Technical Proposal

Catalog of Federal Domestic Assistance (CFDA) Number: 12.217

BAA Number: H98210-FVAP-11-BAA-0001

Title of Proposal: *"Developing Universally Accessible, Secure and Sustainable Balloting Solutions for Chicago's UOCAVA Voters"*

CAGE Code: [redacted]

DUNs Number: [redacted]

Signature: [redacted]

Name: Kelly Bateman

Date: 11-6-13

Applicant: Chicago Board of Elections

Partner Contractor: Everyone Counts

Technical Contact:

Name	Kelly Bateman
Title	Assistant Executive Director
Address	69 W. Washington St., Suite 600, Chicago IL 60602
Phone	312-269-7919

Administrative Contact:

Name	Kelly Bateman
Title	Assistant Executive Director
Address	69 W. Washington St., Suite 600, Chicago IL 60602
Phone	312-269-7919

Period of Performance: ~~Date of Award through December 31, 2012~~

30 December 2011 through 1 June 2015

Chicago Board of Election Commissioners

Table of Contents

TECHNICAL PROPOSAL..... I
Table of Contents..... ii
Technical Approach and Justification..... 1
Executive Summary..... 1
Goals and Objectives..... 2
Blank Paper Ballot Delivery..... 2
Online Ballot Marking..... 3
Delivery Options..... 3
Email Encryption..... 3
Automated Ballot Duplication..... 4
Return Envelope Tracking..... 4
Accessibility..... 4
Integration with existing EMS Systems..... 4
Voter Authentication..... 4
Real-time VRDB Authentication..... 5
Election Administration Efficiencies..... 5
Online Voter Registration..... 6
Integration with existing online systems..... 6
Voter Outreach..... 6
Mobile Kiosks..... 6
Help Systems..... 6
Post-Election Survey to Measure Voter Satisfaction..... 7
Business Continuity..... 7
Security..... 7
Evaluation Factors..... 7
Significance..... 7
Sustainable..... 8
Impact..... 8
Strategic Approach..... 8
Innovation..... 8
Scalability..... 9
Collaborative..... 9
Cost Benefit Analysis..... 9
Schedule and Milestones..... 10
Reports..... 11
On-Demand Reporting Interface..... 12
Ballots Attempted/Completed..... 12
Voter Location Report..... 12
Data Logging..... 13
Data Sample of Logs..... 14
Data Analysis..... 14
FPCA Signup Activity..... 14
Voter Satisfaction Surveys..... 14
Help Desk Statistics..... 16

Table of Contents (continued)

Symptom Analysis Example…….. 16
Support Distribution Report Example…… 17
Regression Analysis of Log Data……... 17
Messaging……... 17
Project Management Reports…… 17
Management Approach…….. 18
Current Process……18
Justification for modification of current processes…….. 18
Proposed processes……... 19
Risk identification and mitigation……21
Performance Indicators, Projections, and Performance Measures……23
Voter registration…… 23
Ballot delivery……23
Ballot return…… 23
Auto duplication…… 24
Ballot challenges……25
Other……... 25
Financial Management…… 25
Milestones……25
Current and Pending Project Proposal Submissions…… 25
Qualifications……... 25
Vendor Partner – Everyone Counts – Examples of Relevant Projects……26
Vendor Partner – Everyone Counts – Management…… 27
Chicago Board of Elections – Management…… 28
Budget Proposal……...30

Technical Approach and Justification

Executive Summary

The Chicago Board of Elections is pleased to submit this application for participation in the Electronic Absentee Systems for Elections (EASE) Grant. We are committed to research, develop, field test and evaluate methods to improve our ability to support our UOCAVA voters. If awarded this grant, we will be able to demonstrate further our use of the latest technologies including a reliable, flexible, and easy-to-use ballot transmission and online marking tool for UOCAVA voters and election administration tools designed to reduce obstacles that UOCAVA voters commonly encounter.

The Chicago Board of Elections is highly committed to ensuring UOCAVA voters are given every opportunity to participate in our democratic process. The Board has a track record of quality service and continuous improvements in that process and has received favorable feedback from UOCAVA voters, who have expressed gratitude for same-day delivery of ballots, whenever possible, via the Internet.

The Chicago Board of Elections has consistently surpassed the 45-day requirement for distributing UOCAVA ballots by delivering ballots 60 days before the election. In the most recent General Election (November 2010), hundreds of UOCAVA voters were the very first voters anywhere in Chicago to cast ballots – ahead of local citizens long before the start of Early Voting and Absentee Voting.

Despite this record, more can be done to improve military and overseas voters' ability to vote. Specifically, we seek to reduce the need to access printers and postal service by increasing the ability to cast ballots via secured fax and Internet services. Increasingly, computer users have ready access to lightweight laptops and mobile devices, but not necessarily printers. Even when there is access to a printer, the voter must then rely on a postal service (USPS, courier service, military, diplomatic, and foreign) for timely return of ballots and other election materials. With many UOCAVA voters serving in remote locations, such as forward operating bases in Afghanistan or at sea, round-trip transit time can take weeks, if not longer.

Individuals deployed at sea may go months without calling at a port and receiving mail. Other voters may be assigned to temporary duty at a location other than their permanent duty station, requiring that postal mail be forwarded, which worsens the transit time. This leads to a likelihood that a voter may be disenfranchised because of inadequate time to receive and return the ballot. This situation is further compounded when issues arise that require the voter and the elections office to communicate to resolve an issue, requiring a second round-trip transit of materials – almost guaranteeing that the voter's ballot cannot be received in time to be counted.

Fortunately, alternatives exist. The omnipresent nature of the Internet provides for use of technology to provide expedited and real-time support for the UOCAVA voter. Even in areas where a printer or postal service is difficult or even non-existent, Internet access is generally available. Technology presents a considerable opportunity for significant progress in the ability to provide timely support to UOCAVA voters, increasing their participation and confidence in elections, and, more importantly, the success rate of those that do participate.

To this end, Chicago welcomes the opportunity to investigate and use technological solutions to overcome the barriers to full and timely participation by the UOCAVA community and provide better tools to the voter, improving the voter experience.

To assist us in this effort, we intend to engage the services of Everyone Counts. Everyone Counts is a firm completely dedicated to the use of technology to improve elections processes. They are 100% US owned and have been in the business of supporting elections since 1997. Everyone Counts had one of the best track records of success in the 2010 election with respect to the use of these advancing technologies.

Goals and Objectives

The Chicago Board of Elections is applying for this grant to conduct research on behalf of the 8,000 UOCAVA voters the agency traditionally serves in a Presidential Election. Additionally, the Board is applying for this grant in order to provide the UOCAVA voters with a more accessible, secure, and efficient process for requesting absentee registration, ballots, and voting in federal, state, and municipal elections. With the assistance of the EASE grant, this program has a significant impact on our UOCAVA voters' voting experience, all while providing meaningful research data for FVAP now and in future elections over the years.

Specifically, Chicago is addressing each mandate as required by UOCAVA, including easing the registration and absentee ballot sign up process, transmitting the ballot electronically, providing UOCAVA voters with the opportunity to electronically track their ballot, ensuring that ballots are transmitted a full 60 days prior to an election (exceeding the federal requirement of 45 days prior to the election), and, finally, providing reporting on the data collected. Chicago's strategic approach allows this program to be sustainable and scalable, using technological innovation to deliver the best possible solution. We have explored and agreed upon the budget to sustain this program for the next several years.

We are focusing on the following objectives:

- Decrease failure rates that UOCAVA voters experience with the absentee voting process.
- Increase the percentage of ballots successfully returned by UOCAVA voters to be either equal to, or greater than the percentage of ballots returned by the general absentee voting population in the jurisdiction.
- Develop tools to help election officials improve the handling of UOCAVA ballots and share these results so other jurisdictions may also receive benefit.
- Provide a secure and universally accessible solution that protects the voter and the ballot package.

The Approach

After accessing their ballot, the voter is provided several options for ballot delivery and return.

A. Blank Paper Ballot Delivery

1. The voter authenticates with the secure ballot delivery interface
2. Voter is provided with their correct ballot style
3. Ballot is downloaded, along with the associated oath, envelope template, and return instructions, as required by Illinois Law
4. Voter marks and completes ballot by hand

5. Voter signs the oath
    a. Voter returns the ballot package by one of the following methods
    b. Postal Service
    c. Licensed courier (such as FedEx or DHL)
    d. Through diplomatic mail from a U.S. embassy or consulate
    e. FAX (Although FAX has been allowed under a federal court order in a previous special election, this would require changes in state law that the Election Board would need to seek through the General Assembly and the Governor's Office.)
    f. Scanned and Electronically Mailed PDF (This would require changes in state law that the Election Board would need to seek through the General Assembly and the Governor's Office.)

B. Online Ballot Marking

1. The voter authenticates with the secure ballot delivery interface
2. Voter is provided with their correct ballot style
3. Voter marks and completes the ballot online (This would require changes in state law that the Election Board would need to seek through the General Assembly and the Governor's Office.)
4. Voter choices are rendered on the ballot as a digital, 2D bar code (This would require changes in state law that the Election Board would need to seek through the General Assembly and the Governor's Office.)
5. ~~At this point, the voter has the option to download the ballot and other material or have the ballot delivery system email the ballot and supporting material to the election office. (This would require changes in state law that the Election Board would need to seek through the General Assembly and the Governor's Office.)~~

C. Delivery Options

Download, Sign and Return	**Electronically Sign and Return**
1. Bar coded ballot is downloaded, along with associated oath, envelope template, and return instructions 2. Voter signs oath 3. Voter returns ballot package in one of the following methods a. Postal Service b. Licensed courier c. Diplomatic mail d. FAX* e. Scanned and emailed PDF* * Would require changes in state law for pilot program.	~~1. Voter uploads an image of their signature to the ballot delivery system*~~ ~~2. Ballot delivery system affixes the signature to the oath*~~ ~~3. Provide opportunity for voter to review the ballot, as well as the oath with their affixed signature*~~ ~~4. Ballot delivery system emails the ballot, along with the signed oath to the elections office on behalf of the voter using the voter's email address as the "From" address.*~~ ~~* Would require changes in state law for pilot program.~~

~~***D. Email Encryption***~~

~~If the voter chooses to have the ballot delivery system email their ballot, encrypted, electronic mail services will be used between the ballot delivery system and the elections office. This secure method of electronic mail delivery addresses a threat identified in NISTIR 7551 (A Threat Analysis on UOCAVA Voting Systems).~~

E. Automated Ballot Duplication

Ballots produced by the ballot delivery system contain a 2D bar code that consists of the ballot style, precinct, and the voter's preferences. This bar code provides an effective and efficient means of duplicating a non-machine readable ballot to a tabulation ready ballot produced by a ballot on demand system.

With this capability, Chicago could streamline its system to avoid the duplication of thousands of returned ballots if Chicago achieves the goals for significant growth in participation by UOCAVA voters. The bar code contains no personal identifying information. Owners of some smart phones with the appropriate computer application can inspect the bar code to verify personal identifying information is not contained in the bar code.

Over time and subject to overcoming legislative, certification, and technological challenges, we will pursue additional methods to support the duplication of ballots. We will investigate the upload of bar code data into the certified tabulation system using the same memory card technology used for transfer of voting data from Direct-Recording Electronic voting machines (DREs). This will avoid the use of duplicated paper ballots when used with a 2D bar code, further increasing the efficiency of the process.

F. Return Envelope Tracking

The envelope template contains a bar code with the voter's unique ID. This bar code enables identification of the voter when the ballot envelope is scanned by the sorter when received, flagging the voter in the voter registration system as having returned the ballot.

G. Accessibility

The ballot delivery system is required to be both Section 508 (ADA) and Section 203 (alternative languages) compliant. An additional benefit of the solution we have chosen is that we will be able to explore the possible deployment of such systems to serve voters with disabilities – in addition to the UOCAVA community. With enabling legislation, such a system could afford voters with disabilities even greater capacity to vote privately and independently by marking an on-line ballot more easily than marking a standard absentee ballot and without the need to cast a ballot in person at an Early Voting site or an Election Day polling place.

H. Integration with existing EMS Systems

The ballot delivery system is required to be compatible with our election management system to reduce the complexity of transferring ballot definition information to the ballot delivery system in preparation for the election.

I. Voter Authentication

To validate the authentication of voters, and to ensure that all voters receive the correct ballot style, each voter will be required to log on using distinct credentials. Authentication will be

accomplished by the voter entering their first name, last name, and other yet to be determined information that will uniquely identify the voter.

In Chicago, the voter's signature and oath are submitted with each ballot. The signature is considered the authoritative authentication of the voter when the ballot is returned for processing. However, authentication of the voter in the ballot delivery system is required to ensure the correct ballot style is provided to the voter.

In the event that the voter is unable to be located in the voter registration database, they will be asked for their address to determine the appropriate ballot style.

Chicago will provide the vendor, Everyone Counts, with an extract of their voter registration database. Initially this will be accomplished with a flat file export, which will be periodically re-exported for the purposes of updating on-going registration activity. As this research project progresses, we will investigate and, if appropriate, implement a more real-time web services-based integration, reducing hands-on efforts.

J. Real-time VRDB Authentication

As a part of our ongoing research, we will evaluate options for voters who are not found in the Chicago Board of Elections' database to be located utilizing a direct link to Illinois Voter Registration System (IVRS). This would provide maximum flexibility for voters who believe they are registered in a particular jurisdiction when they are, in fact, registered in a different jurisdiction. Once located within the IVRS, the voter can then be redirected to the jurisdiction of their registration. This integration will likely be late in the grant cycle.

K. Election Administration Efficiencies and Common Data Formats

As part of our research, we have chosen to experiment with solutions that could drive down the ongoing cost of the administration of serving UOCAVA voters, while increasing accuracy of the UOCAVA ballots, reducing the potential for human error and serving more voters with their full ballot. Additionally, because this effort will implement Common Data Format, it will make integration of eLect independent of different EMS and voter registration systems.

eLect Administration Wizard – Phase 1

This functionality would provide the ability for Chicago to build their own ballots through an online wizard vs. contracting with an outside vendor (in this case, Everyone Counts) to produce UOCAVA ballots. By selecting this module, the per election administrative fees associated with this activity – and the ongoing per election fees beyond 2012 – could be eliminated and election administration would be streamlined and managed by the Chicago Board of Elections.

eLect Administration Wizard – Phase 2

In this phase of the technology rollout, the wizard would be integrated with Chicago's EMS and Voter Registration Databases using Common Data Format. Everyone Counts will enhance the wizard for ballot building by allowing for the automated export of data into the eLect Administration tools. This second phase delivers a fully integrated module between the Chicago Board of Elections, all databases used in administering the election and Everyone Counts. This solution also supports the common data format project being sponsored by FVAP.

L. Online Voter Registration

Chicago provides the ability to register on line through a PDF that can be completed using a computer keyboard and then printed out for a "wet" signature. We plan to research options to further enhance these tools to facilitate voter registration. This may include integration with the ballot delivery system to provide all potential UOCAVA voters the ability to register over the Internet. Additionally, we will pursue a "registration launch" system where the voter would not need access to a printer. Whether on a laptop or a handheld device, the user would be able to enter the voter registration data to launch the mailing of a card to the voter that the voter then could sign and return to complete the registration process. The complete ballot delivery system will also support the completion of the Federal Post Card Application (FPCA).

M. Integration with existing online systems

The Board of Elections would work to integrate any and all online solutions with the existing database for logging the receipt of ballot applications, the emailing or mailing of ballots, and the receipt of returned ballots – as well as logging the status of each UOCAVA ballot application and the receipt of the returned ballot on the Internet so that the voter may verify the status of his or her application and the receipt of the returned ballot.

N. Voter Outreach

Chicago will also look to improve our ability to provide outreach to our UOCAVA community. We intend to use tools and services provided by Everyone Counts to facilitate messaging to UOCAVA voters, options include SMS text messaging, email, and other methods. This messaging capability will allow us to be proactive in communicating with voters. Example scenarios of possible uses include:

- From a list of past UOCAVA voters, the Board can issue reminders to those who have not yet applied for their ballots or not yet returned their ballot close to the election deadline.
- Encouraging voters to vote early, helping manage system load

~~*O. Mobile Kiosks*~~

~~Our vendor has a kiosk solution that they are developing and testing that allows a means of setting up a "voting center" type environment that could be used in areas where there is a concentration of voters (such as a military hospital) or where a unit may be deployed and unavailable during the election period (such as a submarine). We have been invited to facilitate some level of applied research with these tools.~~

P. Help Systems

Although the exact method of implementation remains to be determined, we will implement a robust suite of help features using the resources of both the vendor and our election team. This would include:

- 24/7 email and telephone support during the entire voting period
- Online chat support
- Context-specific help and FAQ's

It is expected that the vendor would handle technical issues related to the site, as well as after-hours calls, and that the Chicago Board of Elections would handle business hour inquiries for election-related items.

Q. Post-Election Survey to Measure Voter Satisfaction

To provide a means for improving our implementation and to provide FVAP feedback on research completed, we will include an optional survey for voters to complete.

R. Business Continuity

To ensure that our UOCAVA community is well served by this system at all times, twenty-four hours a day seven days a week, the vendor will be required to have a robust business continuity plan that will ensure the system remains available in the event of failures of primary servers and communications. This includes proper backups of systems and data, alternate sites in the event of failure of the primary site, and redundant hardware and communications.
In addition, a highly secure (physical and technological) environment will be required to ensure the integrity of the voting process. The vendor will be required to have sufficient capacity to survive peak ballot access traffic.

S. Security

Security of our proposed solution is paramount and will the prime criterion in measuring the effectiveness of our project and a key factor in its continuance after the grant period. All communications between the voters' browser and the server will be secured using a minimum of 256-bit encryption.

If the voter elects to have the ballot delivery system email the ballot back on their behalf, the email shall be sent encrypted using a minimum of 256-bit encryption.

Voter-related data stored on the vendor's system will be encrypted using 2048-bit encryption. The ballot delivery system shall not retain any record of the voters' selections anywhere on the system, including transaction logs, cache, etc., after the voter has exited the system.

The vendor is required to maintain a physically secure facility using the most secure industry standards for threats against communications and malicious file threats (e.g. highly secure firewalls, procedures to protect against denial of service attack, anti-virus and anti-spyware applications, etc.).

Evaluation Factors

Significance

- Addresses **every** stage of the voting cycle - voter registration, ballot delivery, ballot markup, ballot return, ballot tracking, and challenges after ballot return
- Links to our Online Voter Registration system
- Improves FPCA capability
- Links to resources such as online, tailored voter pamphlet
- Links to enhanced ballot tracking system
- Provides ability for voter to mark up ballot online 24 x 7 anywhere there is Internet
- Allows last minute UOCAVA voters to obtain and return ballots until the absolute legal deadline 10 days prior to Election Day
- ~~Provides option for the voter to have the ballot delivery system email the ballot on their behalf using encryption~~

Sustainable

- Relatively low annual fees. When completed, the administrative wizard would eliminate the need for per election fees.
- As a hosted solution, will not significantly increase load of elections staff
- It is anticipated that savings and efficiencies realized from implementation of this system will minimize impact of ongoing costs.
- Ability to provide universal access to the ballot by leveraging the capabilities implemented for UOCAVA voters to assist voters with disabilities.

Impact

- All UOCAVA voters will be eligible to use proposed system.
- Current UOCAVA registration for a Presidential Election year is approximately 8,000. We anticipate a significant increase as we prepare for the 2012 elections.
- Should other counties wish to join our efforts we have identified a scalable and cost effective model for them to participate
- To the degree that enabling legislation passes at the state or federal levels, the features of this proposal also would offer the capacity to improve our service to voters with disabilities, as well as voters with last minute requests for replacement ballots
- The Board of Election Commissioners is scheduled to conduct two elections – the General Primary in March and the General Election in November – in calendar year 2012.
- Anticipate the Board of Election Commissioners will seek to double the UOCAVA return-ballot rate with the use of this system, and the increased voter outreach will further increase participation in out-years

Strategic Approach

- Overall comprehensive, multi-pronged solution that allows the voter a choice of ways to receive and return their ballot
- Allows for real-time capability of the Internet to overcome inherent issues with movement of ballots and other materials via a constrained postal system
- Provides access to ballots 24x7 anywhere there is the capability to connect to the Internet
- ~~Testing of several new concepts (such as CAC card authentication and encrypted email return of ballots) that could allow better integrity of the process~~
- Tests new capability to improve efficiency of processing UOCAVA ballots once received in the elections office through use of 2D bar code technology
- Improves ability to assist UOCAVA voters with previously under-emphasized issue of challenged ballots, which might otherwise go uncounted

Innovation

- Automated ballot duplication; that is, the ability to translate ballots not compatible with tabulation equipment to tabulation ready ballot using 2D bar-code
- Development of a capability to store data in 2D bar codes to memory cards for direct upload into tabulation system bypassing scanning of ballots
- Use of Common Data Format for integration between eLect solutions, EMS, voter registration systems, and other databases makes eLect more agnostic to other vendor products.
- ~~Option for voter to upload signature image and have the ballot delivery system and attach to FPCA and email FPCA on behalf of the voter using encrypted email (future)~~

- 24 x 7 capability of obtaining replacement ballot rather than business hours only
- ~~Kiosks – remote voting stations~~
- Use of messaging capabilities for voter outreach

Scalability

- The capabilities developed in this effort can be extended to any other county with similar legislative requirements and restrictions.
- The design principals proposed by Chicago, along with the vendor Everyone Counts, have taken into account the challenges associated with scaling to accommodate additional voters and functionality.
- Use of 2D bar code technology on ballots will allow elections offices to absorb significant increases in voters using this system without significant impact on staffing for duplication or tabulation of ballots
- Everyone Counts, using the proven design employed within this grant, has conducted large elections electronically in a number of jurisdictions without any scalability issues
    - Australia March 2011 50,000 Voters
    - Honolulu May 2011 18,000 Voters
    - National Student Parent Mock Election 2004 hosted 4 million voters on one day

Collaborative

- The design of our proposed implementation is such that it should be usable by any other jurisdiction that does not have more restrictive statutes.

Cost Benefit Analysis

A traditional cost-benefit analysis normally compares costs and savings. It is important to note that in efforts like this, benefits are often more qualitative than quantitative. In fact, some of the features discussed may increase costs slightly, but when balanced against the improved service to our UOCAVA voters, are worth the costs.

The second important note is that for the most part, features and capabilities proposed in this application are not priced separately, but part of a single license fee/maintenance fee from the partner vendor. The only other costs are per election costs, again for the use of the entire package with costs not broken out by function/capability.

Benefits from use of this system are detailed in depth in the Evaluation Factors subsection above and also in the Performance Indicators, Projections, and Performance Measures subsection under the Management Approach. Costs are detailed in the Budget Section.

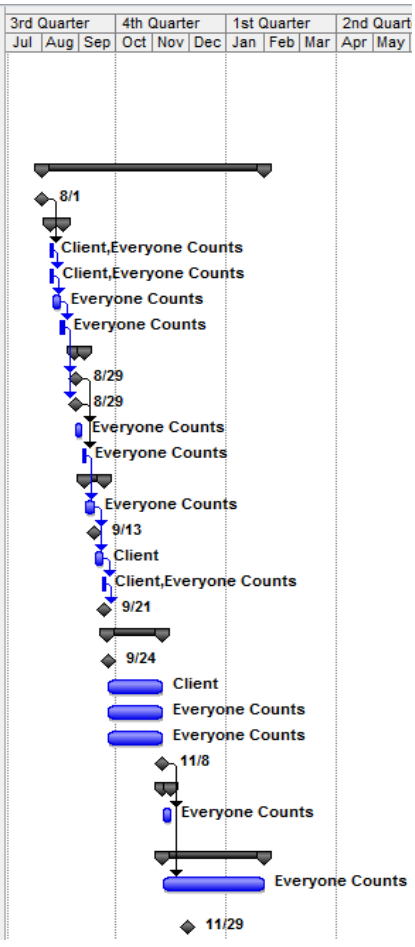
Schedule and Milestones

The following milestones will be used for each election during the EASE grant time period:

- **Kickoff Meeting** - the first meeting after the contract has been awarded, during which team members are introduced, stakeholders documented, and key election project properties defined. Regular communications plan will also be defined.
- **Finalize full project scope** and detailed requirements. To include measurable objectives by project deliverable.
- **Active Project Management** Cycle including delivery of components for user acceptance testing and release.
- **Data Delivery** – Chicago provides vendor with data
- **Election Logic and Accuracy Testing** - the completion of client User Acceptance Testing, after which the election is locked for voters
- **Election Go Live** - the first day when voters can vote in the online election (a minimum of 45 days before Primary and ~~60~~ 46 days before the General Election).
- **Election Close -** the final day of voting in the election. No further voting activity. Site remains active for ballot tracking and challenge resolution activity.
- **Election Certification -** In general, the proclamation of official results occurs 21 days after the Primary Election and 21 days after the General Election.
- **Reporting** - Upon issuance of final proclamation, the research data will be aggregated and the final report will be written. Reports are available on-demand at anytime during the election to authorized individuals

The following is a sample Gantt chart for one election.

ID	Task Name	Start	Finish
1	*Color Legend*		
2	*Client Task*		
3	*Project Phase Begin*		
4	*Milestone*		
5	**2011 General Election**	**8/1/11**	**1/31/12**
6	Contract Awarded	8/1/11	8/1/11
7	**Initiation**	**8/8/11**	**8/18/11**
8	Kickoff Meeting	8/8/11	8/8/11
9	Job Specification Calls	8/9/11	8/9/11
10	Implementation Plan	8/10/11	8/10/11
11	Project Plan	8/17/11	8/17/11
12	**Build**	**8/29/11**	**9/5/11**
13	Client Delivers Draft Ballot Data	8/29/11	8/29/11
14	Client Delivers Initial Voter Registration Data	8/29/11	8/29/11
15	Draft Election Built	8/29/11	9/2/11
16	Draft Voter Registration Credentials Loaded	9/5/11	9/5/11
17	**Test**	**9/6/11**	**9/21/11**
18	Everyone Counts Testing and Review	9/6/11	9/13/11
19	Voter Registration Database to Everyone Counts	9/13/11	9/13/11
20	Client Testing and Review	9/14/11	9/20/11
21	Election Logic and Accuracy Testing	9/21/11	9/21/11
22	Election Locked for Voters	9/21/11	9/21/11
23	**Election**	**9/24/11**	**11/8/11**
24	Election Goes Live	9/24/11	11/8/11
25	Scheduled Voter Registration Database Releases	9/24/11	11/8/11
26	Scheduled Voter Registration Database Updates	9/24/11	11/8/11
27	Election Maintenance and Reporting	9/24/11	11/8/11
28	Election Closes	11/8/11	11/8/11
29	**Report**	**11/8/11**	**11/15/11**
30	Final Report, Including Measurement against Strategic Goals and Lessons Learned	11/8/11	11/15/11
31	**Post Election Support**	**11/8/11**	**1/31/12**
32	Election Remains Functional and Available in case of recounts or audits	11/8/11	1/31/12
33	Certification of Election Results	11/29/11	11/29/11



Reports

Comprehensive reporting will be implemented to monitor and provide analytical tools for all portions of the election management process. This is facilitated by having reports in the following areas:

- On-Demand Reporting Interface
- Logging of Systems Activity (for further analysis)
    - Real-time staffing and process planning by election office
    - Post-Election Analysis of Activity
    - System performance and issue
- Voter Surveys
- Customer Service and Help Desk Log Reports and Analysis
- Project Management Milestone Reporting
- Post-election reports
- UOCAVA Voter available tracking interface

This section is based on currently available reports in Everyone Counts' product suite. During the project planning and implementation phase, additional reports may be requested of the vendor. Experience gained through use in actual elections may also drive additional reports to meet the needs of other counties or to satisfy FVAP research needs.

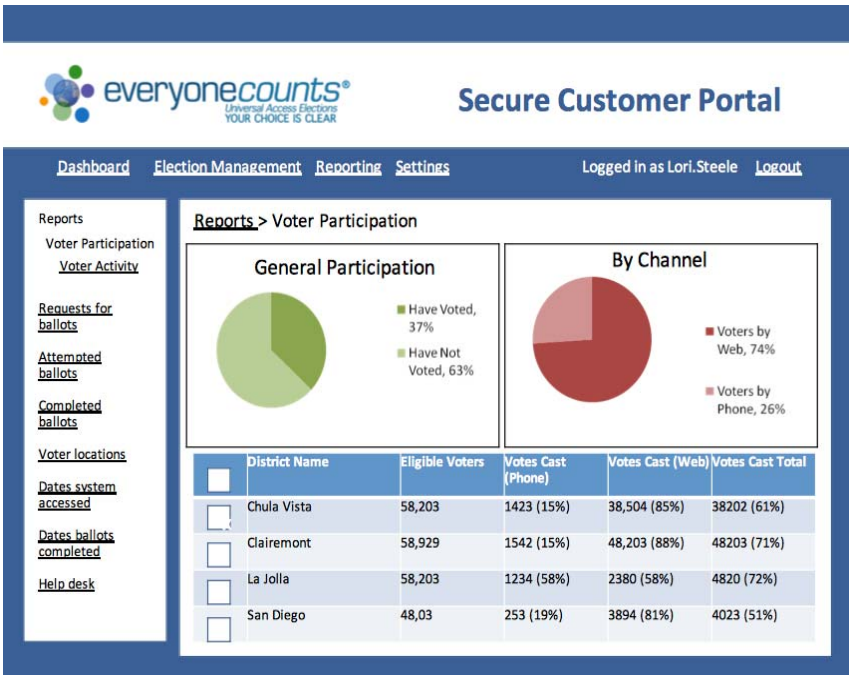
On-Demand Reporting Interface

An on-demand reporting interface will provide real-time access to information regarding the activity of all running elections

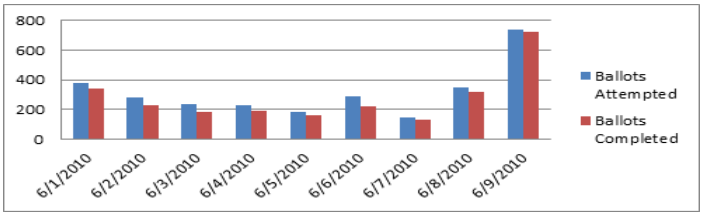
Reports Provided

- **Voter Activity**: The Voter Activity Report provides insight into system use. This includes:
    - Voting Activity / Hour
    - Voting Activity / Day
    - Total Voting Activity (within date range)
- **Voter Participation**: This report provides
    - Turnout by District/Ballot Style
    - Other as determined by Chicago Board of Elections and FVAP
- **Voter Locations:** Report showing the source location of voting activity. Reports are based on the IP address, and
    - Source City, *ie: Los Angeles, United States*
    - Source Domain, *ie: .mil, .gov*

On-demand Reporting Interface



Ballots Attempted/Completed



Typically, the graph spikes around the time of notification emails and reminders.

Voter Location Report

Country	City	Date	Logins
United States	New York	6/1/2010	377
United States	Los Angeles	6/1/2010	281
Canada	Toronto	6/1/2010	234
Great Britain	London	6/1/2010	228
France	Paris	6/1/2010	182
Germany	Berlin	6/1/2010	288
Canada	Ontario	6/1/2010	182

Japan	Tokyo	6/1/2010	178
		Total	**2862**

Data Logging

Everyone Counts uses event logs to archive all administrative and user access within the voting system. **No logged data will ever associate a voter with the preferences they have marked on any ballot, ensuring voter privacy**.

The following information is logged:

Access Period	This field refers to the period of the election and is customizable. Typically each election has three primary states: Content Review, L&A, and Live. All summary reports provided shall utilize data acquired during the "Live" period
Time (TimeZone)	This field is the server Date/Time stamp when the event occurred
Time (System Time)	This field is the Coordinated Universal Time, UTC, represented in POSIX Time
SessionID	This field is a browser session hash and is the unique identifier for all voters accessing the system
Event	This field represents the variety of events logged during each election: ● User Login ● User Logout ● Ballot Accessed ● Ballot Printed ● Ballot Submitted (where available)
IP Address	This field is either the standard four-part IP address or optionally a hash of the IP Address, intended to ensure voter privacy IP addresses can be used to identify the city of the user that is voting from.

Data Sample of Logs

Access Period	Time (Canada/Pacific)	Time (System Seconds)	SessionID	IP Address	Event
Live	19-04-2010 09:06:29	1271693189	817e203e135bad14dc1cbde203bed87f	207.229.6.250	User login
Live	19-04-2010 09:09:00	1271693340	3200d91b5f9f77526db200a130762ad3	68.147.223.212	User login
Live	19-04-2010 09:09:46	1271693386	a41b590c0dbf2c311acc28fcc72b871d	208.97.113.34	User login
Live	19-04-2010 09:12:19	1271693539	112819fe8deb4f19fb056d1aa7c790e4	203.18.176.243	User login
Live	19-04-2010 09:15:05	1271693705	4c00ed4ca30c952f88e20acdf54de867	208.80.96.57	User login
Live	19-04-2010 09:15:16	1271693716	b742cfff2b14d9eb2394352e25dca8cf	74.198.12.3	User login
Live	19-04-2010 09:17:15	1271693835	f76ee37d032ed935a598de4d426f365f	64.39.171.41	User login
Live	19-04-2010 09:18:42	1271693922	c438782c27a8297c22df6d4e5269dff7	199.212.48.2	User login
Live	19-04-2010 09:19:57	1271693997	7eddb3a3633a02ce652c2dbe2119e80d	68.179.94.250	User login
Live	19-04-2010 09:21:16	1271694076	b27d56e7c48a4059ec975dbf1a400eaf	96.49.111.135	User login

The data sample above represents the first 10 logins during a Live Access Period opening at 9am.

Data Analysis

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

FPCA Signup Activity

Reports will be provided to Election Administrators showing signup activity and adoption rate of online-based FPCA sign ups.

UOCAVA Voter-Accessible Tracking of Ballot

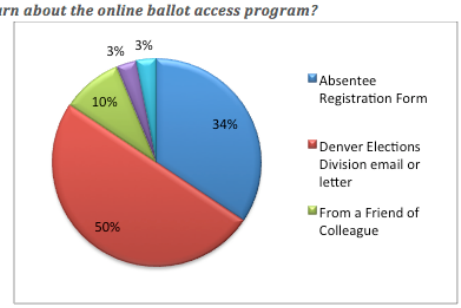
Each voter has the ability to log into the state or county ballot tracking tools to access all available information regarding their ballot. Additionally a voter may be provided with a distinct receipt code at the end of the ballot marking process that may used to ensure their ballot was received by the county. Tracking information includes:

- Ballot accessed
- Ballot printed
- Ballot in-Transit
- Ballot received by County
- Ballot available for tabulation

Voter Satisfaction Surveys

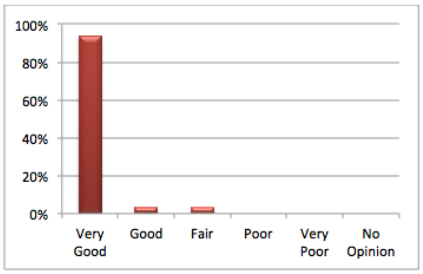
As a part of each election, voters are asked to complete a voluntary customer survey. These questions are collated and a report generated for each. Below are example questions with associated responses. We will be developing further questions to assist us in improving our UOCAVA operations.

How did you learn about the online ballot access program?



Please rate the following features based on your experience using the online ballot marking tool:

- Ease of use



Additionally, free-form questions will be asked, and all responses collated for analysis.

Please provide any additional comments on the online ballot marking tool below:

- This is definitely a great system. Thank you.
- Seems like a great improvement over the previous mail in ballots. I have received mail in ballots in the past after the election date. This is an improvement, though I still received the mail in ballot by regular mail along with instructions on how to vote online. Seems like it might have been faster/cheaper/easier to receive electronic notification rather than regular mail.
- This is by far the easiest way for me to vote as an absentee voter. Fax, email, and mail ballots are all possible but very difficult to complete. This online voting process is easy, keep using and improving it!
- This (online voting) is great. I feel like my vote will be counted without relying on 2 postal systems. Plus it cuts down on paper, which is always a plus.
- None
- I appreciate the ability to still cast my ballot as an American temporarily living overseas. I always felt my mail in ballot never was counted & worried it would not make it in time. I feel my vote will be counted on the day of the election using this method.
- Much more convenient than faxing.
- get out the Online Vote! No one knew this was possible until I got my piece of paper and posted it on Facebook. Thank you Amanda Hill for ALL of your help!

Help Desk Statistics

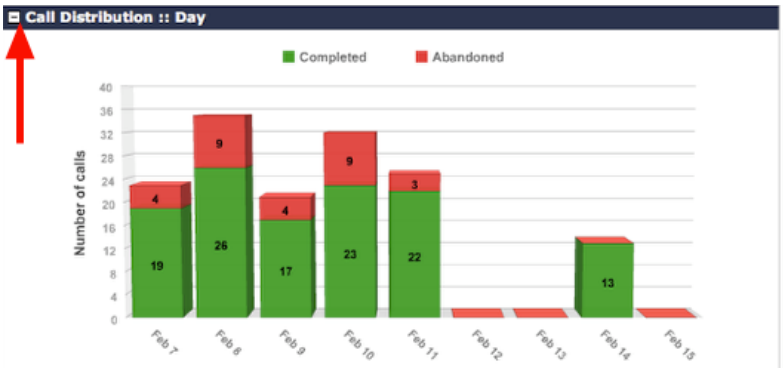
Help desk reports provide the following analysis of the amount of activity and usage of help desk systems throughout an election. Help desk reports provided include:

- E-Mail / Chat / Call Distribution
    - Average Hold Time / Delay for Response
    - Number of Calls
        - By Day
        - By Hour
    - Abandonment Rate
- Symptom Analysis
    - Symptom causing inbound support request
    - Solution Provided

Symptom Analysis Example

Symptom	**Resolution**	**Count**
Could Not Login to Voting System	Reset Credentials	38
Forgot Voting System URL	Re-sent URL to Voter	17
Signup Request	Signup user	9
Questions about online voting	Provide documentation	3

Support Distribution Report Example



Date	Completed	Abandoned	Total Calls	Complete / Abandon / Volume
02/07/05	19 calls	4 calls	23 calls	83% 17% 15%
02/08/05	26 calls	9 calls	35 calls	74% 26% 23%
02/09/05	17 calls	4 calls	21 calls	81% 19% 14%
02/10/05	23 calls	9 calls	32 calls	72% 28% 21%
02/11/05	22 calls	3 calls	25 calls	88% 12% 17%
02/12/05	0 calls	0 calls	0 calls	no completed or abandoned calls 0%
02/13/05	0 calls	0 calls	0 calls	no completed or abandoned calls 0%
02/14/05	13 calls	0 calls	13 calls	100% 9%
02/15/05	0 calls	0 calls	0 calls	no completed or abandoned calls 0%

Regression Analysis of Log Data

At the conclusion of each election, all anonymous log data is analyzed for meaningful data to further the research associated with online voting systems. Intelligence is extracted in the following key areas:

- Peak Voter Activity
- Time to complete ballots
    - Time to complete contest (based on length)
- Preferred method of voting
- Number of errors warned
    - Number of errors corrected

Messaging

Reporting included with eLect Notify (email notifications)

- Message Open Rate
- Message Click-Through Rate (if links are included in the message)
- Unsubscribe Rate
- Bounce Report

Project Management Reports

Regular reports on project management milestones, as well as reports regarding financial progress of the project, will be provided to FVAP as key milestones are reached. These reports will address the successes, challenges, and barriers of the implementation and its use.

Management Approach

Chicago will be focused on the core requirements for UOCAVA voters, including easing the registration and absentee ballot sign up process, transmitting the ballot electronically, providing UOCAVA voters with the opportunity to electronically track their ballot, ensuring that ballots are transmitted a full 45 days prior to a Primary Election (~~60~~ 46 days prior to a General Election), and, finally, providing reporting on the data collected. Chicago's strategic approach allows this program to be sustainable and scalable, using technological innovation to deliver the best possible solution.

We are focusing on the following objectives:

- Decrease failure rates that UOCAVA voters experience with the absentee voting process.
- Increase the percentage of ballots successfully returned by UOCAVA voters to be either equal to, or greater than the percentage of ballots returned by the general absentee voting population in the jurisdiction.
- Develop tools to help election officials improve the handling of UOCAVA ballots and share these results so other jurisdictions may also receive benefit.
- Provide a secure and universally accessible solution that protects the voter and the ballot package.

Current Process

Chicago receives voter registration requests from UOCAVA voters in several different ways - paper forms mailed to our offices, emailed inquiries, the state voter registration system, and the Federal Post Card Application (FPCA). Although not as prevalent, we also receive few registrations via the Federal Write-in Absentee Ballot (FWAB).

All active UOCAVA voters are emailed a pdf of the paper ballot 45 days in advance of primary and ~~60~~ 46 days before general elections. UOCAVA voters who have requested email ballots (either one time or permanent) will be emailed ballots and instruction at the same time paper ballots are mailed. UOCAVA voters can call, email, or FAX requests for an email ballot anytime up to 10 days before Election Day. (After that deadline, the Chicago Board of Elections responds to inquiries with FWAB materials.)

UOCAVA voters have several options for returning their voted ballot to the elections office. They can mail the paper ballot, email the ballot, or FAX the ballot.

Ballots with problems (e.g. oath not signed, signatures on oath does not match signature on file, etc.) are challenged and every attempt is made to contact the voter to resolve the issue through letters, email (if an email address is on file), and telephone. Unfortunately, many UOCAVA voters cannot be reached in time, due to their remote locations.

Justification for modification of current processes

The current process is too reliant on a delivery service (postal service) that takes too long to deliver the ballots (or registration requests) both to and from the UOCAVA voter. The current process of emailing ballots also is reliant on the UOCAVA voter having ready access to a printer to be able to print the ballot before marking it and returning it by mail. Additionally, the transient nature of many UOCAVA voters means that additional delivery time is required to

forward the ballot to the voters' actual location. This is particularly true of deployed military personnel.

Many UOCAVA voters do not keep their mailing address current with the election office resulting in mail never delivered or delayed even further by forwarding. Nationally, FVAP estimates that 17% of military voters never receive their ballots. Use of the Internet allows the voter access to their ballot and a means of voting anywhere there is access to the Internet anytime after 45 days prior to the Primary Election, ~~60~~ 46 days before the General Election. Additionally, email addresses have a higher likelihood of remaining current than physical mailing addresses. Even if the physical or email address is no longer current, an interested UOCAVA voter can proactively access their ballot twenty-four hours a day, seven days a week through our partner's (Everyone Counts) services by going through the links available on the FVAP web site.

The UOCAVA voter can immediately return their ballot electronically via several means. A process that previously took several weeks or longer can now be completed and in the election office in an hour, as early as 45 days prior to the Primary Election and ~~60~~ 46 days prior to the General Election – and then continuing through 10 days before Election Day.

Proposed processes

To facilitate voter absentee registration, we will use Everyone Counts' eLect Platform to provide a link to the Chicago Board of Elections voter registration system where the voter can provide the required information electronically. Alternatively, voters can continue to complete a FPCA electronically and either print, sign and mail the FPCA to the elections office, ~~or upload a signature and have Everyone Counts deliver it to the appropriate county's election office electronically.~~ The FPCA creates a registration in cases where none currently exists. The Board of Election Commissioners then needs the signed and completed form, with the last residential address, to be submitted.

Forty-five days prior to the Primary Election (~~60~~ 46 days prior to the General Election), UOCAVA voters will be able to access their ballot through Everyone Counts' eLect Today product. Through the authentication process, they will receive the proper ballot for their registered address. The voter will then have several choices regarding voting and returning their ballot

1) Print a blank ballot, cast their ballot by hand, sign the oath, and mail the paper ballot and oath to the election office by postal service;

2) Use the online wizard to cast their ballot; download the cast ballot, oath, and other materials; sign the oath; and mail the paper ballot and oath to the election office by postal service, a licensed courier/motor service, or through diplomatic mail;

3) If state law can be amended to allow for a pilot program, use the online wizard to cast their ballot, download the cast ballot, oath, and other materials, sign the oath, attach the ballot and oath to an email, and email or FAX the packet to the election office; or

~~4) If state law can be amended to allow for a pilot program, use the online wizard to cast their ballot, upload their signature to eLect Today, eLect Today attaches their signature to the oath, eLect Today attaches ballot and oath to an email, and eLect Today emails packet to the election office using voter's email address (This feature is an enhancement to be developed).~~

eLect Today will print a 2D bar code on cast ballots with the voter's choices embedded, as well as the precinct and ballot style. (Important note: No personal identification information will be included in the bar code, which can be verified using some smart phone apps.)

When ballots are received at the elections office, the elections office will use eLect Transcriber to auto duplicate ballots received into tabulation ready ballots using the 2D bar code. This auto duplication process will save staff hours for handling the increased number of UOCAVA ballots generated by this proposal. ~~A future enhancement we are planning is to develop a means of storing the voter's choices on a memory card (similar to current DRE process), which would be used to upload into the tabulation system, further improving the efficiency of the process.~~

We intend on using Everyone Counts' eLect Notify product to improve outreach and communications to UOCAVA voters. eLect Notify allows elections officials to send emails or text messages to voters. For instance, this could be used to notify a voter that there was an issue with their ballot (e.g. forgot to sign) or to warn voters that had not yet returned a ballot and the election date was fast approaching.

Using Everyone Counts' eLect Platform, we will provide access to various county and state reference material such as online voter pamphlets and ballot tracking. This will allow UOCAVA voters to obtain additional information about candidates and measures. The ballot tracking features will allow voters to verify that the election office has received their ballot.

~~Everyone Count is developing a mobile kiosk solution (eLect Mobile) that we intend to test for providing service to concentrated areas of UOCAVA voters, such as at military hospitals or local military bases. We will also provide some level of applied research in polling sites to gain voter feedback on these new tools.~~

Everyone Counts' application is already tested with our election management systems (EMS) that are used to develop our ballots. As part of this grant, Everyone Counts will be developing an Administrative Wizard using Common Data Format technology to allow election officials the ability perform some of these tasks themselves and eliminate the per election fee, while making the process less dependent on other vendors' products.

Initially voter data will be transferred to Everyone Counts' eLect system by flat file, As the project proceeds, we intend to develop more real-time integration between our voter registration systems and eLect Today to ensure the most up to date information about UOCAVA voters is available. This integration could also pass information back about voters who have voted to assist election officials in their staff and resource planning and to update tracking information.

To protect the integrity of data and enhance the secrecy of the voters' choices, we intend to make maximum use of encryption technology for communication between the voters' browser and eLect Platform, the email transmitted to the election office by eLect Today, and data stored on eLect Platform. If the voter emails the ballot on their own, we will not be able to provide encryption services.

Chicago is committed to continually improving our service to the UOCAVA voter. To facilitate this effort, we intend to make maximum use of the survey tools offered by the eLect Platform to solicit feedback from the UOCAVA voter and identify areas needing improvement.

Many of the features being developed to provide better services to UOCAVA voters will also allow the Board of Election Commissioners to explore and advocate for changes in the law that could better serve other communities of interest, particularly voters with physical challenges. An

online system would allow voters to mark a ballot independently using a computer. This offers more independence to blind voters and those with dexterity issues who may be able to use a computer more effectively than a pen with a paper absentee ballot. We expect to be able to do this without increased costs. Efficiencies gained by using these tools with local communities can help offset the per-ballot cost of new services whose initial goal is to enhance ballot access for UOCAVA voters.

Risk identification and mitigation

Risk	Impact	Prob	Mitigation
Election system vendor is unable to meet the needs of the project on schedule.	high	low	Selected a vendor with a strong track record of success. Manage vendor deliverables with weekly status updates.
Ballot data is finalized with insufficient time to implement online election.	high	high	Integrate online election vendor systems with EMS systems for direct transfer of data. Thorough pre-testing. Timeline same as print vendor.
Will vendor be able to demonstrate system integration with voter registration system?	high	very low	Currently use flat file transfer - well establish method for current processes.
UOCAVA voter registration data changes frequently during the course of the election.	low	med	Link to VRDB. Schedule voter registration database updates to vendor in advance.
UOCAVA voters may not have Internet access.	high	med	Continue current practice of mailing paper ballots for those voters
Tight project timescales mean that delays will lead to missed election go live date.	med	med	Limit features/capabilities implemented first election to current, stable capabilities. Selected vendor that has previously stood-up an election on tight timeline.
Ballots of online election contain errors.	high	low	Audit vendor's quality assurance process. Ensure all acceptance, Logic and Accuracy tests are completed successfully before election go live date.
Project subject to malicious electronic attack	med	med	Work to security based on DCA approved and other standards. Create a detailed business continuity and disaster recovery plan.

Submission of multiple ballots by the same voter.	very low	high	Control detection and control of multiple ballots at election office using existing controls
Physical security at data center may be compromised	high	low	Maintain security management measures compliant with SAS 70 Type II[TI1] defined in the data center service level agreement.
Vendor staff may present a security risk to the project	med	low	Require security checks on vendor employees to assess risk of possibility of such occurrences.
Customer demand for the election services might be larger than anticipated.	med	low	Ensure that the technical system is built to cope with the largest possible demands. IT works closely with sales for capacity planning. Automatic monitoring of system configured for notifications 24/7 should system go outside of expected parameters.
Negative news stories about the new voting methods appear in the local press.	med	high	Engage with local press during the voter engagement campaign and provide them with positive stories and photo opportunities to education them about benefits.
Turnout is low impacting research results.	low	low	Strong UOCAVA voter outreach and messaging program starting well before first election.
Culture change issues may generate negative feelings in internal staff and stakeholders working on the project.	high	med	Start internal promotion of the project as soon as possible after contract agreement. Also provide complete visibility of the service development to end users throughout the process.
Risk that the vendor will not maintain leadership position in fast changing industry.	med	low	Selected vendor with strong track record and committed leadership
Risk that CEO and other key leaders may leave company	med	low	Strong succession planning and employee development program. Cross training. Strong process documentation
Some of the technologies may be new to some election staff	med	med	Limit number of new features/capabilities implemented first election. Ensure staff receives relevant training before they employ their skills.

Performance Indicators, Projections, and Performance Measures

Voter registration

- Increased participation - with more readily available electronic access to an online tool, we expect higher percentages of UOCAVA voters will be able to participate and return their ballots.
- Reduced errors - if voters are able to enter data electronically directly to the database, transcription errors (e.g. from illegible handwriting) will be reduced.
- Cost savings - if voters enter the data themselves, costs for data entry will be reduced. Costs will be further reduced by increased accuracy, reducing the need for follow-up.
- Expect that voter registrations submitted on paper forms (state registration form, FPCA, FWAB) will migrate to online registrations. Forecast that for the 2012 General Election, more voters will register online than use paper.
- Baseline figures for source of registrations:

	total registrations	State paper form	FPCA/FWAB	online
last 12 months -	7,163	35	7,138	N/A
2008 (presidential) -	7,966	N/A	7,966	N/A

Ballot delivery

- Availability - will provide the UOCAVA voter with twenty-four hour, seven day a week access during the 45 day voting period (30 days for Special Elections).
- Ballot Accuracy - voter is assured of receiving the correct ballot styles, contests, and candidates specific to their registered address.
- Increased voter participation - with a user-friendly tool to assist in voting in a timely manner, expect more UOCAVA voters will exercise their right to vote.
- Guaranteed delivery - delivery of ballot guaranteed for UOCAVA voters using eLect Today, whereas ballots sent via postal service may not be delivered due to incorrect addresses, slow service, voter on temporary duty elsewhere, etc.
- Forecast that for the 2012 General Elections the percent of UOCAVA voters obtaining their ballot electronically will double, with that number tripling by 2014.
- Baseline figures for ballots delivered electronically:

	Total UOCAVA Ballots Issued	Ballots delivered electronically
2010 General -	7,163	6,181
2009 Special Election -	2,093	1,786
2008 General -	7,966	6,328
2007 Municipal -	819	325

- Statistics for non-delivery of ballots not available locally.

Ballot return

- Availability - will provide the UOCAVA voter access 24 x 7 during the 45 day voting period (30 days for Special Elections).
- Increased voter participation - with a user-friendly tool to assist in voting in a timely manner, expect more UOCAVA voters will exercise their right to vote.
- Improved timeliness - with the ability for UOCAVA voters to immediately access ballots when they are available (45 days before the Primary Election and ~~60~~ 46 days before the General Election), and ~~the potential for UOCAVA voters to be able to cast and return~~

~~their ballots without a printer and without waiting for postal service delivery and return, UOCAVA voters will be better able to meet statutory deadlines. This should help significantly reduce and nearly eliminate the prospect of ballots being "returned too late" to be counted.~~

- Voter errors - since eLect Today will prohibit over-votes and warn about under-votes, voter errors will be virtually eliminated. Ballots completed online will eliminate voter intent issues, as stray marks and non-compliant marking of the ballot will be impossible.
- Ballot tracking - UOCAVA can track receipt and acceptance of their ballot by the elections office via ballot tracking link.
- Online voter pamphlet - UOCAVA voters will have access to comprehensive information about candidates and measures online through links on Everyone Counts' eLect Platform. Currently, UOCAVA voters generally do not receive voter pamphlets because they are frequently not printed before ballots are mailed.
- Figures for accessing the online voter pamphlets and ballot tracking applications are not currently broken out for UOCAVA voters. Everyone Counts will be asked to capture this data for UOCAVA voters accessing these items via their site.
- Baseline figures for UOCAVA voter turnout compared to overall voter turnout:

	All turnout	UOCAVA turnout	UOCAVA "gap"
2007 Municipal General	33.08%	21.98%	33.56%
2008 Presidential General	73.87%	88.46%	N/A
2009 Special Election	10.39%	17.73%	N/A
2010 Gubernatorial/Midterm	52.88%	32.50%	38.54%

- Forecast that there again will be no gap in the 2012 Presidential General Election, but that the UOCAVA participation rates will grow to close the gap currently occurring in many non-Presidential Elections: any 2013 special elections, the gubernatorial "mid-terms" in 2014 and the municipal election in 2015).
- Forecast that all ballots that are delivered, voted and returned electronically will be returned on time.
- Forecast that with use, UOCAVA voters will migrate from printing ballots and mailing them back via postal service, ~~to allowing eLect Today email them back on the voter's behalf.~~ No statistical data currently available for a baseline, but Chicago will track how voters cast their votes and return their ballots (print blank ballot; mark votes electronically, print, mail back; faxed back; emailed back themselves; ~~or eLect Today emails back)~~ after implementation of the project.
    - Goal is that for years 2012-2016, 75% of ballots are returned, whether electronically through secured email or through other means.

Auto duplication

- Reduced costs - lower staff costs and time as manual effort is reduced. As an alternative method for the traditional transcribing of ballot preferences from a voter-submitted 2D barcode to a scannable ballot paper, Chicago anticipates scanning 2D barcodes directly to a memory card that is readable by a tabulation machine directly. This streamlined, alternate method of ballot reproduction will significantly reduce ballot reproduction costs.

- Scalable - auto duplication allows election offices to absorbed increased UOCAVA participation without significantly increasing ballot processing effort and staff. It also allows election offices to expand the capabilities being developed for the UOCAVA community to other communities, specifically voters with disabilities.
- There is no baseline figure, as duplication of UOCAVA ballots is not currently needed. Performance in this area will be judged by computing what manual duplication would have cost without auto duplication compared to actual costs using auto duplication.

Ballot challenges

- Improve resolution rate - for those participating in the electronic process. Ballots will be returned and processed earlier since ballot round trip transit time is greatly reduced, leaving more time to resolve challenges. With email or mobile phone numbers, UOCAVA voters with challenged ballots can be notified electronically in a timely manner, again leaving more time to resolve.
- Lower incident rate - use of the online tool will help reduce challenges in the first place by electronic enforcement of business rules.
- Forecast that the percentage of UOCAVA voters whose ballots are not processed due to unresolved challenges will be cut in half.
- Baseline figures for % of UOCAVA ballots not counted due to unresolved ballot challenges: 20-200 per election

Other

- To measure if voters are having problems using the system, we will track the number of individuals that start to use eLect Today, but abandon the process before completion.
- Will also ask Everyone Counts to report and track statistics concerning system reliability and system and application errors encountered.

Financial Management

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

Milestones

Milestones are shown in the Technical Approach section above.

Current and Pending Project Proposal Submissions

The Chicago Board of Elections does not have any current or pending project similar to the one being proposed in this application. The Board is exploring an on-line system to allow voters to launch the registration system from handheld devices and laptops without a printer. The Board also is developing a home page for mobile devices, which would enhance the effectiveness of this grant for UOCAVA voters who may be reliant on mobile devices with Internet access.

Qualifications

Vendor partner - Everyone Counts

Our preferred vendor for this program brings 14 years of experience and a track record of proven success with projects of a similar nature. A world leader, Everyone Counts uniquely combines

election and technology expertise to deliver the most reliable, transparent, secure election solutions for all voters.

100% U.S. owned and based in San Diego, California, Everyone Counts, Inc., is uniquely positioned to ensure that our election can successfully combine America's oldest values with its newest technologies. Their mission is to help election officials deliver reliable and cost-effective universal access to the ballot.

Since 1996, the company's core and primary business has been to provide innovative technology solutions in public and private elections through eLect™, Everyone Counts' proprietary family of secure and transparent voting solutions. Their clients have included governments, political parties, business groups, corporations, labor unions, associations, and various private organizations. With local elections expertise on six continents and the highest-integrity end-to-end web-based voting solution in the world, Everyone Counts' elections are accessible, accurate, secure, audit-able, and completely transparent.

Vendor Partner – Everyone Counts - Examples of Relevant Projects

Customer: State of Utah
Point of Contact: Mark Thomas, State Election Director
Period of Performance: 2010 General Election
Description of project: Electronic ballot delivery for Utah 2010 General Election; UOCAVA ballots deployed early and seamlessly, coinciding with existing election processes and FVAP project requirements. Ballot marking solution a "success," says Utah Elections Director Mark Thomas.

Customer: Numerous Counties in West Virginia
Point of Contact: Jackie Harris, Policy Director
Period of Performance: 2010 General Election
Description of project: Using secure credentials, UOCAVA voters could access, mark and cast their ballot online. Ballots were accessed and cast using military-grade encryption technology, and were decrypted on-site at the local election office where each voter's marked ballot was printed to be included in the count. 100% of surveyed voters said they would use the system again and 95% found the system very easy to use.

Customer: El Paso County, Colorado
Point of Contact: John Gardner, Chief Deputy and Director of Operations
Period of Performance: 2010 General Election
Description of project: When El Paso County's assigned vendor for MOVE Act compliance failed to meet their needs for the 2010 General Election, they turned to Everyone Counts. Having provided online ballot marking for El Paso County's 2010 Primary Election, they knew from experience Everyone Counts could deliver. "Everyone Counts saved the day. We called you on Saturday and four days later you had the election up and available for voters." says John Gardner, Chief Deputy and Director of Operations for El Paso County, Colorado.

Customer: Clackamas County, Oregon
Point of Contact: Sherry Hall, County Clerk
Period of Performance: 2010 General Election
Description of project: Clackamas County offered secure transmission of online ballots for UOCAVA voters. Clackamas County Clerk Sherry Hall stated, "It is an honor to be the first County in Oregon to have the privilege of partnering with Everyone Counts in implementing an online tool for Military/Overseas voters. As Clackamas County Clerk, I want to ensure that the

Military/Overseas Vote counts. This system provides a seamless, secure and simplified method to facilitate this process."

Everyone Counts - Management

Everyone Counts has built a strong team of professionals who are the best at what they do. Their experience in this innovative area of voting is second to none. Everyone Counts is headquartered in San Diego, California and administers elections all over the world. The following individuals will play a key role in the Chicago program.

Lori Steele - Everyone Counts, Inc.– Chief Executive Officer – brings more than 20 years of sound investment management and corporate finance experience to Everyone Counts. In addition, Steele has detailed experience in promoting fair elections and improving voting methods and technologies across the globe. She has built a strong team and led her company to deliver a number of firsts that have enabled innovative voting channels to empower voters, particularly those with access issues and those whose participation rates are low.

Paul DeGregorio - Everyone Counts, Inc.– Chief of Elections – has served in significant policy-making, management, assessment, and training positions for several prominent institutions. In 2006 he served as Chairman of the United States Election Assistance Commission (EAC). As the USA's chief election official, DeGregorio focused on implementing the Help America Vote Act (HAVA) and fostering higher standards for electronic voting, best practices for election officials, and encouraging the use of new technology to serve voters, particularly voters with special needs. From 1993-2003 DeGregorio worked as a technical expert and later as the COO and Executive Vice-President of the International Foundation for Election Systems (IFES). DeGregorio began his career in elections in 1985, when he was appointed Director of Elections for St. Louis County, Missouri.

Aaron Contorer - Everyone Counts, Inc.– Chief of Products and Partnerships – spent 10 years at Microsoft where he was an executive on Windows, MSN, and Visual Studio, building and running product-development teams of up to 200 professionals. He helped lead the conversion of MSN from proprietary to Internet standards, and from his early work on Windows networking he holds several patents in distributed systems and network security. At Microsoft, Contorer also served as Bill Gates' technical advisor.

Karen Clakeley – Everyone Counts, Inc.– Vice President of Sales – has more than 20 years progressive experience in building and leading world-class sales, marketing and business development teams for market leading, global companies. Before joining Everyone Counts, Karen led the strategic account planning and client services activities for the nation's largest producer of printed and electronic customer communications. Karen is results driven and moves fluidly from vision and strategy to implementation and successful achievement of desired results.

Mike Joyce – Everyone Counts, Inc.– Senior Program Manager –For over 8 years Mike has managed and scaled Telecommunications professional services, operational, and sales organizations. Overseeing development, deployment and support of over 10,000 Asterisk PBX systems, Mike specializes in building and organizing highly technical teams through a lead-by-example approach. As a former software development and systems engineer, Mike has a deep understanding of Linux / UNIX, Telecom, Networking and Systems Integration. Mike has designed and deployed customized, highly versatile IVR systems for Governments and Businesses Worldwide. Mike also has a deep background in designing and implementing professional, highly technical training and certification programs.

Jared O'Brien - Everyone Counts, Inc.–Lead Elections Administrator - supervises the successful conduct of all phases of public and private sector elections administered by Everyone Counts; he has worked with clients located in the United States, Canada, Australia and the Russian Federation. Jared has overseen the administration of over 50 elections, including public elections in the US States of Hawaii, Washington, and West Virginia that utilized Everyone Counts' eLect software to provide better voting solutions for electors with disabilities and military and overseas electors. In addition to overseeing the elections conducted by Everyone Counts, Jared brings over 4 years of project management experience. He is a graduate of the University of Southern California.

Nick Coudsy - Program Manager - Nick has 15 years of experience in U.S. public sector elections and is a certified Project Management Professional (PMP). He has worked for many years as an election administrator and as the director of training for Los Angeles County, the largest electoral jurisdiction in the USA; and, for Contra Costa County, California. Nick, who is an election hardware and software specialist, was also a Project Manager for Premier Election Solutions for three years, focusing on serving their California and Washington State clients, particularly on the implementation of new voting systems and certification. Nick is an alumnus of Loyola Marymount University, and has performed graduate work at the H. John Heinz III School of Public Policy at Carnegie Mellon University.

Chicago Board of Elections - Management

Lance Gough – Chicago Board of Elections – Executive Director – Mr. Gough has more than 30 years of experience in election administration, overseeing one of the largest voter jurisdictions in the United States. Most recently, Mr. Gough managed the transition from the punch card system to a dual system of optical scan and touch screen voting machines. Innovations at the Chicago Election Board have included the utilization of more than 4,000 high school and college students in the administration of every citywide election and a comprehensive testing and redundant reporting systems that have assured the timely reporting of results in the region on Election Night. During Gough's tenure, the Chicago Election Board has consistently led the state in participation rates in voter registration, voter turnout and early voting. Mr. Gough is frequently invited to offer expert advice and practical advice on reforms for national and international organizations who examine elections, including associations of attorneys reviewing possible changes in state and federal laws.

Kelly Bateman – Chicago Board of Elections – Assistant Executive Director – A 27-year veteran of election administration in Chicago and Suburban Cook County, Ms. Bateman's work has focused on organizing the processes involved in identifying, registering, training and deploying more than 15,000 election judges (poll workers) for every election. Ms. Bateman also oversees community services, including outreach to foreign-language and special-needs voter blocs. In all of these capacities, Ms. Bateman's duties were instrumental in Chicago's smooth transition from the punch-card balloting system to the newer dual systems of optical-scan paper ballots and touch screen balloting machines.

Dawn Navarro – Chicago Board of Elections – Director, Election Support Division – All forms of non-Election Day balloting come under the supervision of Ms. Navarro, who has 24 years of experience with the Chicago Board. Ms. Navarro's division manages standard mail absentee ballots; early voting; absentee ballots to UOCAVA voters; nursing home voting; and the preparation and delivery of all related materials, forms and signage. In recent years, there has been unprecedented growth in voter use of these balloting options. In the 2008 Presidential General Election, non-Election Day balloting accounted for more than 26.8% of all the ballots cast in Chicago, shattering all earlier records. (The previous records for non-Election Day balloting were 14.9% in the 2008 Presidential Primary Election and 12% in the 2007 Aldermanic Run-Off elections).

Tong Tran – Chicago Board of Elections – Director, Electronic Voting Division – Mr. Tran has managed several technological transformations of voting services for the Chicago Election Board, the biggest of which was the transition from punch-card balloting systems to a dual system of optical scan paper ballots and touch screen balloting machines. Mr. Tran oversees the staff that has developed the ballot database preparation, the programming and testing of all equipment, and the preparation of computer networks for real-time management of early voting records. Mr. Tran also has been instrumental in the successful deployment of systems to securely transmit Election Night results from more than 2,500 precincts with a safety net of back-up systems at receiving stations and the central counting office. As a result, the Chicago Election Board has consistently led the region in the timely reporting of Election Night results.

Budget Proposal

Anticipated Budgetary Timeline

2011-3rd and 4th Quarters	**30%**	**Award 10% + 20% Project Plan**
2012-1st Quarter	**30%**	**Completion of Primary Election Milestones**
2012-2nd Quarter	**10%**	**Preparation for General Election**
2012-3rd Quarter	**10%**	**Preparation for General Election**
2021-4th Quarter	**20%**	**Completion of General Election Milestones**

Direct Labor

Travel

- ~~Two trips for 2 to Washington, DC for program review/report out~~ ~~$7,600~~
- One trip for 2 to San Diego for technical consultation, design review $3,800

Subcontracts/sub awards: None

Consultants: None

Materials and Supplies: None

Scanners (for eLect Transcriber) $500

Other Direct Costs

Item	Cost	Frequency	Total
Software licensing fees to support: • 30,000 UOCAVA voters • Online ballot marking • Automated ballot remaking • Help desk • Hosting	$155,000	One time	$155,000
Election Administration Fee: Election Configuration and Ballot Build	~~$6,000~~	~~Per election~~	~~$12,000~~ $25,000
eLect Administration Wizard: Customization, Activation, Testing Configuration and Integration	$80,000	One time	$80,000
FPCA Integration with Chicago	$25,000	One time	$25,000

Voter Registration Database Ballot on Demand Hardware	$30,500	Per unit X 2 units	$61,000
Absentee Remaking Software	$500	Per election	$1,000
~~Mobile Kiosks & Testing~~	~~$4,000~~	~~Per unit X 2 units~~	~~$8,000~~
Voter Outreach via email, SMS and other marketing	$12,000	Per Election	$24,000

Total Budget **$ ~~377,900~~** $375,300