the number of voters increases, we will limit the pilot counties to those with 500 or more military and overseas voters (on a volunteer basis). The pilot counties will receive additional equipment and training and would use auto duplication in the primary election to provide sufficient time to evaluate the process and functionality, and implement improvements prior to the general election.

Voter Interface: The primary activity for this component during Phase 2 will be to develop the online sample ballot for state and federal races/issues. The sample ballot is required by state law and is a post-ballot certification update to the 100-day notice, which gives voters instructions for voting a federal write-in ballot (FWAB). The sample ballot could be easily posted as a comprehensive list of all state and federal level races and state issues. However, we believe that a district-specific sample ballot would be far more useful to voters who may need to vote a FWA or want to review the choices before downloading ballots online. We will work with our ballot certification vendor to create a sample ballot for each district and with our internal IT office to develop a web tool that will allow voters to enter their zip code in order to pull up their specific sample ballot. We would also work with the counties to link over to any local information.

3. General Election Phase – November, 2012

The 2012 general election will be a final statewide implementation of the process improvements and enhancements in all components of the absentee voting experience for military and overseas electors. This Presidential election is expected to attract large numbers of UOCAVA voters. As a result, the strategies put into place in the first two phases will face a final test during this phase. It will also allow Colorado the opportunity to compare metrics from the 2008 election, before these improvements were implemented, with the results of the 2012 general election. We plan to devote a considerable effort after this election to compile, analyze and report on these results.

C. How Financial Management, Measures of Success and Milestones Will Be Incorporated

Through out all phases of its implementation, the project will follow strong principles of financial management, and will incorporate both fiscal and program-oriented milestones and measures of success. CDOS, which has a fiscal year budget of approximately \$21 million, has extensive experience with and appropriate infrastructure for managing federal grants, most notably with the Help America Vote Act (HAVA) project. Judye Schneider, the Department's HAVA Budget/Policy Analyst, will provide financial management and fiscal oversight.

Sections III.B.4 and III.C offer overviews of milestones and performance measures to be tracked and evaluated over the course of the project. Where appropriate, CDOS will include these milestones and performance measures in its contracts with the vendors that will have major responsibility for implementing the online voting system and ballot on demand components. These contracts will be written based on the Secretary of State's model IT contract, and will include fiscal guarantees tied to the milestones and performance measures in the contract. Ongoing financial management, milestones and performance measures will also be incorporated through the activities associated with the return on investment analysis described in Section V.3.

D. Definition and Formalization of Strategic Goals

Every stage of the voting process presents a greater challenge to military and overseas voters than it does to resident electors, including those who vote locally by absentee ballot. With that in mind, the overarching purpose of this project is to use technology to streamline and ease the process for UOCAVA voters, thus increasing their success rates at every step. At the same time, project activities must fulfill two other essential strategic aims:

- They must enable Colorado to carry out the provisions of all federal and state legislation related to this area; and
- They must achieve the specified outcomes at the lowest cost and by placing the least amount of burden on state and county election officials.

Section III.B.2 lists initial goals and objectives for the Colorado Overseas Voter Project. As the project progresses, we will further define and formalize goals and objectives for each component based on the overall project purpose and strategic aims described above. This process is expected to include specific measurable outcomes (e.g., reductions in failure rates or lower costs) associated with each objective, which may be modifications and/or expansions of the outcomes and metrics listed in Section III.B.C.

E. Planned Modifications to Current Processes

1. Voter Interface

Analysis and measurement of current processes, process related elements and justification for modifying the existing processes: The relevant current processes associated with voter registration, ballot request and the web-based information system include:

- Colorado implemented online voter registration in 2009, but found that the system initially did not have full functionality to assist military and overseas voters. During the 2010 election cycle, we enhanced the system to include all of the federal postcard requirements. However, because the system did not prompt voters to confirm their preferred method of ballot transmission and ballot mailing address, counties still had to conduct a significant amount of follow up to ensure the ballot is sent correctly. Modification of this system is expected to reduce the counties' need to perform this follow-up work.
- The recently-passed Uniform Military and Overseas Votors Act (UMOVA) extended the availability of email ballot transmission and eight-day late return to all military and overseas voters. At present, Colorado's statewide voter registration portal does not have the capability to accommodate the email ballot transmission for all UOCAVA classifications. Therefore, the portal needs to be modified to fulfill this legislative requirement.
- In the past, a votor wanting to complete a federal write-in ballot (FWAB) needed to request sample ballot from his/her county clerk to determine what races/issues and approved candidates were on the ballot. In response to the passage of UMOVA, the state will be posting 100-day notices of state and federal races that are on the ballot, as well as updated notices after the ballot content is certified. These notices will be accompanied by instructions for completing the FWAB. In developing the updated notice, we want to ensure that the voter has as much appropriate information as possible to complete the FWAB. As a result, we intend to make this notice a district-specific sample ballot so each voter will see only those state and federal races that he/she is eligible to vote.
- Prior to the 2006 elections, Colorado created a voter guide for military and overseas voters which is updated for each election. However, counties and the state still receive many emails

and calls during the weeks leading up to an election. Based on feedback from a usability survey, we believe our website can be improved by creating a task-oriented voter portal. Voters typically go to our website to achieve a specific goal, such as registering to vote or determining whether their ballots have been received. The voter portal will be built to help voters easily identify the path to achieve their specific goal.

Potential risks and mitigating strategies: The only risk we foresee with this component is that our enhancements will not prove as effective as we had expected. For this reason, we plan to solicit and monitor voter and county feedback during project Phases 1 and 2 to troubleshoot if necessary and assure that the changes we make produce the desired outcomes.

Formalization of performance indicators and performance measurements: During the 2008 election, about 1.4 percent of Colorado's UOCAVA ballots mailed were returned as undeliverable, compared to about 0.98 percent of domestic absentee ballots. In 2010, about 7 percent of UOCAVA ballots mailed were returned undeliverable, compared to about 3.21 percent of domestic absentee ballots. Although we generally see this number increase in both eategories in off-year elections, we believe that the planned improvements to the online voter registration tool and voter information on the website will decrease the failure rate in this area for UOCAVA voters in 2012.

Projections of the modifications' effectiveness: Our working hypotheses for this component of the research project are:

- The electronic voter interface enhancements will help voters more efficiently reach their desired goal in using our website, decreasing the need for individual communications with the state or counties.
- The electronic voter interface enhancements will reduce the amount of follow-up required on the part of the county before the ballot can be mailed.
- The electronic voter interface enhancements will improve the voters' experience by providing better and more user-intuitive information.
- The electronic voter interface enhancements will reduce the number of ballots returned as undeliverable by making it easier for UOCAVA voters to update their mailing address in one stop.

2. Ballot On-Demand System

Analysis and measurement of current processes, process related elements and justification for modifying the existing processes: Ballot on demand technology is a tool that could be deployed statewide to eliminate the risk of vendor print failure in meeting the 45-day deadline for mailing ballots to voters. About 12 counties used this technology to meet the mailing deadline for the 2010 general election. Although all Colorado counties were able to meet this deadline in 2010, the remaining 52 counties were completely reliant on their ballot printers and experienced a variety of difficulties. Most were required to implement less desirable contingency plans to ensure that all ballots were mailed by the deadline. Eighteen counties sent voters a PDF or Microsoft Word copy of the ballot, which required duplication after the voted ballot was returned. Ballot on demand would have allowed those counties to meet the deadline with a scanner readable ballot, regardless of the print vendors' actions.

The auto-duplication technology has the potential to streamline duplication of electronically transmitted ballots. And, more importantly, it may improve accuracy and safeguard the secrecy of electronically transmitted ballots by eliminating the manual duplication process, which requires a team of election judges. These issues will likely be even more critical in 2012, because participation generally increases in Presidential election years. In 2008, about 16,000 ballots were requested by military and overseas electors (compared to just over 11,000 in 2010).

Potential risks and mitigating strategies: The initial investment in the printers and software necessary to implement this component is not insubstantial. However, based on our experience in 2010, we believe that the ongoing costs will be comparable to the per ballot cost of a print vendor. In addition, ongoing licensing costs are minimal and counties are largely paying for the printed ballot after their initial investment. This strategy has another advantage, in that counties retain control over printing rather than relying on a vendor.

The cost benefit of using auto-duplication technology decreases as the number of voters decrease, since the labor costs associated with manual duplication are lower. However, as noted above, this technology does provide non-financial benefits from improved security and accuracy. Therefore, a major goal of pilot testing both ballot on demand printing and auto-duplication will be to determine the cost-benefits of implementing these technologies in counties of various sizes and with varying numbers of UOCAVA voters. We believe that auto-duplication technology will have a greater benefit in larger jurisdictions due to the number of ballots they may need to duplicate. However, smaller jurisdictions may benefit from the printing technology because they are more likely to be held hostage by a print vendor failure. Our performance indicators and measures in this area have been designed to determine whether these assumptions are correct.

Formalization of performance indicators and performance measurements: Just over 16,000 ballots were requested by military and overseas electors during the last Presidential election. During that election, about 3 percent (about 500) of the ballots were rejected because they were received after the deadline. This compares to about 0.09% of domestic absentee ballots that were rejected. In 2010, military and overseas electors requested just over 11,000 ballots and about 0.9 percent (about 98) were returned after the deadline, about the same as the domestic absentee ballot rate. The tools and pilots implemented in this general election had a clear effect on the rate of ballots returned in time to be counted. We believe that a larger implementation will further decrease this failure rate so that it is below the failure rate for domestic ballots.

Projections of the modifications' effectiveness: Our project will test these hypotheses:

- The ballot on demand technology will eliminate the risk of print vendor failure in meeting the 45-day mailing deadline.
- The ballot on demand technology will help improve accuracy and protect voter secrecy by automatically duplicating ballots downloaded online
- The auto duplication feature will reduce the labor involved in hand duplication of ballots, and resulting in cost savings in counties with more than 500 UOCAVA voters.

3. Online Voting System

Analysis and measurement of current processes, process related elements and justification for modifying the existing processes: Despite the 45-day day mailing provision and late return authorization, many UOCAVA voters still have trouble receiving and returning their ballots in time to be counted. There are many reasons for this difficulty, such as the realities of space allocations on military transports and the facilities and services available in remote areas of developing countries. For example, in 2008, one Colorado county had a voter stationed in Antarctica who was unable to receive a ballot because of the winter no-fly period. Regardless of the reason, these voters need a way to receive ballots in time for their votes to be counted. Fax is a limited option, and in many cases presents challenges due to international time zones, power outages, and other factors.

Online ballot delivery allows voters to access their ballots whether the elerk's office is open or not. This option shortcuts the transmission time and eliminates the back and forth sometimes required to send a ballot by fax. One of the long-range benefits of the online ballot delivery system is its flexibility and usefulness to jurisdictions of all sizes. The benefits of online ballot delivery translate across jurisdiction size — a small county may only have a few UOCAVA voters, but these voters may have high needs for an alternative transmission method (e.g., posted in Antarctica). Voter feedback from the 2010 and 2011 pilot tests of an online system has been overwhelmingly positive. One hundred percent of voters who responded to post-election surveys conducted as part of these tests stated they would use the system again, and a majority rated the experience as much better than past voting experiences.

Potential risks and mitigating strategies: The initial investment in this type of technology is generally larger than the ongoing costs to implement. Each county must build a template for its election the first time the technology is implemented. After that, much like working with a print vendor, the template will allow future elections to be built more quickly. In addition, the pilot will help the counties, state, and vendors identify process and technology efficiencies that can be implemented in future elections. Establishing the election template and identifying efficiencies will ensure that the system can be implemented in a sustainable fashion. One such efficiency that seems reasonably attainable would be to build the system so that counties can control their own election setups in the future. This would not only remove the vendor from an election process, it would reduce election costs. Although we are not aware of any vendors who have developed this functionality at present, we will explore the feasibility of achieving this goal over the life of the project.

Formalization of performance indicators and performance measures: Just over 16,000 ballots were requested by military and overseas electors during the last Presidential election. About 3 percent (about 500) of these ballots were rejected because they were received after the deadline. This compares to about 0.09% of domestic absentee ballots that were rejected. In 2010, just over 11,000 ballots were requested by military and overseas electors and about 0.9 percent (about 98) were returned after the deadline, about the same as the domestic absentee ballot rate. The tools and pilots implemented in the 2010 general election had a clear effect on the rate of ballots returned in time to be counted. We believe that a larger implementation will further decrease this failure rate so that it is below the failure rate for domestic ballots.

Projections of the modifications' effectiveness: The primary hypothesis for this component is that the online ballot delivery tool will improve the voters' experience and reduce the number of ballots returned too late to be counted by reducing the round-trip mailing time.

F. Current and Pending Project Proposal Submissions

The only related project for which CDOS receives current support is the Colorado Risk-Limiting Audit Project (CORLA), funded by a grant from the U.S. Election Assistance Commission. As listed below, two CDOS staff members, Judd Choate and Judye Schneider, ^{Christi M cElveen} devote a portion of their time to CORLA, in addition to the time proposed for the Overseas Voter Project. No other CDOS staff members will have responsibilities related to both grant projects.

Title of Proposal: Colorado Risk-Limiting Audit Project

Summary: The purpose of this project is to develop and pilot new and/or alternative postelection risk-limiting audits using evidence-based, cost-effective processes and methodologies. Five Colorado counties are serving as pilot sites for the project, which has three goals:

- 1. To develop, test, and implement a risk-limiting audit system for Colorado that meets the letter and spirit of Colorado Revised Statute 1-7-515.
- 2. To create a user-friendly, transparent, post-election audit process that can be performed successfully in a variety of jurisdictions, using a variety of voting methodologies, technologies, and vendors.
- 3. To widely disseminate the project's research results to encourage appropriate replication in jurisdictions across the state and the nation.

The project has formed a Research Team composed of CDOS staff members and two expert consultants. This group is reviewing current election processes in the target counties and soliciting input from other stakeholders, including county election officials, voters and concerned citizen groups. The team is also reviewing existing best practices in the state and the nation in order to select the most promising practices for testing in the appropriate target counties.

Tests of these alternative strategies will be designed to collect data on the amount of time and types of staff needed to implement each strategy, feedback from county clerks and their staffs on the strategies' understandability and ease of implementation, and input from citizens and other groups. Methods will include direct data collection, questionnaires, focus groups and individual interviews. The Research Team is also recruiting a second group of counties to serve as a comparison group. The final steps in the process will be to develop recommendations identifying which practices are most effective in varied situations; and to disseminate the results both statewide and nationally.

Source and Amount of Funding:	Federal funds -	\$230,000 (U.S. Election Assistance Comm.)
	State funds -	\$182,224 (state in-kind)

Level of Effort Devoted to Project:	Judd Choate – 0.1 FTE		
	Judye Schneider – 0.05 FTE	Christi McElveen	
Duine Anulisante Calanda Dana	uturant of State		

Prime Applicant: Colorado Department of State

Technical Contact: Judd Choate, Director, Division of Elections Colorado Department of State 1700 Broadway, Suite 200 Denver, Colorado 80290 303-894-2200 judd.choate@sos.state.co.us

Period of Performance/Award Period: 5/01/2011-4/30/2012

Total Amount of Person Hours or FTE to be Devoted to the Project: .40 FTE

How Projects Are Related: The CORLA project is related in that it involves state and county election staff and the performance period is similar to the period proposed for the Colorado Overseas Voter Project. However, other than being pilot tested during the same Colorado elections, the projects are only tangentially related. The CORLA project focuses on implementing risk-limiting audits of all votes cast in an election, while this proposal is aimed at military and overseas voters only.

G. Qualifications

Four CDOS staff members will have primary responsibility for overseeing, managing and implementing the project activities outlined in this grant application. Hilary Rudy, Senior Legislative and Policy Analyst for the CDOS Elections Division, will be the technical contact and project director. Trevor Timmons, CDOS Chief Information Officer, will be primarily responsible for implementing the project's voter interface activities, and will also serve as the technical consultant for the online voting and ballot on demand activities. Resumes detailing these individuals' qualifications may be found on the following pages. In addition to these key staff, Dr. Judd Choate, Director, Division of Elections, will provide high level oversight, guidance and direction for the Colorado Overseas Voter Project, and Judye Schneider, HAVA Budget/Policy Analyst for CDOS, will serve as the grant's financial manager. Brief descriptions of these individuals' qualifications are included below.

Judd Choate, Ph.D., J.D., is the State Elections Director for Colorado. He has a Ph.D. in political science from Purdue University and a law degree from the University of Colorado. Prior to joining the Colorado Department of State, he was an election law attorney at Kelly, Garnsey, Hubbell and Lass, LLC in Denver. As a former professor of political science at the University of Nebraska, Dr. Choate taught courses on campaigns and elections. Dr. Choate has written two books and several refereed articles on electoral and institutional behavior. He also served as the Director of the Nebraska Minority and Justice Task Force, where he successfully secured several major federal grants to support research on racial bias in Nebraska's court system.

Judye Schneider is the Help America Vote Act (HAVA) Budget/Policy Analyst with the Colorado Department of State, overseeing the over \$40 million in HAVA funds received by Colorado since 2004. Judye has a Masters of Arts degree from the University of Colorado, as well as over 20 years experience with the State in managing federal funds received from grants and contracts.

Christi McElveen has been the Voting Systems Program Managers since 2012, overseeing certification, installation, and maintenance of Colorado's voting systems. Ms. McElveen has over 15 years experience in elections at the local and State level.

Hilary Rudy

Legal Experience

Colorado Department of State, Elections Division - Denver, CO

Senior Legislative & Policy Analyst

July 2010 – Present

- Manage legal and policy team of four to ensure legal support for all business units within the Division
- Analyze and interpret state and federal election law to develop and implement election policies, rules, best practices, other guidance
- Oversee state and federal complaint process to ensure timely review and response to election complaints
- Identify, analyze, and track legislative initiatives affecting the Division, and assist with drafting as needed
- Legal review of all training and policy materials prepared by the Division to maintain compliance with applicable laws
- Coordinate best practices working groups, including identifying county and Division participants, developing best practices documents
- Coordinate communication with federal and state agencies, local jurisdictions and their membership organizations to maintain effective productive working relationships
- Participate in national and state commissions, panels, and study groups concerning proposed or anticipated legislation and best practices
- Identify the need for and implement pilot programs to determine the viability of a proposed program
- Manage Division internship program including recruitment of qualified candidates, identification and assignment of projects, and mentoring/evaluating interns to further professional development

SCORE Legal Analyst

- Legal and policy lead for implementation of the statewide voter registration system (SCORE)
- Develop, review, and present training materials on elections and the use of the statewide voter registration system that are consistent with state and federal law
- Assist with the development, testing, implementation, and administration of the statewide voter registration system specifically to ensure compliance with state and federal laws
- Assist in the development and review of standard forms and reports including those used by the statewide voter registration system
- Assist in providing technical and business process support to county users of the statewide voter registration system
- Participate in identifying, analyzing, drafting, and tracking legislative initiatives affecting the elections division, specifically those affecting the implementation and administration of the statewide voter registration system

April 2008 – July 2010

Legal Analyst

August 2006 – October 2007

- Manage rulemaking process including coordinate rule task force meetings, drafting and implementation of revisions and amendments to elections and campaign finance rules, coordinate hearings; maintain record, and submit timely filings
- Coordinate and attend military voting, campaign finance, and elections task force meetings
- Assist with legislative process including bill analysis, testimony preparation, and attending drafting meetings
- Assist with administrative hearings including rulemakings, petition protests, and elections/HAVA complaints
- Assist with the development and maintenance of elections forms to ensure compliance with statute and rules

Legal Intern

June 2006 - August 2006, May 2005 - August 2005

- Assist with management of rulemaking process including rule task force meetings, implementation of revisions and amendments to elections and campaign finance rules, coordinate hearings; maintain record, and submit timely filings
- Assist with administrative hearings including rulemakings, petition protests, and elections/HAVA complaints
- Assist with the development and maintenance of elections forms to ensure compliance with statute and rules

Professional Experience

Business to Business Marketing – San Diego, CA

VP Operations & Business Development

October 2007-March 2008

- Manage hiring and employee relations including ensuring compliance with federal and state employment laws, interviewing and hiring, developing and implementing incentive and benefit programs, managing payroll, conducting performance evaluations and disciplinary hearings, and managing agency relationships
- Collaborate in the development and implementation of strategic marketing and operation plans to ensure growth, client retention, and employee retention
- Assist with the development, creation and distribution of sales and marketing materials
- Collaborate in development of comprehensive training of marketing representative staff including new hire, ongoing marketing skills development, industry vertical training tracks, and client product training
- Oversee client campaign account management including drafting and review of campaign agreements, development and maintenance of client relationships, accounts receivable management, development of marketing campaign notebook and product training program, ongoing campaign monitoring to ensure meeting of goals and client satisfaction

August 2004 – May 2006

Executive Assistant

- Right hand person to President in all aspects including draft correspondence, manage calendar, and special projects as assigned
- Attend High Tech Marketing Alliance luncheon and board meetings, draft and distribute meeting minutes, assist with management of of organization as necessary
- Assist with the development and implementation comprehensive company policies and procedures to improve organizational efficiency
- Offered and accepted employee status after three month temporary assignment expired

Education

Thomas Jefferson School of Law – San Diego, CA Mesa State College – Grand Junction, CO Juris Doctor, May 2006 B.B.A., Management, May 2003

Trevor Timmons

Experience Colorado Department of State

Chief Information Officer

Executive responsible for all information technology services for a state government agency. Budget, Staff, Strategic and Operational authority for the more than thirty members of the I.T. division of the one hundred-thirty person department.

- Formulates the agency's strategic plan, creates and manages to annual \$7 million budget.
- Project Director for successful deployment of a new statewide voter and elections system for all sixty-four counties of the state. This project, identified as a critical project by the Colorado CIO, was completed successfully and first used statewide in the 2008 Presidential Election.

Colorado Department of State

Deputy CIO/Director of Application Development

Managed the I.T. Division of the department. Senior leader and manager responsible for software development activities of the agency. Managed the division's finances, including budget and capital and operating expenditures.

- Primary technical point of contact on legislative changes affecting the department; primary technical contact working with state legislative bodies, county offices, and private sector companies in the policy domains in which the department operates
- I.T. Section Chairperson for the International Association of Commercial Administrators (2004-07); I.T. Manager of the Year, Colorado Information Management Association (2005)

Kroger MIS

Technical Project Lead, Senior Programmer/Analyst

Technical Project Lead and Server Development Lead for central I.T. group supporting 250+ retail grocery stores and four divisional offices.

- Technical Project Lead on Computer Assisted Ordering project; designed, managed, coded, tested and deployed system encompassing all aspects of stores ordering and receiving product.
- Server Development Lead on Advanced Retail Management System project; design, supervise and deploy system to post retail price changes and item changes to store point of sale systems.
- Led Kroger efforts to implement these two systems in thirty-seven new stores acquired by Kroger in a corporate acquisition of Fred Meyer Stores.

Colorado Department of State Applications Programmer II

Design, construct, deploy and maintain a variety of computer systems used by employees and the public.

• Major projects included re-writing departmental accounting system; statewide voter registration system; developing complex printing system for department use.

29

1998 - 1999

1994 - 1998

1999 - 2007

2007 - Current

Colorado Department of State

1992 - 1994

Auditor

Financial auditor for the Licensing and Enforcement Division

• Regulated charitable gambling activities in Colorado; conducted financial investigations, prepared evidence and gave testimony at hearings. Submitted recommendations for legal action against non-compliant licensed persons and companies.

Education

Colorado School of Mines Bachelor of Science – Engineering 1985 - 1991

V. BUDGET PROPOSAL

1. Itemized Budget

- 2. Budget Narrative/Justification
- 3. Return on Investment Analysis

2011 Electronic Absentee Systems for Elections (EASE) Grants For States, Territories and Localities Solicitation number HQ0034-FVAP-11-BAA-0001 Colorado Division of Elections

Budget Narrative

Senior/Key Person/Other Personnel

No personnel or direct labor costs, or the associated fringe benefits, are allocated to this project, other than the administrative and clerical positions that are included in the indirect costs, described below.

Equipment

The project will acquire equipment necessary for the various requirements of Colorado Overseas Voter Project. This equipment consists of printers, packaged with the required operational software that will be deployed to each of the 64 Colorado counties. The cost for the printers also includes training, installation, and other items that are required for deployment. These printers are essential to the Ballot on Demand process. Barcode scanners will be used for a pilot project to research the feasibility of automatic ballot duplication using Ballot on Demand printers of ballots, which are downloaded through the online ballot delivery tool.

	Units	FVAP	CO Department of State	TOTAL
BALLOT ON				
DEMAND:				
Printer Packages	46 @ \$15,000 each			
	(one per Hart			\$690,000
	County)			
	18 @ \$20,000 each			
	(one per ES&S,			\$360,000
	Sequoia, and			\$300,000
	Premier County)			
2D Barcode	8 @ \$750 each			\$< 000
Scanner				\$6,000

	FVAP	CO Department of State	TOTAL
Total for Printer Packages			\$1,050,000
Total for Barcode Scanners			\$6,000
TOTAL EQUIPMENT COSTS			\$1,056,000

Travel

No travel costs are anticipated for the Colorado Overseas Voter Project. Meetings will be conducted via telephone and videoconference in order to be as cost effective as possible.

Participant/Trainee Support Costs

No additional participant/trainee support costs are anticipated for the project.

Other Direct Costs

Other direct costs, as indicated below, are estimated expenses that include software licensing and maintenance fees, and election setup per county. These activities will be focused on building the infrastructure needed for the Ballot on Demand system. This infrastructure build-out will be phased in with many counties involved in the first wave scheduled for November 2011 and the remainder anticipated to be online for the June 2012 election.

ITEM	PURPOSE		COST
Software licensing			\$200,000
and maintenance fees			
Development of			250,000
county-controlled			
election setup			
Election set-up		Q3 2011–40 counties	
		included	
		Q1/Q2 2012 – 64 counties	
		included	
		Q2/Q3 2012 – 64 counties	
		included	
		TOTAL	\$450,000

	FVAP	CO Department of State	TOTAL
Other Direct Costs			\$450,000

Total Direct Costs

FVAP	CO Department of State	TOTAL
		\$1,506,000

Indirect Costs

The Colorado Department of State currently has a negotiated indirect rate with the Election Assistance Commission of 18.6 percent, which is requested as part of any awarded grant funds, as indicated below. The total of this indirect funding, based on the funding requested for direct project costs, will be \$280,116. For the purposes of the Colorado Overseas Voter Project, indirect costs will include a portion of the Project Director's total time (Hilary Rudy), totaling .25 FTE and a small portion (.05 FTE) of the Director of the Colorado Division of Elections (Judd Choate). Also included is .10 FTE clerical assistance dedicated to the project.

In addition to these administrative and clerical staff persons' time, the indirect costs also include a portion of the embedded costs for activities being conducted by the Division of Elections that, although not solely dedicated to the project, will have an impact on it. For example, various Web site enhancements have been previously planned and are an ongoing activity. These enhancements will benefit the Colorado Overseas Voter Project; however, they are not dedicated to it. Additionally, the development of the online sample ballot is another similar activity that benefits the project, but would have been implemented even in the absence of the project.

Total Direct and Indirect Costs

	FVAP	CO Department of State	TOTAL
Direct Costs			\$1,506,000
Indirect Costs			\$280,116
TOTAL			\$1,786,116

Return on Investment Analysis

Implementation of the new technologies and process improvements will benefit Colorado UOCAVA electors in a number of ways by improving access, enhancing informational offerings, improving privacy, and reducing failure rates in every stage of the absentee voting process. Further, these changes will improve county efficiency as well. Previously, some counties needed to use a work-around solution in order to meet the 45-day mailing deadline, which will be unnecessary with the implementation of the Colorado Overseas Voter Project. The project will benefit the state and counties by eliminating the need for this work-around, thereby increasing efficiency and streamlining the process, leading to cost savings. In addition, many jurisdictions across the country are planning to implement online ballot delivery systems in the coming years, and we believe that some of the innovative strategies Colorado will test, such as ballot-on-demand technology and 2D scanners to protect the privacy of these votes, will advance development and lay the groundwork for the next generation of these types of creative tools and applications.

The substantive return on investment can be measured both qualitatively and quantitatively. Below is a list of the anticipated effects resulting from receiving grant funding.

- Improved online voter registration and voter look-up processes
- Increased timeliness and quality of voter information available online
- Increased distribution options for downloadable ballots
- Expanded ballot-on-demand technology
- Improved confidentiality in the ballot duplication process to enhance vote secrecy
- Improved tracking of issuance and receipt of ballots
- Expanded notification to voters of successful submission for tabulation
- More accurate post-election reporting

The quantitatively effect of the Colorado Overseas Voter Project is shown below, including the origin numbers for each outcome predicted.

Expected Outcome	2008	2010	2012
Increased total registrations of UOCAVA electors	16,251	10,650	17,000
Increased number of UOCAVA voters	11,942	4,378	<u>14,000</u>
a. Military	3,304	1,086	4,000
b. Overseas	8,638	3,292	10,000
Improved access to appropriate absentee ballots	16,251	10,650	<u>17,000</u>
a. Number of Ballots Returned	13,029	4,645	14,875
1. State Mail-In	11,317	4,560	13,306
2. Federal Write-In	1,538	97	1,569

The metrics, as described in the proposal narrative Section III.B.4, will measure the results of these efforts and, therefore, the subsequent return on project's investment. The measures will be evaluated at the intervals described in the proposal and agreed-upon during the funding process.