



Dean C. Logan
Registrar-Recorder/County Clerk

March 31, 2016

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

Sachi A. Hamai, Chief Executive Officer

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

VSAP Quarterly Report – 1st Quarter, 2016

The following is the first quarterly update of 2016, detailing project activities and accomplishments during the period of December 1, 2015 to February 29, 2016. 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) completed a variety of tasks associated with the design of the County's future voting system. This includes the Ballot Marking Device (BMD), tally system, and other associated components. The BMD Design Validation Units (DVUs) which will be used are expected to become available in summer of 2016. Also, the Department has completed drafting the Software Solution Design Document (SSDD), a document that provides a detailed specification for the enterprise software architecture of the new voting system. The document is in the final stages of review and revision and will also be finalized by early summer 2016; and will be a core component in the manufacturing and procurement phase of the project.

In preparation for Phase IV of the project, the Manufacturing and Certification Phase, research is being conducted in various operations within the Department to examine and evaluate the possible impact the new voting system designs may have on processes and logistics. Some of those operations being examined are Vote By Mail, tally and polling place-to-vote center migration efforts. Careful planning, research and continued engagement is crucial as we plan for the manufacturing and eventually final implementation of the project. The administration of elections is a complex set of operations which require comprehensive and strategic preparation.

We have continued to engage our VSAP Advisory Committee, the VSAP Technical Advisory Committee as well as the public throughout the course of the project. In addition, we are closely monitoring legislation that supports a model of election administration that will allow effective implementation for the new system. In particular, we are closely analyzing and engaging with Secretary of State and Legislative staff on SB 450 which proposes comprehensive changes to election administration in California. The current bill language includes provisions that allow counties to send all voters a Vote By Mail ballot as well as provide ballot drop-off locations and vote centers. Vote centers

are a critical component to the implementation of the new voting system and as such, Los Angeles County has taken a Support in Concept position for this bill. The Department will continue to monitor this bill and will update your Board on further developments.

BMD Design Update

These images are the latest iteration of the Ballot Marking Device (BMD). The Department worked with IDEO to further refine the system specifications and design of the BMD and its associated components including the User Interface and the Integrated Ballot Box (IBB). In the next reporting period, we will arrive at a final design of the BMD which will be incorporated in five final Design Validation Units (DVUs).



For more information about the design concepts of the new voting system, please visit our website at <http://www.lavote.net/vsap/design-concepts>.

Vote By Mail Research

As mentioned in the previous quarterly report, the Department conducted Vote By Mail user testing in November with the goal of assessing the usability and accessibility of the proposed Vote By Mail ballot

and packet design. There were 76 participants randomly selected for this research representing various age groups, language groups and voting experience. The participants rated their experience on the following topics: overall design including layout, font, size, and length of the ballot, ease of use, privacy and anonymity of voting experience, and level of confidence to accurately record votes. The attached Newsletter provides a detailed discussion of the results of this research. The full report is available on the VSAP website at <http://www.lavote.net/Documents/vsap/Vox%20VBM%20Report%20V1.3.pdf>.

Tally System

The Department introduced concepts for the new tally system to the Technical Advisory Committee (TAC) through a series of conference calls held in December and January. The purpose of these meetings was to introduce and discuss the key architectural design directions of the tally component of the new voting system. In addition, participants discussed tabulation methodologies including centralized tally and distributed ballot scanning.

We continue to engage TAC members to seek their feedback on the proposed tally system. The feedback gained from the TAC provides guidance to the VSAP team as we work towards further refining the tally system concept.

Vote Center Planning

One of the elements of the new voting experience presented by the VSAP are vote centers. Vote centers would allow eligible voters to cast their ballot at any location within the County during the voting period, increasing access and convenience. In researching models and best practices for developing a vote center strategy, the VSAP team met with the Department of Parks and Recreation to learn from their Parks Needs Assessment study; which aimed to determine geographic boundaries and spatial needs of communities to ensure equal access to parks and recreational facilities. The VSAP team gained valuable insight from this study. The methodology used by the Department of Parks and Recreation will be considered in developing a plan for the strategic placement of vote centers.

The analysis of vote centers has also been a significant part of the Department's legislative efforts in conjunction with SB 450. The formula for the minimum number of vote centers that a county must have is one of the most crucial elements of the bill, and the Department has been an active member in these discussions. In addition to the vote center formula, which includes ratios for both the early voting period and Election Day, these discussions have also included extensive examinations of the operating hours, distribution, and other requirements of vote centers. These deliberations are ongoing and the Department will continue to advocate for a vote center model that is consistent with VSAP.

Procurement Strategies Workshop

The Department held a Procurement Strategies Workshop on December 15, 2015. Representatives from the Chief Information Office and County Counsel were also in attendance. This workshop was conducted as part of the initial preparation work for the Manufacturing and Certification Phase of the project. Among the discussion points were: identifying the requirements for the ideal software and BMD hardware contractors, developing a procurement communication and evaluation tool, and a presentation of the different implementation strategies and solicitation models conceptualized by the VSAP team. These considerations are crucial for launching an open process for system manufacturing at the beginning of Phase IV.

Stakeholder Engagement

The VSAP team met with voter engagement committees to give status updates on project activities during this quarter. We have engaged over 3,200 voters, poll workers, election administrators and other stakeholders throughout the course of this project resulting in a concept for an improved voting experience which includes new processes and new technologies.

January 25, 2016 - Los Angeles County Quality & Productivity Commission

Jeremy Gray, Assistant Registrar-Recorder/County Clerk for Information Technology and Principal Project Manager, presented an update on the BMD design, extensive qualitative research, user testing, community engagement activities and the latest images of the voting system prototype to the Quality & Productivity Commission. This generated positive responses and continued support from the Commission.

January 27, 2016 – Community and Voter Outreach Committee (CVOOC)

VSAP team members met with the CVOOC to provide a project update. This included sharing the findings from the Vote By Mail user testing, a summary of community engagement efforts and other on-going activities. The members were also informed that the most recent reports and Newsletters are available on the VSAP website.

February 29, 2015 – Voting Accessibility Advisory Committee (VAAC)

VSAP team members met with the VAAC to provide a project update. The VSAP team presented a brief overview of the Vote By Mail user testing and an update on engaging various voting accessibility organizations. An open invitation was extended to members to observe the upcoming Advisory Committee Meeting on March 16, 2016.

Media Coverage

During this reporting period, the project has been featured in the following articles and publication:

February 16, 2016 - Human-Centered Design for the Voting Experience
http://ssir.org/articles/entry/human_centered_design_for_the_voting_experience

December 8, 2015 - Upgrading California's Elections for the 21st Century
<http://www.cafwd.org/reporting/entry/bringing-california-elections-into-the-21st-century>

November 9, 2015 - Election Administration Reports - Volume 45, Number 22
http://www.lavote.net/Documents/vsap/press_room/_11092015_november%209-final.pdf

VSAP Newsletter

Attached to this report is the latest issue of the VSAP Quarterly Newsletter which is produced to keep the VSAP Advisory Committee, VSAP Technical Advisory Committee, and the public informed regarding project developments. This issue provides a discussion of the results of the Vote By Mail research and other on-going activities within the project.

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. 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.

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@rrcc.lacounty.gov.

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

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MESSAGE FROM DEAN

As the County's Registrar of Voters, I am tasked with ensuring accountable and transparent administration of national and local elections. It is our Department's responsibility to provide the resources necessary so that the election process is accessible and no voters are disenfranchised. In order to maintain the integrity and accessibility of elections, we must have the right systems and processes in place - from the voter registration system, to the machines at the polling places, to the tally system that we use to accurately count the votes.

As we prepare for the Presidential Election this year, the importance of the Voting Systems Assessment Project is reinforced. We must continue our effort to develop a better voting system for our voters by the 2020 Presidential Election. The current technology does not provide optimal accessibility and usability to our voters. As President Obama pointed out, it is "easier to order a pizza than vote." The challenge therefore is to continue seeking ways to develop a voting experience that allows for increased flexibility and convenience for our voters, a system that allows us to meet the voters where they are and serve them in ways that are familiar and meaningful. Our goal is to arrive at a design that allows voters to have choices and an ability to customize their experience in a manner that instills trust, confidence and possibly even excitement in the experience of casting a vote.

In this issue, we share with you the latest design developments and the research findings that have led to those developments. This includes updates to the design of the Vote By Mail packet, Vote By Mail ballots and the Ballot Marking Device.

We encourage your continued participation and feedback as we approach the end of the current phase and move forward with the System Engineering and Certification Phase.

DEAN C. LOGAN

Registrar-Recorder/County Clerk
Los Angeles County

DESIGN CONCEPT UPDATE

The Ballot Marking Device (BMD) design has been further refined with design modifications incorporated in the last few months. We are close to completing the system engineering and design specifications of the new voting system and all its associated components including the User Interface and the Integrated Ballot Box (IBB). The Design Validation Units (DVUs) will be presented at the conclusion of Phase III. For up-to-date information on the VSAP and design concepts, visit our website at <http://www.lavote.net/vsap/design-concepts>.

LEARNINGS FROM THE RESEARCH: VOTE BY MAIL USER TESTING

The Department conducted Vote By Mail (VBM) user testing in November 2015 to test the usability and accessibility of the new Vote By Mail design as well as to evaluate the impact of the ballot size and secrecy sleeve on the overall voting experience. We gained significant insights from this research that validated the design and identified areas for improvement. In this section, you will find a summary of some of the findings from the Vote By Mail user testing and our next steps in refining the design.

Participants

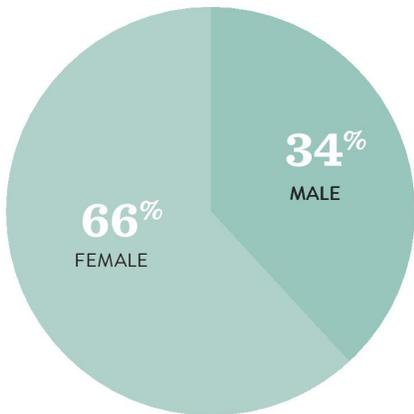
76 voters participated in the research. They were purposefully selected according to the following criteria: experienced VBM voters, new VBM voters, seniors ages 65 and up, young people ages 18-25, people with minimal formal education, Spanish speakers, Korean speakers, people with motor impairments and people with mild visual impairments. We were assisted by our partner organizations in the recruitment of participants. These organizations include: League of Women Voters of Los Angeles County, United Cerebral Palsy of Los Angeles, Korean Resource Center, NALEO Educational Fund and Asian Americans Advancing Justice.

The participants were asked to rate their interaction with the proposed Vote By Mail ballot in different areas: overall lay-out including font size and font style, ease of finding contests and marking selections, completing the ballot, packing up, and mailing a valid ballot.

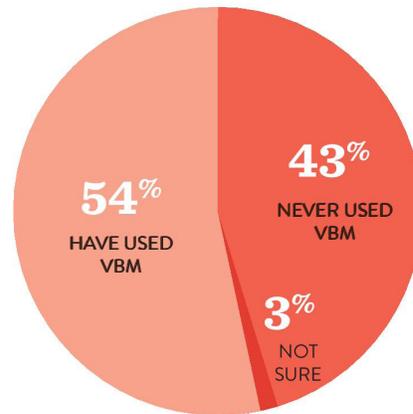
The graphs below and charts that follow provide a general picture of the individuals who participated in the research. In addition to basic demographic characteristics, you can see varying levels of voting experience, access to computers, use of mobile phones, financial situation and educational attainment. The diversity of these participants reflects the larger LA County electorate.



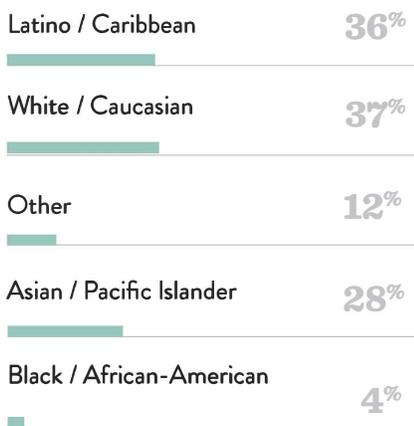
GENDER



VOTING EXPERIENCE

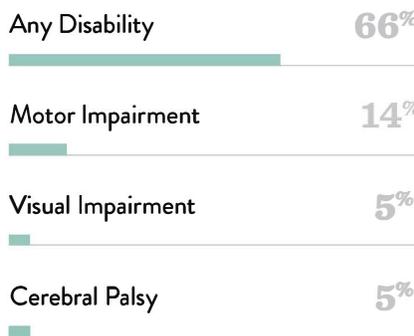


RACE / ETHNICITY

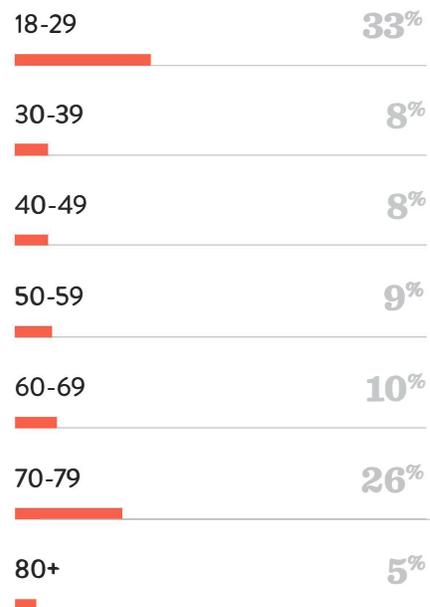


Results add up to greater than 100% as several participants reported mixed racial/ethnicity by marking more than one race/ethnicity category.

ACCESS CHALLENGE



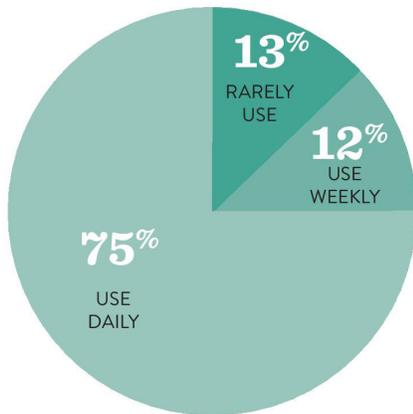
AGE



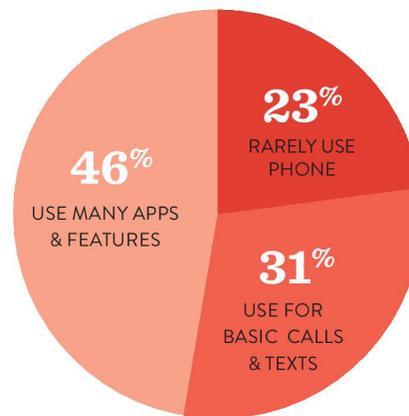
Participant Breakdown

Participants were diverse in terms of race/ethnicity, gender, age, educational attainment, ability, voting experience, technology experience, and financial status.

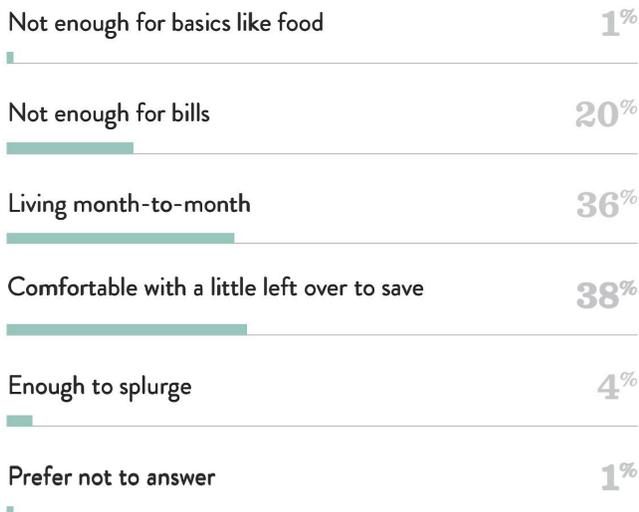
COMPUTER USAGE



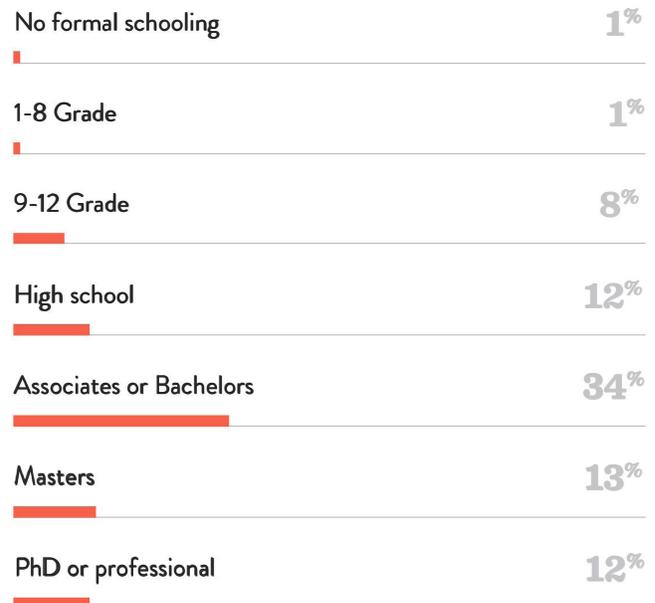
MOBILE PHONE USAGE



FINANCIAL SITUATION



EDUCATIONAL ATTAINMENT



Overall Layout

Participants were asked to narrate their first impressions of the ballot when they first opened the packet. A majority of the voters recognized the simplicity and ease of layout. The voters overwhelmingly embraced the design, commenting that it was efficient and official looking.

91% of participants thought the font was an easy size to read. Voters who usually require a larger font type to read content, such as the participants from United Cerebral Palsy of Los Angeles and those who reported mild visual impairments, found that the font size, the bold letters, and the colors make the ballot readable and legible.

Federal, State & Judicial Offices
Estatales, Federales, y Oficinas Judiciales

332 1 / 6

Marking your votes
Marcado sus votos

To make your selections, fill in the oval to the left of your choice. Make sure to fill the oval completely, and don't make marks outside the oval. Please don't vote for more choices than indicated. You don't have to vote in every

Para hacer sus selecciones, llene el óvalo a la izquierda de su selección. Asegúrese de llenar el óvalo completamente, y no haga marcas fuera del óvalo. Por favor no vote por más opciones que se indica. Usted no tiene que votar en cada carrera.

Misplaced or damaged ballots
Fuera de lugar o papeletas dañadas

Vote in person OR return a damaged ballot in envelope provided and call (562) 466-1323 or (800) 815-2666 to request a replacement ballot before

Votar en persona o enviar por correo votación y llamada (562) 466-1323 o (800) 815-2666 para solicitar una boleta de reemplazo antes de las elecciones.

Federal Offices
Oficinas federales

President and Vice President
Presidente y Vicepresidente
Vote for One / Vote por Uno

Gary Johnson LIB
for President / para Presidente
James P. Gray LIB
for Vice President / para Vicepresidente
Party Preference: Libertarian
Preferencia de Partido: Libertario

Roseanne Barr PEA
for President / para Presidente
James P. Gray PEA
for Vice President / para Vicepresidente
Party Preference: Peace and Freedom
Preferencia de Partido: Paz y la Libertad

Barack Obama DEM
for President / para Presidente
Joseph Biden DEM
for Vice President / para Vicepresidente
Party Preference: Democrat
Preferencia de Partido: Demócrata

Jill Stein GRE
for President / para Presidente
Cheri Honkala GRE
for Vice President / para Vicepresidente
Party Preference: Green
Preferencia de Partido: Verde

Thomas Hoefling IND
for President / para Presidente
Robert Ornelas IND
for Vice President / para Vicepresidente
Party Preference: Independent
Preferencia de Partido: Independiente

Mitt Romney REP
for President / para Presidente
Paul Ryan REP
for Vice President / para Vicepresidente
Party Preference: Republican
Preferencia de Partido: Republicano

State Senator; 26th District
Senador Estatal 26 Distrito
Vote for One / Vote por Uno

Ben Allen REP
Party Preference: Republican
School Board Member, Santa Monica
Malibu Unified School District
Preferencia de Partido: Republicano
Miembro de la Junta Escolar, Santa Monica
Malibu Unified School District

Sandra Fluke DEM
Party Preference: Democrat
Social Prosecutor
Preferencia de Partido: Demócrata
Procurador de Justicia Social

United States Representative
43rd District
Desatado Unidos representante
43 Distrito
Vote for One / Vote por Uno

John Wood, Jr REP
Party Preference: Republican
Political Writer
Preferencia de Partido: Republicano
Escritor Político

Maxine Waters DEM
Party Preference: Democrat
United States Congresswoman
Preferencia de Partido: Demócrata
Congresista de Estados Unidos

Insurance Commissioner
Comisionado de Seguros
Vote for One / Vote por Uno

Jerome E. Horton DEM
Party Preference: Democrat
Member, State Board of Equalization
Preferencia de Partido: Demócrata
Miembro de la Junta Estatal de Impuestos

G. Rick Marshall REP
Party Preference: Republican
Chief Financial Officer
Preferencia de Partido: Republicano
Jefe de Finanzas

Member State Board of Equalization
Junta de Igualación del Estado miembro
Vote for One / Vote por Uno

Jerome E. Horton REP
Party Preference: Republican
Member, State Board of Equalization
Preferencia de Partido: Republicano
Miembro de la Junta Estatal de Impuestos

Alex Padilla DEM
Party Preference: Democrat
Chief Financial Officer
Preferencia de Partido: Demócrata
Jefe de Finanzas

Controller
Controlador
Vote for One / Vote por Uno

Betty T. Yee DEM
Party Preference: Democrat
California State Board of Equalization
Member
Consejo de Estado de California

John Chiang REP
Party Preference: Republican
California State Controller
Preferencia de Partido: Republicano
Controlador del Estado de California

State Offices
Oficinas Estatales

Governor
Gobernador

Secretary of State
Secretario de estado
Vote for One / Vote por Uno

Pete Peterson REP
Party Preference: Republican
Governor of California
Preferencia de Partido: Demócrata
Gobernador

Alex Padilla DEM
Party Preference: Democrat
California State Senator
Preferencia de Partido: Republicano
California Senador Estatal

Treasurer
Tesorero
Vote for One / Vote por Uno

Greg Conlon REP
Party Preference: Republican
Businessman/CPA
Preferencia de Partido: Republicano
Empresario / CPA

John Chiang DEM
Party Preference: Democrat
California State Controller
Preferencia de Partido: Demócrata
Controlador del Estado de California

Attorney General
Ministro de Justicia
Vote for One / Vote por Uno

Ronald Gold REP
Party Preference: Republican
California Attorney
Preferencia de Partido: Republicano
Abogado de California

Kamala D. Harris DEM
Party Preference: Democrat
Attorney General of California
Preferencia de Partido: Demócrata
El Procurador General de California

Insurance Commissioner
Comisionado de Seguros

Return Envelope

OFFICIAL

Ballot enclosed

Los Angeles County
Registrar-Recorder/County Clerk
PO BOX 30960
Los Angeles CA 90030-0960

OFFICIAL LOS ANGELES COUNTY
2018 General Election Ballot
2018 Boleta Elección General

Continue voting on next page
Continuar la votación en la página siguiente

“ It looks less intimidating than current ballots. ”

“ It looks kind of modern. Very straight forward. I like the feel. The borders have a nice feel. It seems very efficient, instead of each page being one section. It is nicely put together. It is very user friendly. It looks like something that carries weight and value. ”

Usability & Accessibility

The usability of the proposed design was gauged through the ease of finding candidates and measures on the ballot. Participants rated the experience of finding contests on a quantitative scale from very hard to very easy. On average, 7% of the voters rated the finding of contests as hard, 36% thought it was okay while 58% said it was easy to look for contests on the ballot.

“ I like how the judicial offices and state offices are bolded and go with the background. The yes or no’s are pretty clear. The size may be helping with this. I think the descriptions are clear. I like how A, J, N are separate on the left and are easier to find. ”

Marking the Ballot

As we have learned from previous studies of best practices, ballot systems that allowed voters to read contest information and mark on the same page were more cognitively intuitive than those systems that involve a separate selections sheet. In the proposed design, the selection circles are directly under each contest description. Voters had increased confidence in this system because they are less likely to commit errors while marking their votes than in the current model where they go back and forth between a separate booklet and the ballot.

In addition, all ballots and secrecy sleeves included instructions on how to mark their selection. These design decisions were aimed at enhancing usability and increase accessibility for people with fine and gross motor impairments.

“ It is really superior because the choices are right there in front of you. It’s a no brainer that the thing you’re inking is exactly there. There’s no cross checking, much faster, very much more reassuring. This will assure the paper trail, especially in a recount. There’s really so little chance of making the wrong decisions. ”

Accuracy of Completing the Ballot

On the analysis of accuracy, this study found that voters completed their ballots with an average of 19.7 correct marks out of 21 contests. 80% of the voters who returned their ballots marked 20 or all 21 contests correctly. A small minority of 6% scored ten or fewer contests correctly.

This research validates many of the key design elements necessary for a usable and accessible design, which are already present in the proposed Vote By Mail ballot. There is room for improvement based on the findings from the user testing. The Department is working with IDEO to further refine the design and incorporate the valuable feedback learned from this research.

The full Vote By Mail research report is available on our website at <http://www.lavote.net/vsap/research>.

LEGISLATION UPDATE

The Department is closely monitoring proposed legislation that will allow for the effective implementation of the new voting system. Los Angeles County has taken a Support in Concept position for Senate Bill 450. The concepts enumerated in this bill are aligned with the voting experience that the Department envisions for the voters – the establishment of vote centers, a period for early voting, and ballot drop-off locations. On the concept of an All Vote By Mail election, however, the County is proposing an alternative option as an amendment to the bill. We continue to dialogue with the Secretary of State, legislators, and stakeholders, and actively monitor other legislative activity related to election administration.

PHASE IV PLANNING

The VSAP team is preparing the groundwork for the next phase of the project, the System Manufacturing and Certification Phase, which will be launched this summer. In connection with this, a Procurement Strategies Workshop was held on December 15, 2015. The workshop was attended by the VSAP Internal Project Team and representatives from IDEO. Representatives from the Chief Information Office and County Counsel were also present. Among the topics on the agenda were identifying the requirements for the ideal software and BMD hardware contractors, developing a procurement communication and evaluation tool, and a presentation of the different implementation strategies and solicitation models conceptualized by the VSAP team. The input from the workshop will be used as guidelines for the process of competitive bidding in the next phases of the project.



COMMUNITY ENGAGEMENT

Throughout the course of the project, we have continuously engaged members of the public and community groups. In addition, as the project continues to gain national attention, various individuals from different localities, states and countries have expressed interest in the project and have contacted the VSAP team to learn more about our research and design. To date, we have engaged over 3,200 voters, poll workers, election administrators and stakeholders resulting in a concept for an improved voting experience which includes new processes and new technologies.

Los Angeles County Quality & Productivity Commission | January 25, 2016

The VSAP was invited by the Quality & Productivity Commission to present an update on the BMD design, extensive qualitative research, user testing, community engagement activities and the latest images of the voting system prototype. The Commission provided positive feedback and support for the project.

Community and Voter Outreach Committee (CVOC) | January 27, 2016

We gave a project update to the members of the CVOC. We shared the findings from the Vote By Mail user testing, a summary of community engagement efforts and other on-going activities.

Voting Accessibility Advisory Committee (VAAC) | February 29, 2015

We presented a project update at the most recent VAAC meeting. We shared a brief overview of the Vote By Mail user testing and our efforts on engaging various voting accessibility organizations. An open invitation was also extended to members to observe the upcoming Advisory Committee Meeting on March 16, 2016.

IN THE NEWS

February 16, 2016 - Human-Centered Design for the Voting Experience

http://ssir.org/articles/entry/human_centered_design_for_the_voting_experience

December 8, 2015 - Upgrading California's Elections for the 21st Century

<http://www.cafwd.org/reporting/entry/bringing-california-elections-into-the-21st-century>

November 9, 2015 - Election Administration Reports - Volume 45, Number 22

http://www.lavote.net/Documents/vsap/press_room/_11092015_november%209-final.pdf0

FOR MORE INFORMATION

Get the latest updates and project developments by visiting the Voting System Assessment Project (VSAP) website at 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.