

Dean C. Logan  
Registrar-Recorder/County Clerk

October 2, 2015

TO: Supervisor Michael D. Antonovich, Mayor  
Supervisor Hilda L. Solis  
Supervisor Mark Ridley-Thomas  
Supervisor Sheila Kuehl  
Supervisor Don Knabe

Sachi A. Hamai, Interim Chief Executive Officer

FROM: Dean C. Logan,  Registrar-Recorder/County Clerk

### **VSAP Quarterly Report – 3<sup>rd</sup> Quarter, 2015**

The following is the third quarterly update of 2015, detailing project activities and accomplishments during the period of June 1 - August 31, 2015. These reports are provided to inform your Board and the public on the progress of the Voting Systems Assessment Project (VSAP). This quarterly report is prepared in response to the motion adopted by your Board on September 7, 2010.

During this reporting period, the Registrar-Recorder/County Clerk (Department) continued to refine the design specifications for a final model of the Ballot Marking Device (BMD) and associated system features engaging key stakeholders, organizations, committees and the public. These past months we met with subject matter experts in technology to discuss the design and technical direction of the voting system components. These steps will bring us closer to the next phase of the VSAP, which will be manufacturing the final design and, ultimately to a systems integration phase that will lead to implementation of a new voting experience in Los Angeles County.

### **Engineering System Development Update**

We have further refined the Ballot Marking Device and developed an appearance model as a result of feedback gathered during user testing sessions and advisory committee meetings. Information was collected during user testing hosted throughout Los Angeles County on May 26, May 28, and May 30, 2015. The user testing results helped guide the construct of the updated appearance model and further developed the specifications for the Ballot Marking Device.

#### *User Testing Results*

We conducted a series of user testing sessions to test various features and functions of the latest iteration of the Ballot Marking Device. During these user testing sessions, voters were asked to simulate the marking and casting of a ballot using a system prototype. Participants were observed during the process and were then asked to provide feedback during a short interview. This qualitative research allowed IDEO to learn more about how individuals interact

with the proposed system features and functions and how users feel about the general experience.

The results from the user testing led to the development of the appearance model. Research findings are available on the Department website: <http://www.lavote.net/vsap/research>.

#### *Stakeholder Committees*

In order to further assist with refining the prototype of the voting system, IDEO and the Department met with the VSAP Advisory Committee, VSAP Technical Advisory Committee, Community and Voter Outreach Committee (CVOC) and Voting Accessibility Advisory Committee (VAAC) in June and July. VSAP Advisory Committee members provided feedback on the latest appearance model and discussed considerations to further refine the system.

The VSAP Technical Advisory Committee meeting involved detailed discussions of technical and feasibility issues, and identified areas that need further research. Issues such as ballot size, paper type, printing method, and many other specifications were examined at length and many recommendations were received. CVOC and VAAC members also provided feedback on the prototype voting device for IDEO and the Department to take into consideration moving forward.

#### **Open Source/Intellectual Property Workshop**

On July 29, 2015, the VSAP Technical Advisory Committee members, representatives from CIO, County Counsel and Department staff participated in a workshop, led by Gartner, to learn about open source software. The topics included were Intellectual Property, licensing, strategies for software asset management, and costs of ownership. This is just the first of various conversations that will occur to determine the best strategy for protecting the transparency, accessibility, and security of the new system.

#### **Vote By Mail Workshop and User Testing**

Vote By Mail is an important component of the County's voting system. As we continue to redesign the voter experience to create an optimal experience for voters, it is important that we include Vote By Mail in that new vision. Currently, approximately 32% of County voters are permanent Vote By Mail voters. Furthermore, the Department anticipates growth in the number of Vote By Mail voters, due to voting trends across the Country as well as due to the impact of legislative reforms such as SB 450.

In order to begin the redesign of the Vote By Mail system, the Department conducted a Vote By Mail workshop on August 27, 2015. IDEO presented a proposed Vote By Mail ballot design for review. Several members from the Department's Vote By Mail Section were in attendance and provided significant input on the design and its possible impact to the current process.

The Department is currently preparing to conduct user testing on the proposed Vote By Mail ballot design. The research will gather qualitative data on the usability and overall voting experience using the new design. New and permanent Vote By Mail voters will be invited to participate in the research which will commence in the coming months.

## **Public and Stakeholder Engagement**

During this period, the Department continued to meet with the public and stakeholders via engaging the Community and Voter Outreach Committee (CVOC), Native American Veterans Association (NAVA), Voting Accessibility Advisory Committee (VAAC), VSAP Technical Advisory Committee, and VSAP Advisory Committee.

### June 10, 2015 – Community and Voter Outreach Committee (CVOC)

VSAP team members met with CVOC to provide a status update. The VSAP team presented the updated prototype Ballot Marking Device and discussed the results of the user testing sessions that occurred in previous months.

### June 13, 2015 – Native American Veterans Association (NAVA)

VSAP team members met with NAVA to provide a status update. The VSAP team presented the updated prototype Ballot Marking Device and discussed the results of the user testing sessions that occurred in previous months.

### June 18, 2015 – Voting Accessibility Advisory Committee (VAAC)

VSAP team members met with VAAC to provide a status update. The VSAP team presented the updated prototype Ballot Marking Device and discussed the results of the user testing sessions that occurred in previous months.

### July 23, 2015 – VSAP Advisory Committee

The VSAP Advisory Committee, VSAP team, and IDEO met for a full day to discuss the results of the user testing sessions and latest developed Ballot Marking Device model. Members were presented the results and appearance model and explained how the appearance model was created.

### August 28, 2015 – VSAP Technical Advisory Committee

VSAP team members and IDEO provided an update of the new voting system to the VSAP Technical Advisory Committee members. There was a discussion regarding the results of the user testing sessions, the updated appearance model, and hardware and software specifications.

## **Financial Report**

As of August 17, 2015, the Department has paid the amount of \$9,420,000 to IDEO in the current contract. The total contract amount is \$13,648,000. Contract deliverables are submitted to the Department as the project progresses. The most recent deliverables include the BMD User Interface "Looks Like/Works Like" Final Prototype, Interactive Sample Ballot Solution Prototype and the Functional Prototypes Source Code.

As was referenced in its October 14, 2015 Board letter, the Department sought reimbursement of the IDEO contract and related pre-manufacturing activities through the use of Proposition 41 Voting Modernization Bond (VMB) Act funds based on the clarifying language passed in County-supported Senate Bill 360 in 2013. While the Department received approval of this funding request, it was later withdrawn by the VMB based on legal interpretations on the use and distribution of the bond funds for research and development activities separate and apart from the actual purchase of certified voting equipment.

The Department is working closely with the Office of the Secretary of State (SOS) on further clarification on the State and federal funding issues and is also involved in constructive conversations with the U.S. Election Assistance Commission (EAC) with regard to use of federal Help America Vote Act (HAVA) funding for this current phase in lieu of Prop 41 funding.

It is important to note that the issue here is one of scope and timing and not of allocation. Both the Prop 41 bond funds and the allocation of federal HAVA funds to the County remain intact. The nature and approach the County has taken with the project requires further procedural and policy clarification to ensure the timing and distribution of those funds is handled properly and that it is appropriately auditable.

It is still expected that the County will receive reimbursement for a significant share of these expenses; however the timing and the specific source of allocation is still being worked out. We continue to have strong support and cooperation from both the SOS and EAC in this regard.

### **Media Coverage**

The VSAP has generated a great amount of media attention. The project has been highlighted in the National Media as well as in local publications. Articles have focused on the County's innovative approach to implementing a new technology and improving the voter experience.

During this reporting period, the developing voting system has appeared in the following media articles:

August 7, 2015 - What L.A. County Is Doing to Make Voting Suck Less

<http://www.citylab.com/cityfixer/2015/08/what-cities-are-doing-to-make-voting-not-suck/400637/>

July 15, 2015 - Tech Overhaul to Help Los Angeles Improve Voting Experience

<http://www.govtech.com/dc/articles/Tech-Overhaul-to-Help-Los-Angeles-Improve-Voting-Experience.html>

July 15, 2015 - Can LA County solve America's voting problem?

[http://www.laobserved.com/archive/2015/07/can\\_la\\_solve\\_americas\\_vot.php](http://www.laobserved.com/archive/2015/07/can_la_solve_americas_vot.php)

July 14, 2015 - Los Angeles is Redesigning The Voting Experience To Be Not Awful

<http://www.gizmodo.in/news/Los-Angeles-Is-Redesigning-the-Voting-Experience-To-Be-Not-Awful/articleshow/48062933.cms>

July 14, 2015 - Voting in Los Angeles is about to get a lot cooler

<http://la.suntimes.com/la-news/7/88/325013/los-angeles-county-voting-system-upgrade>

July 11, 2015 - In Los Angeles, Voting Is Getting the Silicon Valley Treatment

<http://www.bloomberg.com/politics/articles/2015-07-11/in-los-angeles-voting-is-getting-the-silicon-valley-treatment>

June 13, 2015 - Los Angeles County voting to shift from inkblots to open source

<http://arstechnica.com/tech-policy/2015/06/los-angeles-county-moves-to-open-source-voting-technology/>

June 1, 2015 - New High-tech voting "Touch screen" system appears in Koreatown  
[http://www.koreadaily.com/news/read.asp?page=10&branch=NEWS&source=&category=society&art\\_id=3421325](http://www.koreadaily.com/news/read.asp?page=10&branch=NEWS&source=&category=society&art_id=3421325)

### **About the VSAP**

Launched in September 2009, the Voting Systems Assessment Project (VSAP) was developed by the Department in response to the growing voting system needs and challenges faced by the County. While the County's current voting system has served the voters of Los Angeles County with accuracy and integrity, the design of these systems and the age of their technology do not offer the technical and functional elasticity necessary to continue to accommodate the growing and increasingly diverse electorate.

The size and diversity of Los Angeles County and the limited voting systems market, however, make it almost impossible to reasonably consider a commercial off-the-shelf voting system solution. Any voting system solution will entail a significant development or customization process in order to satisfy the County's needs, General Voting System Principles and technical requirements.

In response to these needs and challenges, the VSAP takes an unprecedented and comprehensive approach at modernizing the County's voting system. The vision of the project is to implement a voting system through a transparent process that takes into account the needs and expectations of current and future Los Angeles County voters. The VSAP aims at achieving three goals in this process: 1) give current and future Los Angeles County voters an unprecedented opportunity to participate in the assessment and development process; 2) increase voter confidence in the electoral process through the participatory structure of the project; 3) synthesize public input and research to acquire or develop a new voting system for the County.

### **Stay Connected**

More information regarding the Voting System Assessment Project (VSAP) is available to the public online at [www.lavote.net/vsap](http://www.lavote.net/vsap). The pages on our website are frequently updated with news and information and are a great way to stay connected with the progress of the project between quarterly reports. We strongly encourage public input throughout the process and look forward to continuing to work with your Board on this critical project.

Additionally, attached to this report is the new issue of the VSAP Quarterly Newsletter which is produced to keep the VSAP Advisory Committee and VSAP Technical Advisory Committee updated on project developments. This newsletter provides milestones and status updates as the project progresses. In this issue you will find a detailed discussion of the user testing research results, community engagements, committee activities, media coverage and special events.

If you have any questions please contact me directly or your staff may contact Jeramy Gray, Assistant Registrar-Recorder/County Clerk at (562) 462-2714 or via email at [jgray@rcc.lacounty.gov](mailto:jgray@rcc.lacounty.gov).

dl:fp  
Attachment



# VOTING SYSTEMS ASSESSMENT PROJECT

## Quarterly Newsletter

September 2015

Volume 1, Number 2

### IN THIS ISSUE

- Message from Dean
- System Engineering Update
- User Testing Research Results
- Engagement with the Community
- Committee Activities
- Vote By Mail Design Concept
- In the News
- Publications
- Special Events

### CONTACT US

<http://lavote.net/vsap/newsroom>

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### MESSAGE FROM DEAN

This year, we commemorate the 50th Anniversary of the Voting Rights Act of 1965. This anniversary reminds us of the importance of creating an accessible, transparent and trustworthy voting process as we develop the County's new voting system. The future of voting depends on the ability of this system to adapt to the demands of a diverse electorate, and ensuring that the act of voting remains a fundamental right of every citizen.



We have made great strides in the development of a new voting system for Los Angeles County voters in the past few months. The user testing research results gave us significant insights into voting behavior of the County's electorate. As a result, the Ballot Marking Device (BMD) and Interactive Sample Ballot (ISB) were updated to accommodate suggestions and ideas from key stakeholders, especially the voters.

In this newsletter, we provide you with the latest VSAP developments and milestones that have occurred since the previous issue of this quarterly newsletter. Among these are updates on system engineering, results from the user testing research, a new design concept for Vote By Mail, community engagement, media coverage, and other project-related activities.

**DEAN C. LOGAN**

Registrar-Recorder/County Clerk  
Los Angeles County

## SYSTEM ENGINEERING UPDATE

The Los Angeles County Registrar-Recorder/County Clerk (RR/CC) and IDEO conducted a series of user testing sessions in May to test various features and functions of the proposed voting system at multiple locations throughout Los Angeles County. An important part of the process is incorporating feedback from various sectors and using this in refining the prototype. The photo below shows the most recent appearance model. A full report on the BMD Appearance Model is available on our website at <http://www.lavote.net/Documents/vsap/5.2%20BMD%20appearance%20model.pdf>



WHAT WE LEARNED FROM THE RESEARCH

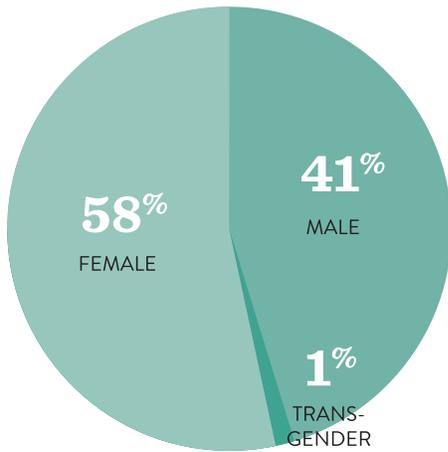
In this section, you will find some of the important findings from the extensive user testing conducted by the RR/CC and IDEO. With the help of our partner organizations, the Korean Resource Center, League of Women Voters, National Association of Latino Elected and Appointed Officials (NALEO), the Department of Military and Veterans Affairs and the Department of Community and Senior Services, we were able to get representatives from diverse backgrounds to participate in the research. If you would like to see the full research findings, visit the VSAP website at [http://www.lavote.net/Documents/vsap/LA%20Research%20Report\\_final\\_sl\\_v05.pdf](http://www.lavote.net/Documents/vsap/LA%20Research%20Report_final_sl_v05.pdf)



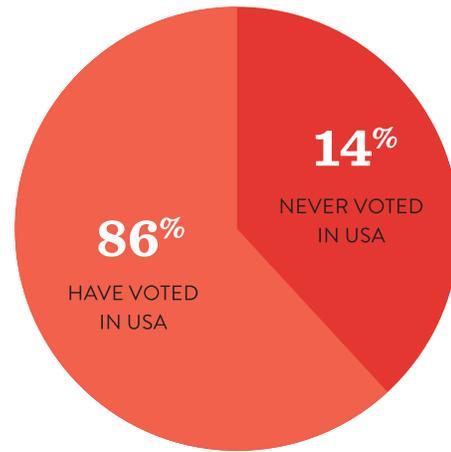
**Participants**

167 individuals participated in the user testing sessions. The following charts show the demographic characteristics of the participants. The data shows the sample population's gender, race/ethnicity, access challenge, age, financial situation, and educational attainment. It also includes their access to technology including computer and mobile phone usage.

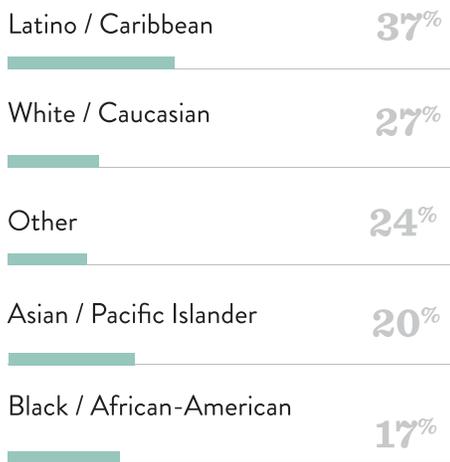
**GENDER**



**VOTING EXPERIENCE**

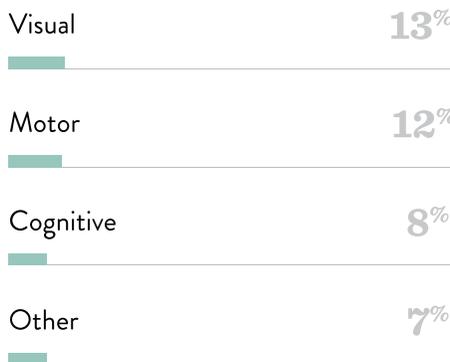


**RACE / ETHNICITY**

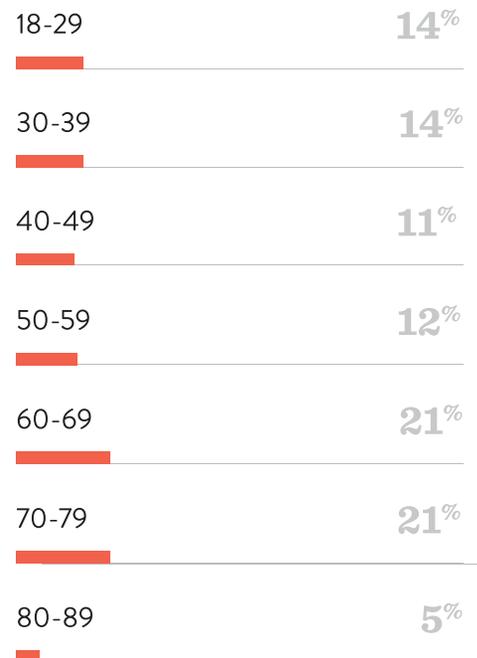


Results add up to greater than 100% as several participants reported mixed racial/ethnicity.

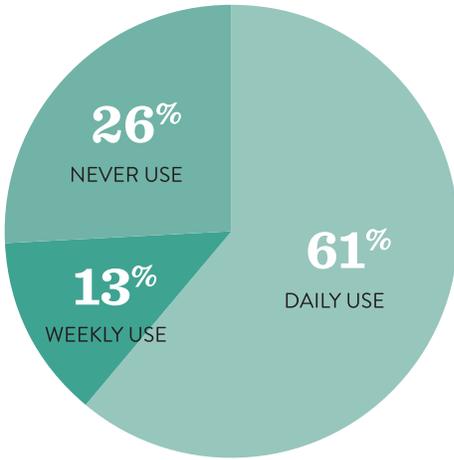
**ACCESS CHALLENGE**



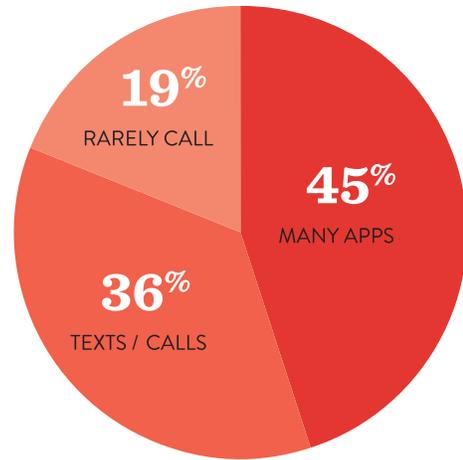
**AGE**



COMPUTER USAGE



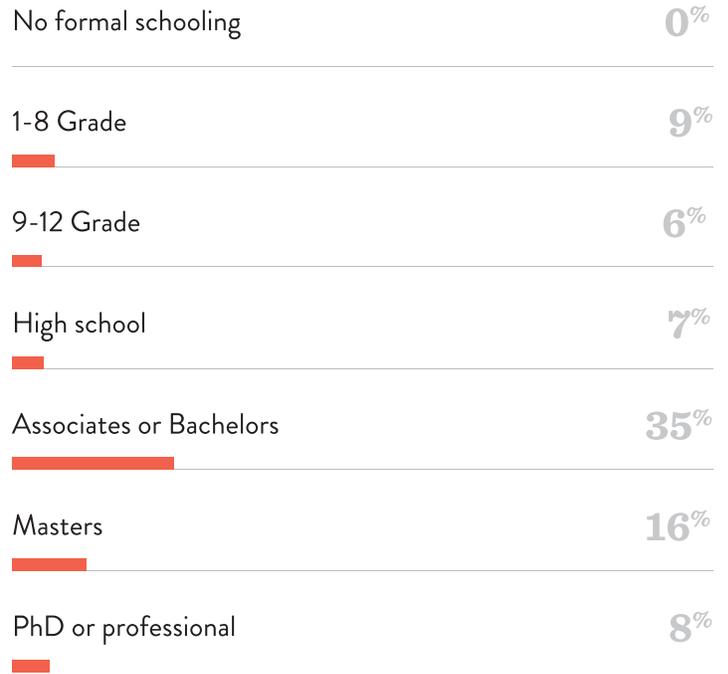
MOBILE PHONE USAGE



FINANCIAL SITUATION



EDUCATIONAL ATTAINMENT



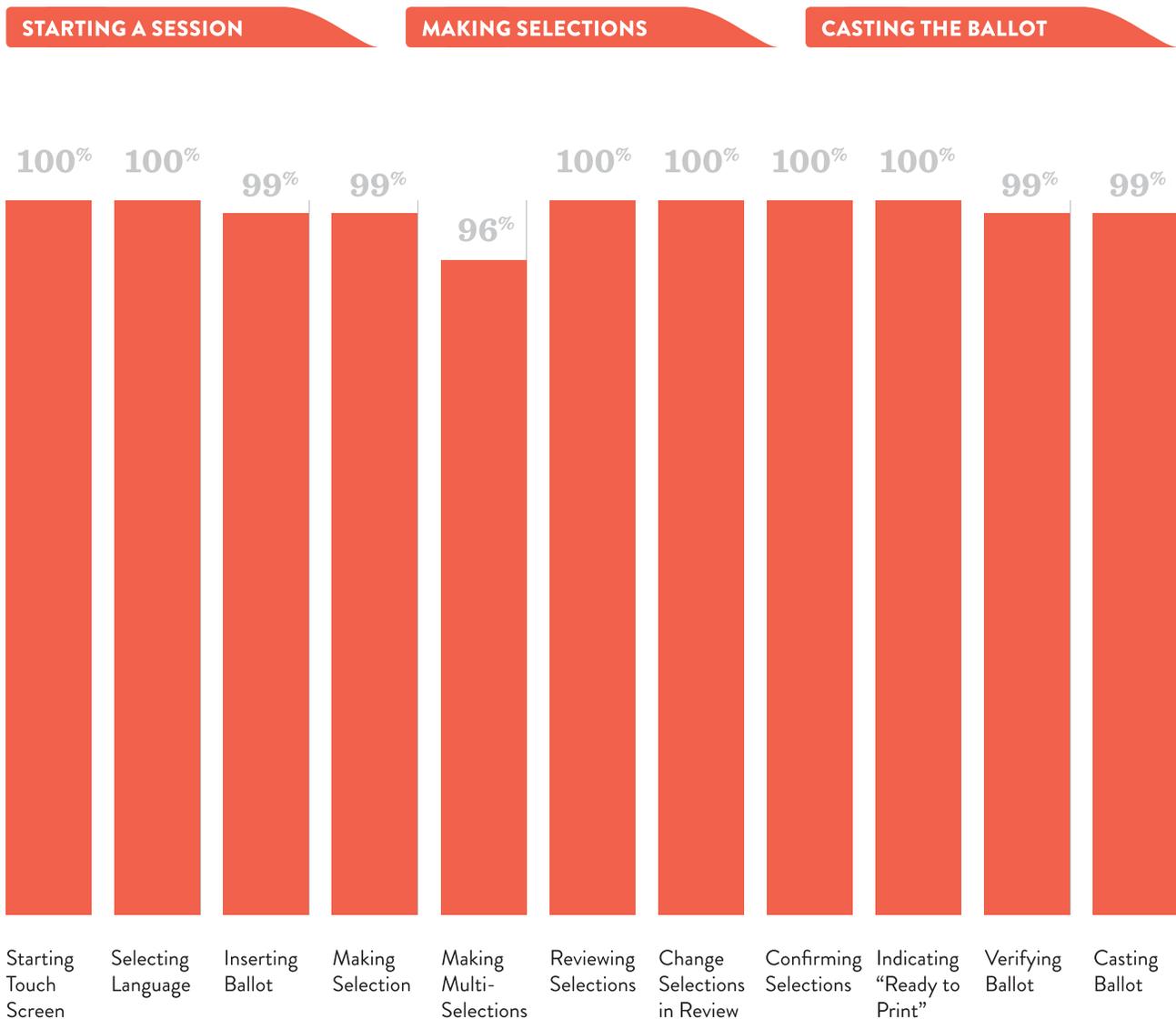
“ I am a veteran of two wars and this is the first time the government has ever asked my opinion on something. ”

**Accessibility**

An important purpose of the research was to measure the accessibility of the BMD. 132 participants with specific needs rated the Touch Screen and Immersive Audio features of the model. They rated the accessibility of the device in three stages of voting—“Starting a Session”, “Making Selections”, and “Casting A Ballot”. The research findings show the BMD as 99% accessible across the board.

**Touch Screen Experience**

Accessibility during voter experience  
% of Voters who found step accessible



## Immersive Audio Experience



“ It was easy. And I think this will get more young people out. It’s time to make room for the next generation. But, you know, it works for me too. ”

**Usability**

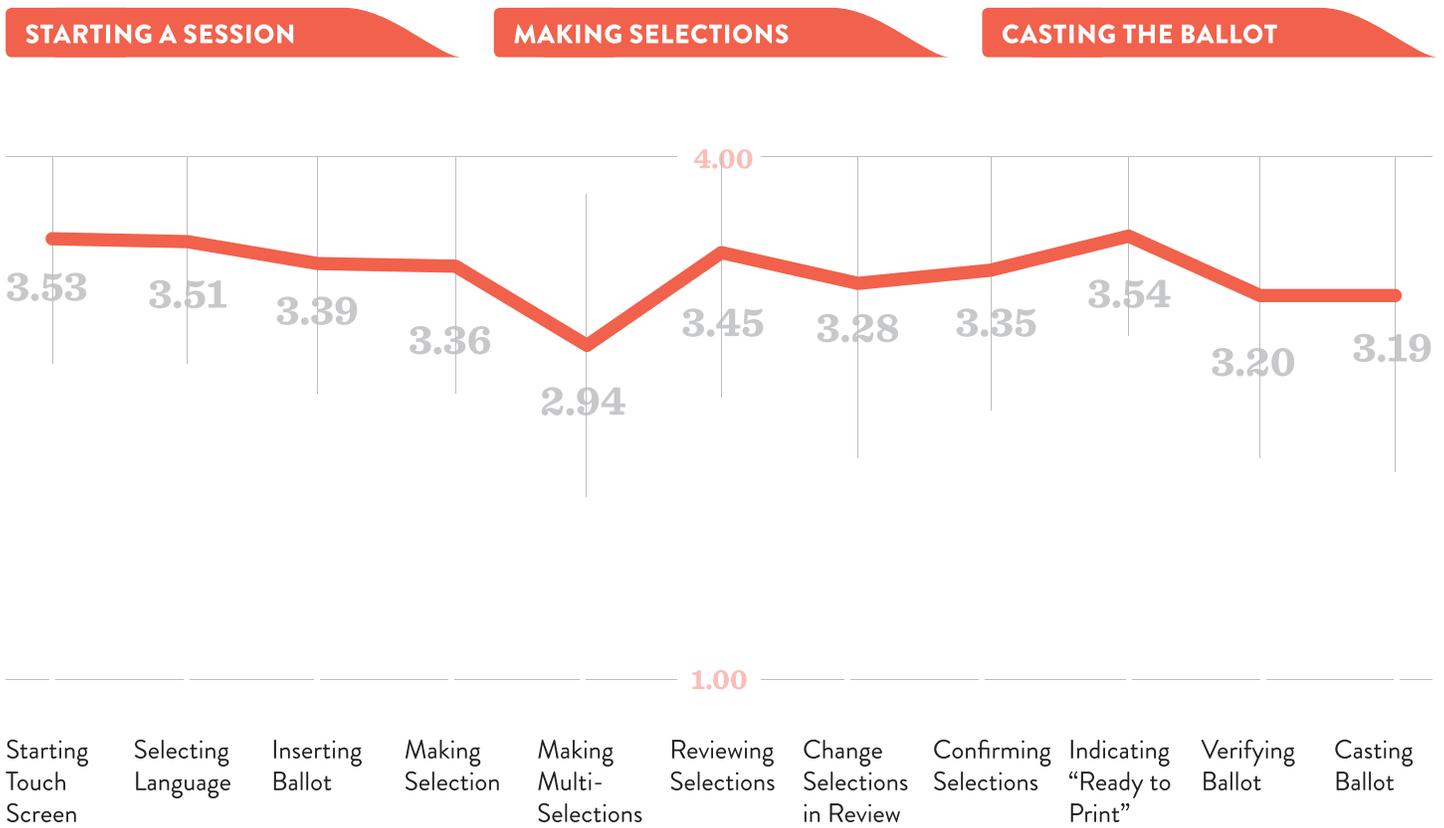
The BMD was also tested in terms of how accurate, easy, efficient and satisfied users were with their Touch and Audio Experience. The participants rated the experience using the following scale: 1 – impossible, 2 – hard, 3 –ok and 4 – easy. The findings show that the touch experience had a mean score of 2.94 – 3.67, while the audio experience had a mean score of 2.8 – 3.67.

**Touch Experience**

EASE OF VOTING

Mean Usability Scores Across Voter Experience with Standard Deviations

1.00–4.00 SCALE:  
1.00=Impossible | 4.00=Easy

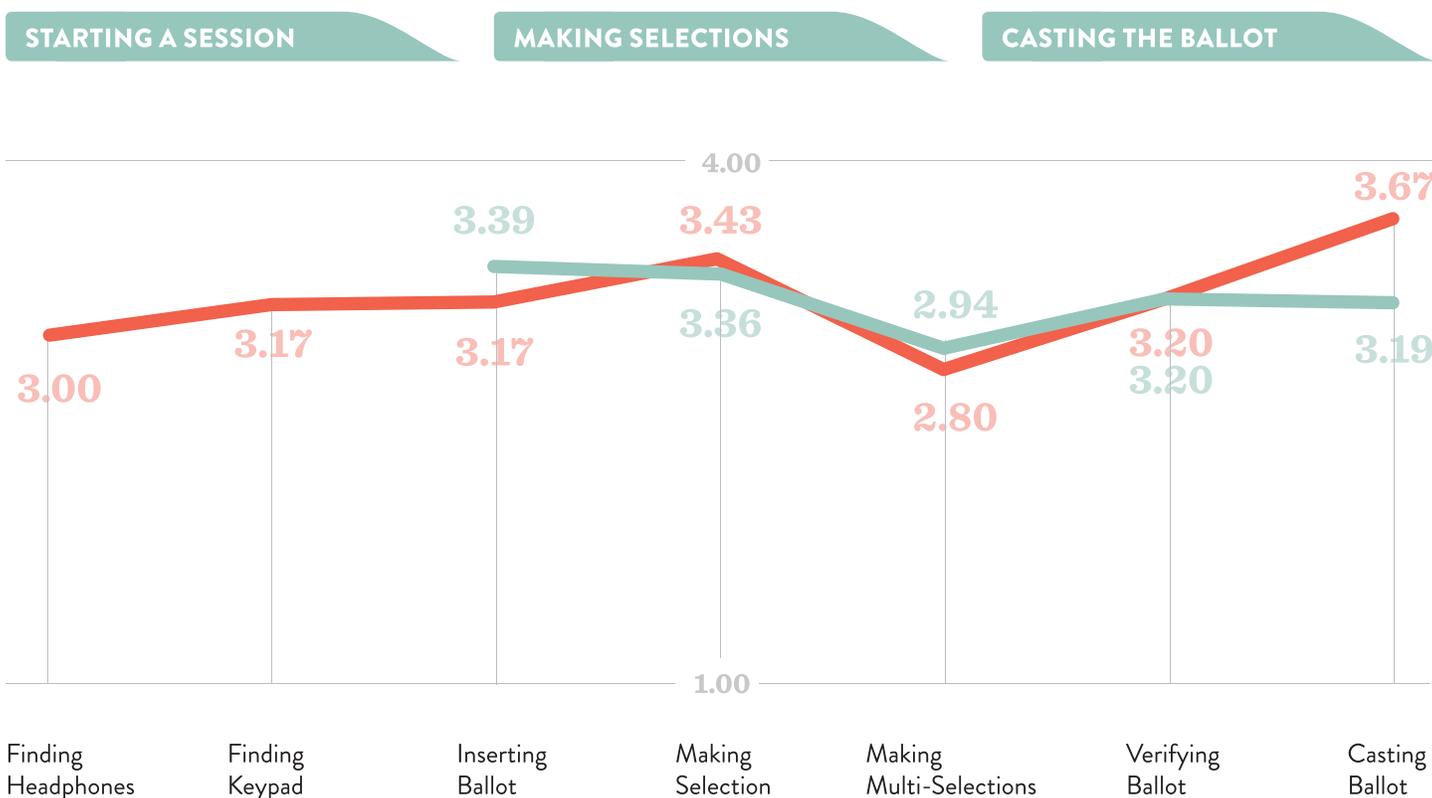


# Audio Experience

EASE OF VOTING

Comparing Ease of Voting Across Audio and Touch Experience.

Audio Experience —  
Touch Experience —



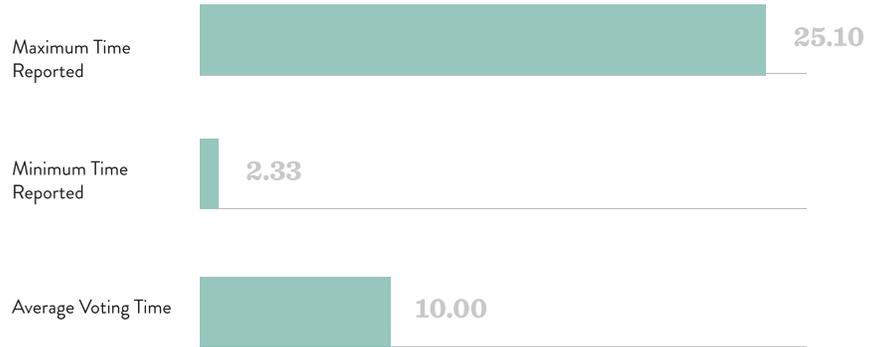
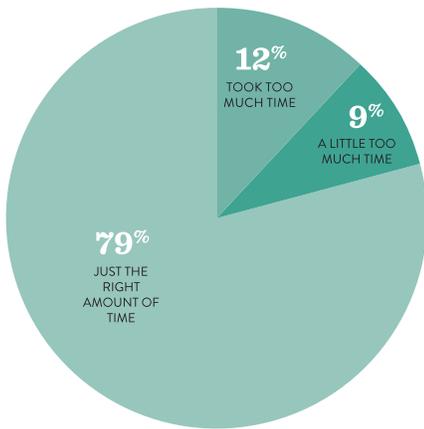
“ This new system can do wonders if they perfect it the way it needs to be perfected, the right way, no one can go behind and change anything, it can't be tampered with... It's a great tool, I love it. ”

On a 22-contest mock election, participants were asked to rate the ease of voting experience and to identify the length of time it takes to vote using the BMD. The findings show that it takes a voter an average of 10 minutes, with a range between 2-26 minutes. Seventy-nine percent of the participants felt it was just the right amount of time needed to cast their votes.

## Time Experience

How did you feel about the amount of time it took to vote?

Time in minutes to finish voting.



### TIMED EXPERIENCE

79%

“ Felt like just the right amount of time to me. ”

## COMMUNITY ENGAGEMENT

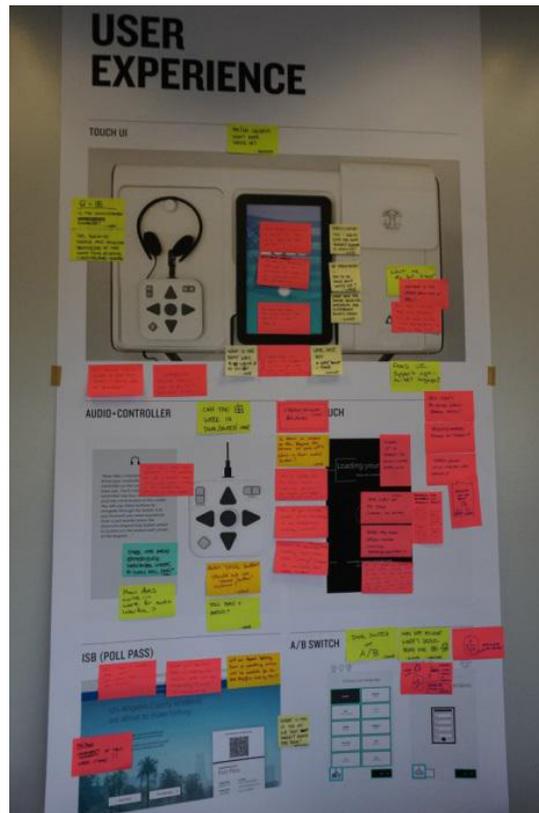
To continue meeting our goal of maintaining transparency with the public during the VSAP development process, we have continued to meet with and present to community organizations. During the Community Voter Outreach Committee (CVOOC) meeting on June 10, 2015, the newest prototype appearance model was presented and members were given the opportunity to provide feedback. On June 18, 2015, we met with the Voting Accessibility Advisory Committee (VAAC) to present the newest voting system prototype and gather their feedback. Additionally, we presented the newest voting system prototype to the Native American Veteran’s Association (NAVA) on June 13, 2015 and received feedback.

## COMMITTEE MEETINGS

**July 23, 2015** – VSAP Advisory Committee Meeting

**August 28, 2015** – VSAP Technical Advisory Committee Meeting

Following the multiple sessions of user testing in May, we refined the Ballot Marking Device concept and presented a prototype appearance model with these modifications. The report of findings and a refined prototype appearance model were presented to the VSAP team and VSAP Advisory Committee on July 23, 2015. These findings and the updated appearance model were presented to the VSAP Technical Advisory Committee members on August 28, 2015.



## VOTE BY MAIL DESIGN CONCEPT

The RR/CC acknowledges the growing number of voters who choose to Vote By Mail and their input is equally as important to the development of the new voting system.

The RR/CC and IDEO conducted a Vote By Mail workshop on August 27, 2015. During that workshop, IDEO presented their proposed design for the Vote By Mail ballot. The design concept was a result of qualitative research. Several members of the Department's Vote By Mail Section were in attendance and provided feedback on the design. IDEO is in the process of incorporating the input from the workshop. We will provide updates regarding the Vote By Mail ballot design as it continues to be refined.

**IN THE NEWS****September 15, 2015 – California Tests Ballot Box of the Future**

<http://www.cbsnews.com/videos/california-tests-ballot-box-of-the-future/>

**September 15, 2015 - America's Aging Voting Machines Could Present Election Problems**

<http://www.npr.org/sections/itsallpolitics/2015/09/15/440255752/report-americas-aging-voting-machines-could-present-election-problems>

**September 15, 2015 – America's Voting Technology Crisis**

<http://www.theatlantic.com/politics/archive/2015/09/americas-voting-technology-crisis/405262/>

**September 15, 2015 – The Dismal State of Americas Decade Old Voting Machines**

<http://www.wired.com/2015/09/dismal-state-americas-decade-old-voting-machines/>

**August 7, 2015 - What L.A. County Is Doing to Make Voting Suck Less**

<http://www.citylab.com/cityfixer/2015/08/what-cities-are-doing-to-make-voting-not-suck/400637/>

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## PUBLICATIONS

### “America’s Voting Machines At Risk”

[https://www.brennancenter.org/sites/default/files/publications/Americas\\_Voting\\_Machines\\_At\\_Risk.pdf](https://www.brennancenter.org/sites/default/files/publications/Americas_Voting_Machines_At_Risk.pdf)

This is a report produced by the Brennan Center for Justice at NYU School of Law that provides a detailed documentation of the problems associated with the aging voting machines and recommends steps that must be taken to resolve this “impending crisis”. The Center conducted interviews across states and local officials, experts in election technology, administration, and security, and utilized information from the Verified Voting website.

Some of the key findings in this report are: 1) the voting systems were not designed to last for decades due to the pace of rapid technological change, 2) most voting machines are close to, or have exceeded their expected life span of 10-20 years, 3) the delays in purchasing new equipment may lead to more risks - the risk of increased failures and crashes and serious security and reliability flaws, and 4) resources are insufficient to purchase new machines.

## SPECIAL EVENTS

The newest prototype appearance model is on display at the LA County Fair from September 4-27, 2015. The display allows visitors to learn about our past through the history of the Voting Rights Acts of 1965, and look into the future of voting.

The VSAP will also be featured in a session at SXSW Eco on Monday, October 5, 2015. [http://schedule.sxsweco.com/events/event\\_ECOP45623](http://schedule.sxsweco.com/events/event_ECOP45623). This is the fifth year of the conference which engages business leaders, investors, innovators and designers with the goal of discussing solutions for economic, environmental and social issues.



### FOR MORE INFORMATION

Get the latest updates and project developments by visiting the Voting System Assessment Project (VSAP) website at [www.lavote.net/vsap](http://www.lavote.net/vsap). We strongly encourage public input throughout the process and look forward to continuing to work with you on this critical project.