

# Developing and Implementing a Publicly Owned Voting System – Los Angeles County’s Voting Solutions for All People

Dean C. Logan, *Registrar-Recorder/County Clerk, Los Angeles County*<sup>1</sup>

## Introduction to the First Publicly Owned Voting System

In the fall of 2009, the Los Angeles County Registrar-Recorder/County Clerk embarked on an unprecedented effort to design, engineer, manufacture, and implement the first publicly owned voting system in the United States; an initiative that would later be identified as Voting Solutions for All People (VSAP). Through this effort, Los Angeles County reimagined the voting experience in the nation’s largest local voting jurisdiction, transformed the commercial voting systems marketplace, and stretched the reins of its regulatory environment by setting a new standard for voting system design that prioritizes usability, security, and accessibility.

Los Angeles County functions under the regulatory governance of local government yet it serves an electorate larger than 42 of the 50 states in the Union plus the District of Columbia, in a county that spans 3,100 square miles and ranges from the Malibu coastlines to the San Gabriel Mountains, and the dense population of downtown Los Angeles to the secluded high desert. With more than 10 million residents and 5.6 million registered voters, Los Angeles County is one of the most socially diverse regions in the world making up a wide variety of backgrounds, cultures, and communities. To meet the needs of its unique voter demographic, the County started the VSAP initiative by assessing the existing commercial voting systems market, and, more importantly, by researching and understanding the needs of its current and prospective voters.

## VSAP: Designing a Human-Centered Voting Model

After surveying the limited commercial voting systems market, the County found that no developed system was scalable to the needs of Los Angeles County or offered the features identified as priorities in undertaking the VSAP initiative. The County recognized early on that its current elections infrastructure (InkaVote+) was at the end of its functional lifecycle, lacked the elasticity to adapt to changing election laws, and was out of step with voter demands. So, the VSAP initiative represented an unprecedented decision to design, build, and implement a modern voting system that focused on the voter experience.<sup>2</sup>

When designing a technical system, it is common to prioritize aspects like hardware requirements, software specifications, operating systems, and technology branding. Although these factors are critical to successfully building a system, the County found that a focus on the human element was the most impactful aspect of designing and developing the VSAP model, and one that would remain relevant throughout the entire project.

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<sup>1</sup> Dean C. Logan is the Registrar-Recorder/County Clerk for Los Angeles County, CA – the largest local elections jurisdiction in the United States. Logan serves on the Board of Directors for The Election Center (National Association of Election Officials) and on multiple public administration research and academic advisory boards. He is a part time instructor at the California State University Northridge MPA program.

<sup>2</sup> Democracy by Design: <https://www.youtube.com/watch?v=BvooVpyw34g&t=7s>.

The field of election administration may seem narrow at times, but when looked at closely, it is a richly diverse industry with unique perspectives, areas of expertise, and priorities. The VSAP project team found that building coalition groups like a robust Stakeholder Advisory Committee and a highly regarded Technical Advisory Committee<sup>3</sup> helped tremendously throughout the project lifecycle and ensured a level of collaborative accountability to the underlying premise of the initiative. Through engagement with these bodies, the County brought together talented experts and advocates, some of whom have been the harshest critics of voting technology, and involved them in the process, heard their perspectives, and leveraged their expertise. The VSAP project team engaged stakeholders to adopt and gain consensus on the principles<sup>4</sup> of the initiative and collectively agreed that failure was not an option. Today—two years into implementation—VSAP committee members are some of the most vocal advocates of the work represented in the VSAP initiative and proponents of the system that was built.

To ensure the system resulting from VSAP truly met the needs of voters, the County adopted a human-centered design strategy grounded in a dynamic partnership with IDEO, a global design and innovation company, to spearhead and guide the project team through an iterative design process articulating a vivid vision for project deliverables and developing system specifications. Post-design, the project was further grounded in the competitive recruitment and selection of Smartmatic, an internationally recognized leader in technology innovation and on-the-ground election systems implementation that embraced the VSAP vision of public ownership and design and came on board as the VSAP manufacturing partner and systems integrator.

This approach represents a significant shift away from how voting systems are typically designed, manufactured, deployed, and supported in the United States. Historically, the primary drivers in voting system design and selection have been basic regulatory compliance and cost, resulting in systems that are often difficult to use and have very little in common with the technology voters interact with in their daily lives. Instead, VSAP flipped that on its head and designed a system centered first on usability, relevance, and access. Only then were technology specifications<sup>5</sup> identified and integrated into the design with an emphasis on security, sustainability, and adaptability<sup>6</sup>.

Los Angeles County's voting system is comprehensive, scalable, and component-based, covering all elements of the voting and vote-counting process. Individual and integrated components include ballot layout, candidate and contest management, vote by mail, Interactive Sample Ballot, Ballot Marking Devices that produce a human-readable paper ballot of record, and an independent central tally system. The system is intentionally built to integrate with off-the-shelf hardware components and to be compatible with external election-support applications, ensuring that as new components come into the marketplace (and as it anticipated they will), VSAP remains agile and adaptable for generations. For example, the model includes integration with an existing, commercially available electronic roster or poll book product.

## **Election Administration: Voter Experience and Services**

Los Angeles County is proud of its voting system, but fully recognizes the system and the implementation of the VSAP model are only as impactful and sustainable as the organization responsible for delivering and supporting them. Building on the success of the VSAP initiative, the

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<sup>3</sup> Advisory Committees – VSAP: <https://vsap.lavote.gov/committees/>.

<sup>4</sup> Principles – VSAP: <https://vsap.lavote.gov/principles/>.

<sup>5</sup> VSAP – Phase III: System Design and Engineering: <https://vsap.lavote.gov/wp-content/uploads/2017/08/VSAP-Phase-III-Report.pdf>.

<sup>6</sup> Design Concepts – VSAP: <https://vsap.lavote.gov/design-concepts-2/>.

County strives to maintain a work culture and service delivery model that mirrors the principles that were the foundation of this monumental undertaking.

Today, election administrators in Los Angeles County think and approach their responsibilities in terms of the voting experience and ensuring that voters have the best options for voting. The County leverages technology to facilitate that voting experience. Most voters in Los Angeles County today exercise their franchise using a Vote by Mail ballot, but how they interact with that resource differs across demographics, so the need for options and customization are critically important. The availability of secure ballot drop boxes, ballot tracking tools, and signature verification software applications are examples of resources that increase voting opportunity and transparency. The VSAP model also offers regional Vote Centers where any voter in the County can vote in-person for up to ten days leading up to and on Election Days. Vote Center locations are selected based on accessibility, visibility, and familiarity throughout the County where voters can access a broad range of accessible services that offer an independent, secure, and private voting experience, and where voters from a wide range of communities can access customizable language assistance through our audio ballot and multi-lingual display options.

### **Election Administration: Logistical and Workforce Planning**

The VSAP model catapulted Los Angeles County into the 21st century and opened the door to reevaluating logistical and staffing procedures to offer new ways of facilitating elements of our representative democracy. As one example, the administration of Vote Centers can be compared to deploying 1,000 small businesses for 11 consecutive days. The scope of the VSAP project required the County to be intentional when selecting vote center locations. Gone are the days where voting took place in a residential garage. Electrical power and cellular connectivity are now necessities and accessibility is central to the selection process rather than a compliance after-thought. The skills necessary to work and volunteer at a Vote Center are now more sophisticated with new roles for line monitors, voting area assistants, and tech support, resulting in the need for Election Workers with levels of technical knowledge, skills, and training that were previously not required. Historically, the majority of workers were community volunteers who made a one-day commitment and whose attendance at one to two training classes was sufficient preparation. That too has shifted. Los Angeles County now relies on a staffing model where community volunteering is encouraged, and needed, but one that calls for higher demand and reliance on public employees to serve the expanded roles of supervising and operating a Vote Center.

### **Election Administration: Workforce Engagement**

The County invests heavily in training operational teams and Election Workers to provide the best experience possible. Following the 2020 Presential General Election, Election Workers were surveyed<sup>7</sup> about their experience to collect insights and data on their experience working the election. The topline results were positive. When asked how well training prepared them, 74% surveyed said they felt very prepared or prepared, 23% said somewhat prepared, and 3% unprepared (Figure 1). Further data showed 91% surveyed said that their experience was very positive or positive. Lastly, when asked about the likelihood of returning, 83% indicted it was very likely or likely they would sign up to work again (Figure 2).

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<sup>7</sup> Los Angeles County Election Worker Survey: <https://www.lavote.gov/docs/rccc/election-info/Election-Worker-Survey-Results.pdf>.

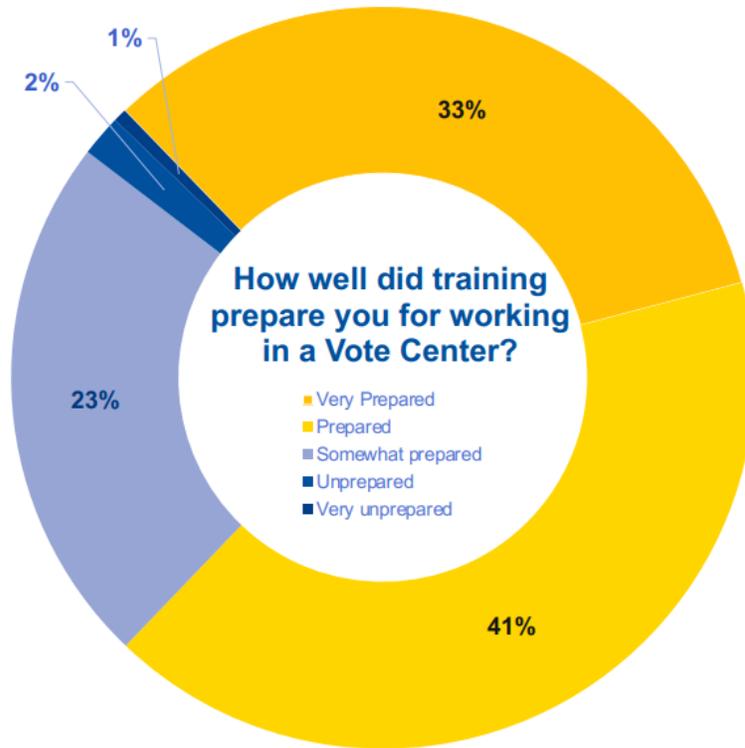


Figure 1

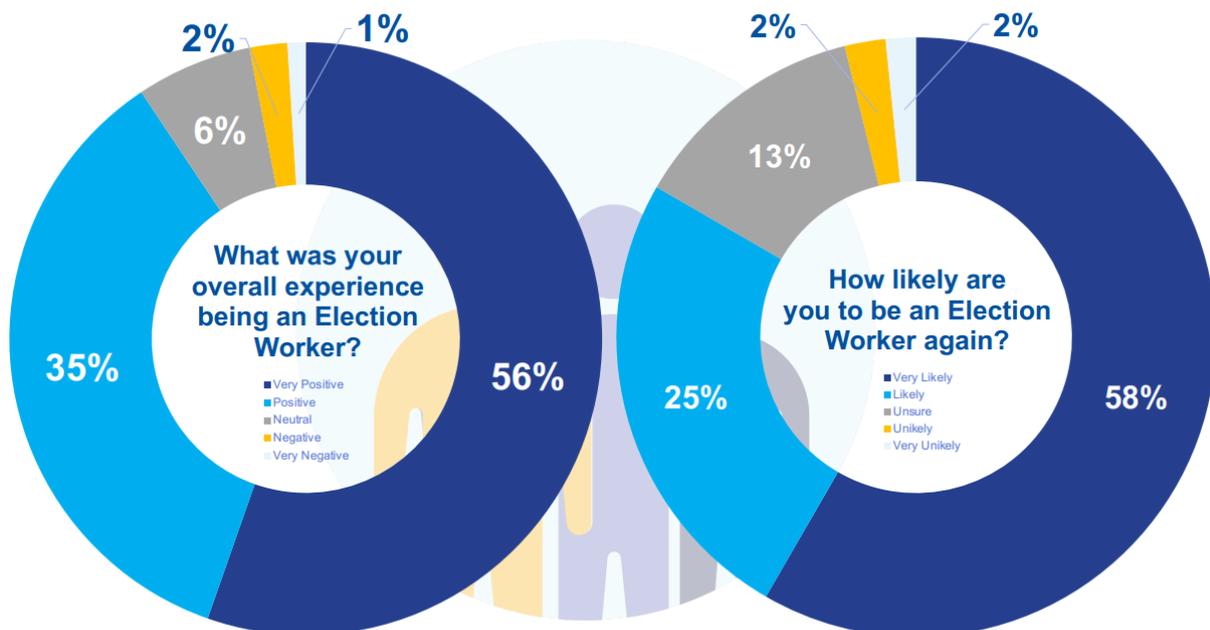


Figure 2

## Election Administration: Public Engagement

The VSAP system was created following a human-centered approach, and consequently the County was eager to survey the larger electorate after one of the biggest elections in recent history. A digital survey was distributed to those who voted<sup>8</sup>, with more than 60,000 voters responding. When asking voters who cast a ballot in-person to rate their experience, 82% reported very positive or positive, 11% responded neutral, and 7% reported having a negative experience. When asked about their experience using the Ballot Marking Device, 73% surveyed said they had a very positive or positive experience (Figure 3).

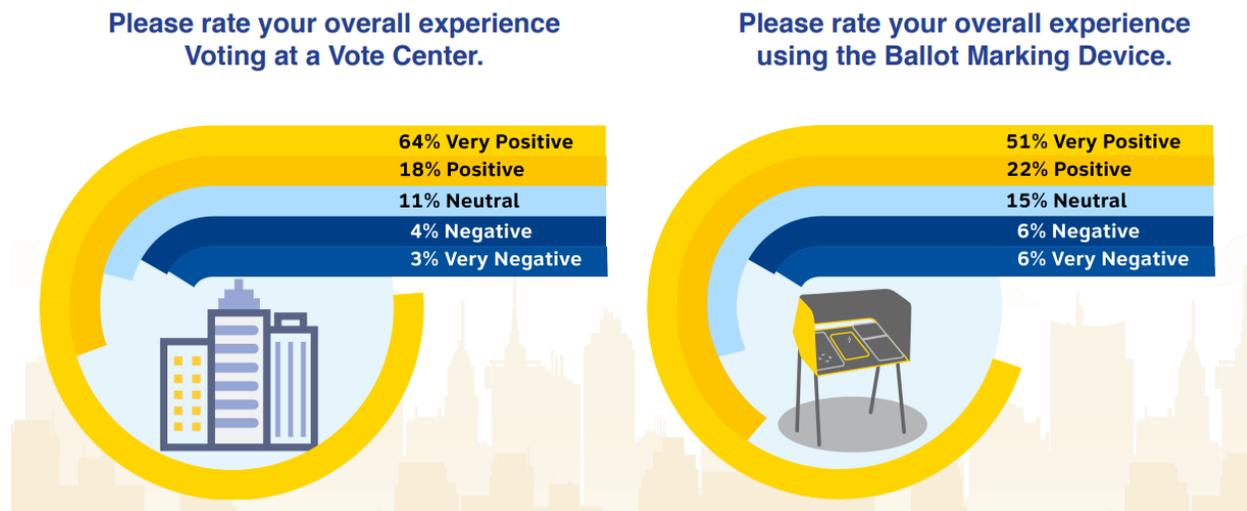


Figure 3

Voters who returned a Vote by Mail ballot were asked a unique set of questions. These voters were asked whether they trusted the ballot would be received and if they thought their ballot was secure. The results were overwhelmingly positive with 92% saying they had an easy experience (Figure 4); 80% trusted their ballot would be received on time, and 79% trusted their ballot was secure (Figure 5).

<sup>8</sup> Los Angeles County Voter Experience Survey: <https://www.lavote.gov/docs/rcc/election-info/Voter-Experience-Survey.pdf>.

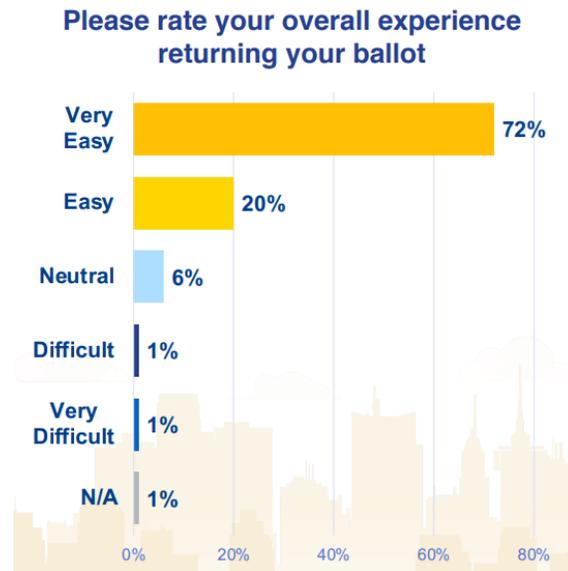


Figure 4

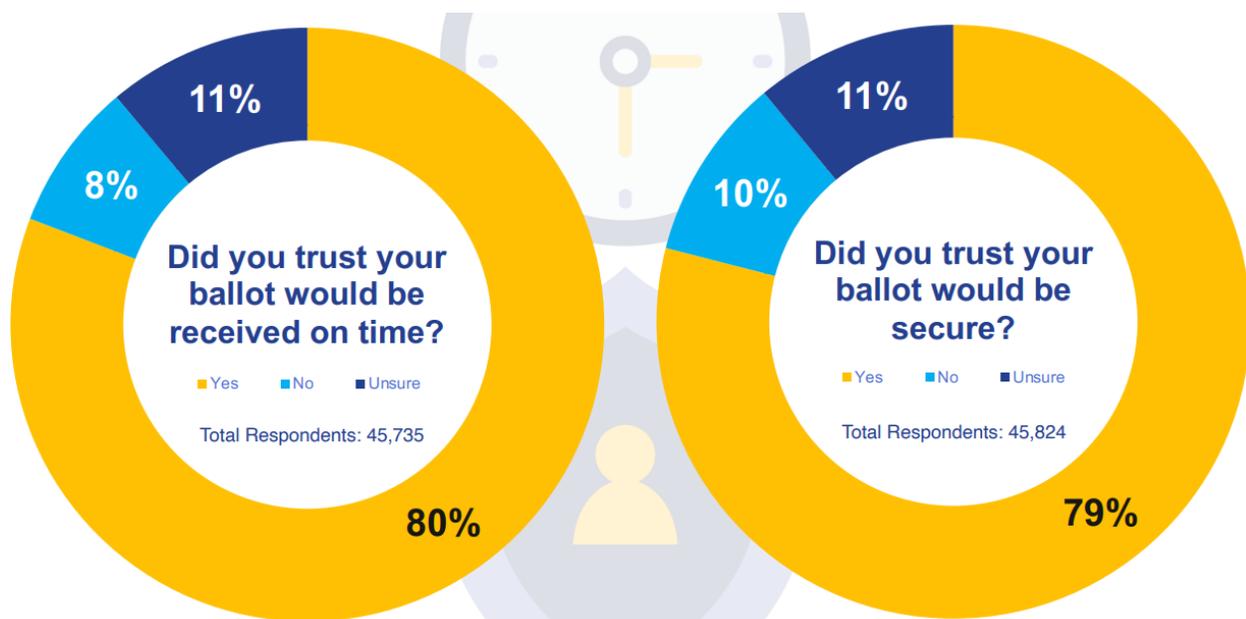


Figure 5

A strong organization and workforce and key partnerships with those who share those values are critical to successfully implementing, supporting, and maintaining modern-day election technology. These survey results indicate that the VSAP experience has positively engaged the election administration workforce and voters.

The VSAP journey underscores the importance of focusing on the human aspect of election technology. Design and usability are better when the process focuses intentionally on the voters who

will use the system and thinks first about their experiences. Similarly, designing to address the most challenging or extreme user needs results in a better system and experience for all. Voters benefit when practitioners find ways to align technology, operations, organization, and options to best serve the electorate and create a sense of faith, trust, and accountability in the electoral process.

To document and capture the VSAP implementation, Los Angeles County produced a documentary in which the County, along with members of its advisory committees, reflected on the rollout of the new system and the part they played in the implementation: Voting Revolutionized.<sup>9</sup> The stories are candid and convey the significance – as well as the challenge – of undertaking significant change management initiatives and implementing major service delivery and system modifications.

## **The Future of VSAP**

The nature, integrity, and structure of our electoral process are under tremendous scrutiny as election administrators navigate political discourse, respond to the continuing impacts and after-effects of a global pandemic, and embrace the changing needs of our electorate. Los Angeles County continues to work on enhancements and refinements to its voting system technologies and logistical models of administration. Holding true to the VSAP principles, the County will continue to develop ways to increase transparency and expand the VSAP footprint. This includes the work of an additional stakeholder working group– Open Source Work Group<sup>10</sup> –to explore how the County can work throughout and beyond the country to share the model with flexibility for other jurisdictions to build systems and service delivery models that meet the needs of their electorates.

The roles and expectations of those who serve in the capacity of election administrators and electoral officials are more visible, demanding, and even threatened than at any time in recent history. As a field of professionals, election administrators are entrusted to facilitate voters' ability to cast a vote and to have confidence in that vote's impact. However, the process, outcomes, and legitimacy of elections do not belong to these administrators; rather, they belong to the voters for whom those systems give voice, influence, and representative power. The design, selection, and deployment of voting systems and election-related technology must reflect that distinction. It is important to never lose sight of that.

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<sup>9</sup> Voting Revolutionized: <https://www.youtube.com/watch?v=dsf8XHsgSbI&t=3s>.

<sup>10</sup> VSAP Open Source – Preliminary, Conditional Implementation Plan: <http://lavote.gov/open-source>