



Election Administration Security and Integrity White Paper

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INTRODUCTION

The County of Santa Clara Registrar of Voters' Office's (ROV) mission statement is to protect and ensure the community's right to participate in fair, inclusive, accurate and transparent election. To achieve this, we follow all the applicable laws and maintain numerous procedures and processes to safeguard the integrity of elections. This paper will address these procedures and processes for each of the areas:

- Security Infrastructure and Partnerships
- Voter Data Information
- Voter Centric Product Design/Creation
- Election Management Software and Voting Systems
- Pre-Election
- Vote Centers
- Vote by Mail
- Post-Election
- Technology Services and Solutions
- Public Information

This white paper summarizes election law requirements, ROV's specific procedures and processes, and general best practices pertaining to the security and integrity of voters' information and election results. These procedures and processes will be continually assessed and updated as laws change, technology evolves, and new best practices emerge among subject matter experts in the election industry. ROV is committed to open and transparent elections and invites the public to observe these various operations.



PROCEDURES AND PROCESSES

Security Infrastructure and Partnerships

The County utilizes a defense-in-depth approach to protect its election management system (EMS) and Voting Systems against threats to the election process that includes physical controls (security fences and cameras), technical controls (data encryption, access controls, and hardening of servers), and administrative controls (policies and procedures). ROV has partnered with the County Information Security Office (CISO) to provide training for employees with access to the voter database on recognizing and reporting suspicious activity and social engineering, as well as other potential threats to ROV systems and data.

California Elections Code

The majority of general ROV activities, processes, deadlines, forms, training, handling, reporting, certification, and other election related activities are governed by the California Elections Code laws along with additional local, state, and federal laws. ROV adheres to these laws and always maintains compliance. All other activities are conducted under the purview of the County of Santa Clara Board of Supervisors policies and direction, County Administration, and ROV department policies.

Certified Equipment and Essential Programs

Our current voting system is Dominion Voting Systems Democracy Suite. Our current Election Management System is DFM Associates Election Information Management System (EIMS). Our current electronic poll book system is KnowInk.

Dominion Voting System – Approved for use by the Secretary of State (SOS) in 2020. We have the latest state-certified version of voting system for tabulators, ballot creation, ballot printing, and election results reporting.

Election Management System – Although not needed to be certified by SOS, this is a critical data/records managements software for the Registrar of Voters and must be compatible with the VoteCal statewide voter registration database. The software maintains voter data, precinct information, GIS address information, political and special district boundaries, and historical data relating to elections in general.

Electronic Poll Books – Approved for use by SOS in 2020, we have the latest state-certified version of electronic poll books. This system is used to maintain the eligible voter file during voting days, check in voters as they vote, and prevent voters from voting again at vote centers. The limited voter information is communicated between the secured Gov-Cloud server and ROV by means of secured Wi-Fi, white-listed equipment and encrypted files.

All other software applications, and programs are procured by the ROV with support of Technology Solutions and Services (TSS) and County Procurement departments for election specific needs for

conducting essential functions, documentation and reporting, and dissemination of information to and for the community.

Security Infrastructure

ROV operates under the infrastructure of the County of Santa Clara with the following:

- Following the National Institute of Standards and Technology (NIST) security controls and standards for cybersecurity frameworks.
- Continually monitoring systems to detect and prevent intrusion.
- Using software applications or hardware appliances that monitor traffic moving on a network to search for suspicious activity.
- Strengthened barriers between secure trusted networks and outside or untrusted networks, such as the Internet.
- Upgrading network firewalls and servers to the latest technology and standards.
- Permitting connections to other authorized systems *only* when necessary, such as the State's voter registration database called VoteCal.
- Under federal law, election officials must provide technological security to prevent unauthorized access to election management systems, including while exchanging data.
- Utilizing encryption of data while at rest and during transmission.
- Conducting routine database backups.
- Regular and routine back-ups of election data can prevent data loss should other systems break down or be taken out of service.
- Thorough chain-of-custody documentation of all assets and systems.
- Physical security of Berger Drive Campus includes security fencing, employee badge access to secured areas, security cameras, alarm systems, and a County Sheriff Deputy stationed on campus during critical election season. County Sheriff Deputies provide increased security on Election Day.

Outside Agencies and State Level Security Support

To better understand and protect the nation against cyber threats, the Department of Homeland Security formed the Cybersecurity and Infrastructure Security Agency (CISA), acting as a "risk advisor" and collaborating with industry and government partners to defend against today's threats and build a more secure infrastructure. Anyone can visit the Department of Homeland Security's CISA website to find out what's happening at the national level and how to be cyber smart.

The Center for Internet Security (CIS) is a non-profit entity that works with the global IT community to safeguard both private and public sector organizations against cyber threats. CIS is home to both the Multi-State Information Sharing and Analysis Center (MS-ISAC), the go-to resource for government entities for cyber threat prevention, protection, response, and recovery, and the Elections Infrastructure Information Sharing and Analysis Center (EI-ISAC), which supports the cybersecurity needs for state and local government election agencies.

The Multi-State Information Sharing and Analysis Center (MS-ISAC) is the main hub for collaboration and information sharing about cyber threats to improve the overall cybersecurity of state and local

governments. Their mission is to identify, protect, detect, respond, and recover from attacks on critical public and private systems. The MS-ISAC has a 24-hour watch and warning center that monitors and disseminates key information about threats in real time, shares how to identify and reduce vulnerabilities, and offers outreach and education to help enhance the nation's security.

The Elections Infrastructure Information Sharing and Analysis Center (EI-ISAC) supports the cybersecurity needs of the elections' subsector. Here, election agencies gain access to an elections-focused cyber defense suite, including sector-specific threat intelligence and cybersecurity awareness and training products, access to the 24-hour Security Operations Center for ongoing incident response and remediation, threat and vulnerability monitoring, and tools for implementing security best practices. The EI-ISAC is supported by the MS-ISAC and builds on its successes.

Physical and cyber security at the state level is largely provided through the California Secretary of State, with information gathered from the federal government, along with the California Office of Emergency Services, California Highway Patrol, and other resources. In 2018, California's State Legislature established the Office of Elections Cybersecurity and the Office of Enterprise Risk Management, setting aside millions of dollars to increase efforts to combat misinformation and improve cybersecurity in California.

The Elections Cybersecurity Communications Department develops election information-correction campaigns, improves outreach to communities in rural and urban areas, and assists county elections officials and voters with up-to-date information about potential threats. The Enterprise Risk Management Office coordinates efforts between the Secretary of State and local elections officials to expand cyber-attack prevention capabilities and establish improved cyber incident responses.

The California Association of Clerks and Elections Officials (CACEO) is a professional, non-partisan organization of local election administrators charged with conducting elections in the 58 counties in the State of California. CACEO's goal is to provide a voice for election officials at the state and national level, and to foster relationships and share information to sustain and improve upon California's elections infrastructure. Annual conferences and certification programs offer ongoing education and training, including sharing of ideas, local programs and "best practices", and inviting guest subject-matter experts that can expand knowledge, provide guidance, and improve how election officials manage physical and cyber security, among other election administration concepts.

Employee Access Security Standards

The ROV uses appropriate access controls to systems and data, such as:

- Granting employee access on an "as needed" basis, establishing a minimum of two-factor authentication and unique credential parameters for each employee.
- Physical access to the ROV is protected by use of employee badge. Further limitations on employee access to voting systems and servers on an "as needed" basis.
- Employing the two-person rule is critical throughout the election, including whenever ballots and vote center results are being transported, during ballot processing, tabulation and adjudication, and reporting results.

Public Access Security Standards

- Public access to voter information is given to authorized applicants who meet the legal criteria defined by California election law, such as for political, governmental, scholarly, or journalistic use. For more information on who may apply to be authorized and what information may be available, please read the “Voter Privacy Statement.”
- Requiring all applicants to complete and sign an official application indicating how they will use the data.
- Thoroughly vetting all applicants against the legal criteria prior to approval.
- Providing all approved applicants documentation from ISO on security awareness and how to protect data.
- Sharing only the minimum necessary data to those who have been authorized.
- Redacting any legally protected information, such as driver license or identification numbers.
- Using only secure networks for data transfer and granted access.
- VPNs, encrypted drives, secure FTP, or other methods that enable restricted access.

Election Backup Plan

The Registrar of Voters created and maintains a general back up plan called Continuity of Operations Plan (COOP). This was previously known as the Continuity of Government (COG) plan. This plan outlines all day-to-day essential operations, securing of physical records and documents, securing of electronic records and documents, back up physical locations, succession plan and contact information for ROV personnel to either continue essential operations at an alternate location or alternate county operations in case of disaster emergencies.

ROV maintains, updates, and submits this COOP plan to the Secretary of State’s Office (SOS) prior to each statewide election. This plan outlines all security features, processes, mitigating measures, and back up plans for a secure election.

For each election, a Dominion Election Project is created within the server where all data and files can be stored and accessed by authorized staff. A copy of this election project is placed on an external drive and stored at a secured location for emergency recovery situations. After election certification, a final copy of the election project will be saved as an archive and stored at a secured location. The election project consists of various formatted files for each system component and reports.

Voter Data Information

Residency Confirmation Postcards

Resident confirmation postcards are one of many means to verify if voters are still residing at the same address as their current voter registration. When a piece of mail is marked undeliverable and returned to our office, or if USPS notifies ROV of an out of state address change, we send a postcard to the address on file to confirm with the voter in case this new information is incorrect. The voter’s status is marked as inactive for two federal elections at which point if there is no confirmation of original address, the status becomes cancelled. However, if the address change is within the county, we send a

confirmation card to the new address to notify the voter of the changes and an opportunity to respond if the new address is incorrect. If no response by the voter, the new address becomes their registration address. If we receive a response for correction, we make the appropriate update to the voter's file.

CA Health Department (CHD)

Reports of death by CHD are sent to SOS office to be updated within VoteCal system. All voters with high confidence information matches are automatically cancelled by the VoteCal system. For less than high confidence matches, a list of voters is sent to the ROV office for verification. When verified, the voter will be cancelled by ROV. If verification can't be achieved, ROV will not update for benefit of the voter. County's vital statistic reports are sent via USPS to the ROV and appropriate updates are made in accordance with high confidence information matches or no update is made for the benefit of the voter.

High confidence match is where the name, address, birthdate, and/or CA Driver's License/ID or last 4-digit of SSN can be verified.

CA Department of Correction and Rehabilitation

Reports of convicted felons are sent to SOS office to be updated within the VoteCal system. All voters with high confidence information matches are automatically cancelled by the VoteCal system. For less than high confidence matches, a list of voters is sent to the ROV office for verification. When verified, the voter will be cancelled by ROV. If verification can't be achieved, ROV will not update for benefit of the voter. County's convicted felon reports are sent via USPS to the ROV and appropriate updates are made in accordance with high confidence information matches or no update is made for the benefit of the voter.

High confidence match is where the name, address, birthdate, and/or CA Driver's License/ID or last 4-digit of SSN can be verified.

Court Orders for Incompetency or Conservatorship

Reports of incompetency or conservatorship persons are sent via USPS to ROV. All voter information with high confidence information matches is updated to cancelled status.

High confidence match is where the name, address, birthdate, and/or CA Driver's License/ID or last 4-digit of SSN can be verified.

VoteCal

The State of California has implemented a statewide voter registration database referred to as VoteCal. All counties will be able to determine if a voter has already registered and/or voted anywhere in the State of California. VoteCal is a statewide database clearinghouse system where all the ROVs in California are securely connected. All the EMS within ROV are linked to VoteCal and exchange information such as registration status, duplicate data, re-registration, state report of vital statistics and convicted felons, DMV

registration information, vote history, and other election related voters' data. VoteCal will improve service to the voters of California by allowing records to be transferred from county to county without voters having to reregister and by including voters' preferences, such as their choice of language or whether they want to vote by mail or at the polls.

Office of the Secretary of State

In addition to maintaining the VoteCal statewide database, the Secretary of State's Office provides regulations and guidance for all election related processes, provides support with elections cybersecurity protocols, voting systems technology assessments and certifications, and ensures counties comply with all related California and Federal laws.

Citizen Eligibility

Per California law, the ROV relies on the registrant's affirmation by signing under penalty of perjury on the voter registration affidavit as confirmation of their US citizenship. Voter registration information is validated against the VoteCal statewide database using the driver's license, ID number, and last four digits of the social security number.

Voter Registration and DMV

The federal National Voter Registration Act of 1993 permits persons conducting business at a Department of Motor Vehicles (DMV) office to register to vote or update voter registration information. This act, often referred to as the "Motor Voter" law, allows the public to register to vote or update their voter registration during a driver's license or identification (ID) card transaction at the DMV. Additionally, California implemented its own "New Motor Voter" law, which makes voter registration at the DMV automatic. If an applicant completing a driver's license, ID card, or change of address transaction, either online, by mail, or in person, they will be automatically registered to vote by the California Secretary of State unless they choose to opt out. California law also allows the preregistration of eligible residents, ages 16 or 17 years old, so that they may be automatically registered to vote when they turn 18 years of age.

Identification (ID) requirements

A California driver's license or state ID is required the first time you vote in California. Applicants who do not have either can provide the last four digits of their Social Security number. This information is also verified in the VoteCal system maintained by the SOS Office.

Voter Data File Request

Voter Data file request is a process of requesting voter data information by political parties, campaigns, journalists, academic researchers, and others authorized by law to communicate, study demographics, research vote/turnout patterns or data mined for academic purposes. The data request is governed by CA Elections Code §§ 2188, 2194, 18109; Government Code § 6254.4; CA Code of Regulations §§ 19001-

19009). Application, copy of ID and fee are required to be submitted to the ROV office for validity of use and receipt of requested data. Applications can be obtained at www.sccvote.org.

Public Confidential Access Terminal in ROV Office

The public confidential access terminal in the ROV office is used primarily by PAC organizations and representatives who collect voter registration forms and petition signatures to verify if the voter is already registered to vote, or verification of petition signers' eligibility. To access the terminal, the representative will have to submit a Voter Data file request for authorization.

Voter Centric Product Design/Creation

Ballot Design

Ballots are designed following strict guidelines set by the Elections Code and the SOS Office. These ballots are printed on controlled certified papers and contains many details such as official election name, authorized color and image design, ballot style, language, placement of candidates, and the unique order of contests and appearance, placement of measures in the order of jurisdiction and appearance, and other informative resources for voters.

Ballot Marking Target

Target marks, or voting ovals, on the ballots are specifically designed to ensure the vote marks do not transfer and match other vote targets on the opposite face of the ballot. The target locations are designed within columns of ballot information.

County Voter Information Guide

The County Voter Information Guide (CVIG) is an important tool to help voters prepare for casting their ballots. Voters are encouraged to read it carefully before they vote and take it with them to the Vote Centers. The CVIG consists of a Sample Ballot, which voters are encouraged to use to mark their choices before completing the official ballot, voting instructions, information about local candidates and measures, the location of the voter's nearest Vote Center, and other important election information. A CVIG is automatically mailed every election to each registered voter who registers by the 29th day before an election. The books are created specifically for voters in their unique ballot style where only the eligible contests and information are included. Voters also have the option to look up and view their CVIG online at www.sccvote.org and opt-out of receiving a physical copy in the mail. The online version of the CVIG is created with accessible features such as zoom and text to speech coding.

Vote By Mail Envelopes

Vote by Mail ballot packets are printed and assembled specifically for each voter, ensuring voters receive the correct ballot style, instructions, and return envelope in their preferred language. The ballot return envelopes contain a space for the voter's signature so that the ROV can validate the ballot. The envelopes also include notices to voters regarding the deadline and requirements to return their ballots, as well other voting rights and accessibility options. The same incoming envelopes are designed to efficiently move through USPS processes to arrive at ROV in a timely manner, and to be compatible with the state's "Where's My Ballot?" ballot tracking application.

Ballot Mailing Dropbox Security (Box)

ROV ballot drop boxes provide a secure, accessible, and convenient means for voters to return their completed vote by mail ballots. A drop box is a secured and locked container where voters may deliver their ballots from the time they receive them in the mail up to the time polls close on Election Day. Ballot drop boxes may be installed inside a public facility such as city halls and libraries, or outside of common public areas such as VTA light rail stations and community centers. These drop boxes are typically available 24 hours a day for outside boxes, and business hours for indoor boxes, and are secured in place, sealed with tamper evident seals, and multiple locking mechanisms.

Remote Accessible Vote by Mail (RAVBM)

Due to recent legislation, any registered voter may use the RAVBM system to download, mark, and print their ballot in the comfort of their own home. When a voter accesses the system, they are given a digital version of their official ballot to mark electronically, then print the completed ballot and return it by mail or at a drop box, just as they would any other mail ballot. No information about how the ballot was marked is captured, stored, or transmitted by the RAVBM system. The printed paper ballot must be received by the ROV to be counted.

The RAVBM system is compatible with a wide variety of accessible devices and programs, enabling voters with disabilities to mark their ballots independently and privately using their own assistive technology.

The RAVBM is also made available early—45 days before each election—for military and overseas voters who qualify under the Uniformed and Overseas Civilian Absentee Voting Act (UOCAVA).

"Where's My Ballot?" Notification System for Voters

"Where's My Ballot?" is an online application managed by the CA Secretary of State designed to track mail ballots through the postal stream and proactively push arrival, delivery, and receipt status notifications to voters, thus increasing election visibility and accountability. This is a free notification program available to all California voters.

Emergency Ballot Delivery Program

The Emergency Ballot Delivery Program is for voters that are hospitalized, incarcerated, or persons with disabilities who are unable to retrieve their ballots personally. The program allows voters to request a ballot to be delivered to them up to 7 days before the election. These ballots are not put in the mail but rather are delivered by either the assigned representative from participating facilities or by ROV staff. The Registrar of Voters introduced the Emergency Ballot Delivery Program service to all facilities throughout the county to give them the opportunity to request ballots for voters that are hospitalized, incarcerated, or persons with disabilities to assign a coordinator the ability to request and receive ballots on their behalf.

Election Management Software and Voting Systems

Dominion Voting System

This is a SOS certified voting system utilized by ROV. The entire system is localized in an “air gapped” environment. All the components of this voting system are only connected within this environment. Section 19205 of the California Elections Code mandates that no part of a voting system can be connected to the internet at any time, nor shall any voting system electronically receive or transmit data through an exterior network of any type. Any information obtained from this system is controlled with onetime use media or authorized personnel with authorized secured media.

Election Information Management Software (EIMS)

Voter registration databases (VRDBs): The County’s VRDB vendor is DFM Associates. The VRDB is contained in a DFM Associates’ application called the Elections Information Management System (EIMS). The application and server are deployed on County premises. The County follows best security practices recommended by experts for the EIMS and in line with National Institute of Standards and Technology (NIST) security controls, including encrypting information, ensuring logical access controls, role-based or permissions-based access (i.e., only those with a need to know and a right to know can access data), implementing multi-factor authentication to log into the system, and utilizing physical access controls such as badge access, server cages, and video surveillance. Additionally, the County monitors and audits access to the EIMS to identify unusual access or changes to data, and the EIMS is regularly backed up to allow restoration, if needed.

Other best practices that the County may implement include training users, particularly to help them deal with spear-phishing directed at employees or contractors with access to voter and elections systems.

Electronic Poll Books (EPB)

EPB are the latest iteration of what used to be printed voter rosters utilized at polling places. These EPBs contain and maintain a list of voters who are eligible to vote for the election. These EPB are programmed with all voter information for vote centers to check in the voter as they show up to vote in person. The voter’s voting method and history information is communicated back to ROV and all other EPBs via secure

cloud server to prevent the same voter from be able to vote again. The communication between all the systems take place in near real-time.

The following security features are implemented by the County:

- All traffic will be encrypted using the latest encryption standards.
- All traffic will pass through Amazon’s Shield product, which provides both detection and mitigation of distributed denial of service (DDoS) attacks. Additionally, the County’s AWS (Amazon Web Services) environment will be continuously monitored for unusual behavior, and alerts will be generated for anything out of the ordinary.
- The EPB system will allow different levels of access, from a basic function that allows limited interaction for Vote Center workers, to administrative access that will allow TSS or other authorized administrators to troubleshoot and engage in other business-related activities.
- All EPB and network devices will be locked in a cage every night within a secured storage area.
- Deploy as single-purpose devices and restrict device functionality to only what is required and confirm that all unnecessary features are disabled (e.g., wi-fi, Bluetooth). Disable unnecessary functionality in hardware when possible.
- Understand the method that voter information is loaded into the EPB and cryptographically confirms that the EPB file on the device matches the original file.
- Physically disable or otherwise seal exposed ports where possible.

Logistics

Logistic procedures include processes to provide technical support for voting systems, and procedures to isolate and quarantine voting machines should there be a need for investigation if they behave in an inconsistent manner. ROV logistics staff are trained to conduct minor troubleshooting and technical steps. During voting days, vendor representatives are available via phone support or are present at ROV’s 299-POLL command center for further in-depth troubleshooting and technical support.

The logistics group also obtains all data regarding technical related issues experienced at the voter centers during the canvass process and conducts investigations, verify, and address any possible systemic issues and provides study report to SOS with election certification documents.

Pre-Election

Pre-election Logic and Accuracy Testing (Pre-LAT)-Vote Center (For Vote Center Equipment)

All scanning tabulators and voting equipment to be used at voting locations go through pre-election logic and accuracy testing (Pre-LAT). During the Pre-LAT, they are reset to wipe all previous use information, programmed with current election information, tested for integrity and accuracy using controlled test ballots and simulations, and sealed with tamper evident seals once all the processes and tests are validated and verified. Only certain seals are removed to open the polls for voters’ use during voting days. All other seals remain in place for prohibition and evidence of tampering.

Pre-Election Logic and Accuracy Testing - ROV (For Central Count Equipment)

All scanning tabulators to be used for central counting at the ROV office are also subjected to Pre-LAT. During the Pre-LAT, they reset to wipe all previous use information, programmed with current election information, tested for integrity and accuracy using controlled test ballots, and sealed in a room with controlled access and surveillance once all the processes and tests are validated and verified. The machines are a larger and faster version of the scanning tabulators utilized at vote centers.

Equipment Security

The Election Logistics and Voting Systems (ELVS) division performs, tests, and maintains the following:

- A complete test of the entire voting system after delivery from the vendor to the county in preparation for implementation.
- Prior to each election cycle, performs a series of tests (Pre-LAT) on all voting hardware and software to confirm that every device used to count ballots and record votes does so accurately.
- Confirm to the SOS that the software used in the election functions correctly and is the same software received from the Secretary of State.
- Follow the SOS approved procedures for identifying, setting up, delivering, and securing all designated devices during every election, including “air-gapping” and attaching both permanent and removable tamper-evident security seals on all devices that will be checked throughout the voting period.
- Prohibit internet connection on all devices and prohibit devices from receiving or transmitting voting data via an exterior computer system of any type.
- Use “two-factor authentication” for all users, requiring a minimum of two pieces of verified information be entered by the user to gain access.

All voting equipment is programmed, tested, and sealed with tamper evident seals prior to deployment to vote centers.

Vote Centers

Vote Center Procedures

Vote center procedures were established to conform to all local, state, and federal laws, as well as ensure voters are given opportunity to exercise their right to vote in a safe manner, securely, independently, and privately. The procedures also outline legal information and postings for all voters and public observers. The procedures and postings address vote center staff responsibilities, voter responsibilities, security of voting equipment, ADA requirements, language requirements, and adherence to vote center location guidelines set by the SOS.

Opening and Closing Process

Opening procedures at the vote centers were established to ensure that no voting equipment or materials have been tampered with or altered since they were sealed by the ROV and delivered to the vote center, or since the previous day of voting alterations. Materials and equipment are checked for signs of tampering and verified against the documentation received from the ROV or the prior day's documentation, when applicable, before they are removed from secure storage and set up to be ready for use by voters.

Closing procedures were established to ensure the vote counts, supplies, and security features have all been reconciled for the day and documented for the next day. This process includes, but is not limited to, verification of the number of voters checked in, ballots voted, ballot paper supply reconciliation, and logging pertinent data into ROV's tracking software at the end of each day.

The supplies include forms for keeping daily reconciliation, count of unused ballot papers, and serialized tamper evident seals for daily securing of equipment.

Voter's ID Requirement

Under California election law, ID is provided at the time the individual registers to vote. Under federal law, ID is required for first time voters who are casting their first ballot in a federal election. Outside of those identification requirements, and once the voter has voted for the first time and is validated, a voter no longer needs to provide ID under California election law. Voters who present in person to vote must be able to state their name and address as it appears on the voter registration rolls and can be found in the EPB containing the list of voters.

Command Centers for Vote Centers, Voters, Technology, Logistics and Media Support

Various Command Centers (CC) at ROV are created to support vote center personnel with procedural and technical support, voter information needs, equipment and supply needs, public and media needs, vendor needs, and ROV operational needs. Vote center CC supports vote center personnel with procedural and technical, supplies, and equipment support for efficient and effective operations of all vote centers during voting days. 299-VOTE CC supports voters with registration detail information, where to vote, ballot and voting information guides and materials. Media CC supports various media venues and social media presence for public information regarding voting days, methods, and locations. Telecommunication Services CC supports with vendor programs and software, cyber security, network infrastructure, and overall technical support to keep all ROV office operations at maximum efficiency. Logistics CC supports with voting equipment technical troubleshooting and maintain usability of all election equipment that are in operation, supplies at vote centers for voter needs, and logistic needs of various courier and transportation operations. ROV Administration CC support the main ROV facility activities, volunteer recruitment and processing, facility use, signage, and many other operations.

Security and ADA Surveys for Vote Center Locations

To ensure all voters have equal access to all voting locations and ballot drop boxes, vote centers and ballot drop box locations procured for use in Santa Clara County are vetted for various requirements:

- SOS ADA survey
- Transportation accessibility
- Community density to ensure opportunity for voting population
- Size and usability to maintain safety and privacy of voting
- Community language requirements
- Ease of accessibility for voters

Signage and Information for Voters

Various signs are placed at the ROV office and voting locations in 14 targeted languages to inform voters of their rights, give election-specific information, help explain various aspects of the election process, and facilitate participation in the election process. The signs provide verified and legitimate sources of information, including links to the ROV website for further information and FAQs, to counter-act misinformation and disinformation.

Additional signs are legally required to be posted at voting locations for voters' awareness of their rights, accessibility needs, voting instructions, language support, and how to obtain election materials.

Voter Information Display (VID) Boards at Vote Centers

VID boards are created and updated every election to be visible and displayed at all vote centers for voters to view and be made aware of current changes in laws, voting rights, information regarding additional supporting languages, and regulations and voting instructions. The information and instructions are printed and displayed in 14 languages.

Official Ballot Statement (OBS)

The OBS was created to maintain the chain of custody log, as well as verification of daily voting information as a security measure, and for canvass processing after election day for vote centers. The OBS contains count of ballots cast, count of voters checked in, count of used and unused ballot sheets, and various security details to ensure voting systems and equipment were not tampered with during non-voting hours.

Voter Index (Formerly Street Index)

The voter index is a list of voters who have voted for the specific election and is available at the ROV office, through virtual secure ROV file location, or at any vote center. This information is utilized by voting rights and political organizations to encourage voter participation. As with any voter data information request process, only authorized applicants are allowed to receive such data and only on voting days.

Provisional Voting (PV)

PV ensures that no properly registered voter is denied their right to cast a ballot if the voter believes they are registered to vote, and their name does not appear on the roster due to a clerical, processing, computer, or other error. If the voter turns out not to be registered, the PV ballot may be processed as a Conditional Voter Registration (CVR) where ROV will determine the voter's eligibility and process accordingly.

A provisional ballot is a regular ballot that is placed in a special pink envelope prior to being put in the ballot box. A voter may vote a provisional ballot at any vote center in the county. However, only the contests the voter is eligible to vote for will be counted.

Other situations also apply such as:

- If a voter cannot provide proof of identification as required by federal law for voting for the first time in a federal election, the voter will be asked to vote a provisional ballot. ROV will verify the voter's eligibility by comparing their signature on the provisional ballot envelope with the signature on their voter registration form.
- If the voter roll states that the voter has already voted either at a vote center or Vote by Mail ballot, the voter will be asked to vote a provisional ballot. This allows ROV to verify that the voter has not mistakenly voted twice in any given election.

Conditional Voter Registration (CVR) Voting

On January 1, 2017, CVR voting became effective in California. Under this law, eligible voters who missed the 15-day registration deadline have the opportunity to come to the Registrar of Voters' Office or any vote center between 14 days prior to Election Day and the day of the Election, and conditionally register to vote. Voter must first complete an affidavit of registration (also known as a Voter Registration Card). After completing the Voter Registration Card, the voter will be given a CVR provisional ballot. CVR provisional ballots are subject to the same requirements as other provisional ballots and will be treated and processed the same as other provisional ballots. Once the Registrar processes the affidavit of registration, and only if the ROV determines the voter's eligibility to register is valid, and validates the voter's information, then the registration becomes permanent and the CVR provisional ballot will be counted.

Voting Equipment Security During Voting Days

The Registrar of Voters has developed an Election Administration Plan describing an overview of how the County will conduct elections under the new Voter's Choice Act model. Under the new model, vote centers must be open for voting up to 10-days before Election Day. New Election Worker procedures, detailed chain of custody documentation, and newly designed security carts that will be used to transport and store voting equipment in the field are a few examples of how ROV will secure and protect voting equipment assets while in the field. Facilities are also secured and ROV is the only one who has access to

the room or area where voting center will be/equipment is located. If not possible, they provide a secure closet or other location where equipment can be stored.

Registrar of Voters' Election Administration Plan Preventative Measures (see Appendix N) can be found at <https://sccvote.sccgov.org/voters-choice-act/election-administration-plan>.

Ballot Couriers

Couriers are designated volunteers in teams of two who are assigned to pick up bags containing ballots sealed with tamper evident seals from vote centers at the end of each day. The bags are assigned a unique serial number, and the courier team and vote center lead fill out a chain of custody form together. The serial numbers are reported to ROV via dedicated TrackIT application. Upon arrival at the ROV office, the bags are inspected for tampering and then handed off to ROV authorized personnel for further processing.

TrackIT Software

TrackIT is a County-created program to report and track sealed ballot and results cartridge containers transported from vote centers to ROV facility. These items have unique identified location, date, and serial number cards. These items are scanned into TrackIT at the close of each day from vote centers and then again at time of arrival at the ROV. The seals and the serial numbers are verified to ensure chain of custody have not been compromised in transit.

Example of unique serial number is 0102O1234 where "0102" is the vote center location, letter "O" is the type of ballot bag, and "1234" is the designated one-thousand series number dedicated to this ballot bag. By use of these three sets of serialization method, no bag can be mistaken for any other bag used during an election.

Vote by Mail

Signature Checking

The ROV adheres to the regulations set by the California Code of Regulations, Title 2, Division 7, Chapter 8.3, Signature Verification, Ballot Processing, and Ballot Counting. When processing vote by mail ballots, ROV follows these regulations as the signatures are compared from the scanned image of the return envelope to the signature on file for the voter. If the signature matches the file, the envelope is marked as "good". If the signature can't be verified or questionable, the envelope is marked "challenge" and will be forwarded to the supervisor level for further scrutiny.

The signature checking process is outline in the Ballot Processing and Canvass Operations Manual published on www.sccvote.org prior to each election.

Return Ballot Envelope Sorting

The returned ballots are processed through two sorting passes. The initial sort (aka 1st Pass) process scans the voter's information barcode, captures the entire image of the envelope, and is sorted into group precinct batches. The data is then transmitted to the voter registration database for the signature verification process, and then the verification results are sent back to the sorter system. Second sort (aka 2nd Pass) process verifies the "Good" category envelopes and sorts them into precinct specific batches. All other batches such as "Challenge" are separated and routed to the supervisor. "Invalid" envelopes are separated and handled in accordance with invalid category reasons.

Sorting allows the ballots to be categorized by precinct number. The prepared ballots by precincts are given to the voting system group to count and tally votes. The advantage of sorting the ballots down to precinct level is to assist with finding the ballots needed to conduct 1% manual recount operations later.

Ballot Extraction and Flattening

As all returned envelopes are separated by "good" category and sorted by their designated precinct, the envelopes go through an extraction process. The envelopes are prepared in such a way that they are faced to the side where personal information can't be viewed and ballots are seated in the correct position. The envelopes are fed through the extraction machine where it slices part of the envelope and opened for the ballot to be removed. When the batch of envelopes and ballots are extracted, they are placed in the designated trays and the ballots relocate to the flattening operation and the empty envelopes relocate to storage operation.

The extracted ballots are flattened of their fold creases and paired with the designated header card to be delivered to the ballot tallying room.

The empty envelope batches are recorded and packaged for election material retention.

Ballot Duplication Operation

This term refers to the process of a "human-eye" review and remaking of ballots that are damaged/torn/bent and otherwise cannot be read by the ballot counting machine. This important process is done to interpret and capture the voter's intended vote. Ballot duplication is conducted under the two-person rule.

The original ballots are properly identified, recorded, and boxed for archival. The duplicated ballots are identified with their original counterpart details, recorded, and sent to the ballot tallying room. Teams of two staff follow the duplication procedures outlined in the ROV Ballot Processing and Canvass Manual available each election on the ROV website.

Ballot Envelope Challenge process

Returned ballot envelopes with the following reasons are marked as “challenge” and given to the next level supervisor for further investigation and/or processed for signature curing procedures. Challenge reasons are:

- Signature on the envelope does not match the signature on file.
- Signature on the envelope is missing.
- First level staff cannot identify or verify the signatures with certainty.

Challenge envelopes are provided to the supervisor to investigate the signature match and/or process the signature per the signature curing procedures. If the signature can be identified or verified, the envelope is updated with a “good” status. If the signature is not a match or missing, correspondence is sent to the voter to provide an affidavit to submit a new or missing signature. The correspondence allows for the voter to cure their signature deficiency within 28 days after election day. Once the ROV receives the voter’s affidavit, the envelope and ballot will be processed accordingly.

Ballot Received after Election Day

Vote by Mail ballots that are postmarked ON or before Election Day must be received no later than seven days after the election to be processed.

Vote by Mail Ballot Envelope Return Methods

While voters can return their voted ballot in the postage paid Vote by Mail envelope provided, they can also return it in person. Voters can return their ballot to any ROV official ballot drop box location, or at any available vote center on or before Election Day. Voters can also authorize someone to return their ballot by completing the area on the authorization portion on the return Vote by Mail ballot envelope.

Ballot Harvesting

Ballot harvesting refers to individuals who collect, or “harvest” many voters’ completed ballots, possibly taking advantage of the voter’s option to permit an individual to return their voted ballot for them. While this act of collecting and returning ballots for multiple voters is not illegal, the person collecting the ballots may be violating one or more laws that protect the voting process if there is any intent by the person collecting ballots to engage in a criminal act. Voters are encouraged to only give their ballots to known and trusted individuals and organizations, or to utilize official ROV drop boxes and the USPS.

For more information on returning voted ballots, see Elections Code Section 3017 and related penal provisions found in Division 18.

Post-Election

Canvass Operation

The canvass is the time period following an election when important, detailed steps are completed that lead up to the final certification of election results. In a regularly scheduled countywide election, the canvass period lasts for 30 days, as authorized by state law.

California Elections Code Section 33.5 defines the official canvass as, “the public process of processing and tallying all ballots received in an election, including, but not limited to, provisional ballots and vote by mail ballots not included in the semifinal official canvass. The official canvass also includes the process of reconciling ballots, attempting to prohibit duplicate voting by vote by mail and provisional voters, and performance of the manual tally of 1 percent of all precincts.” Canvass activities include ballot adjudication, write-in review, preparation of the statement of vote, 1% manual recount, and processing of unsigned ballot statement forms and signature verification forms.

The ROV publishes the Ballot Processing and Canvass Operations Manual describing the canvass process in detail that can be found on our website at www.sccvote.org prior to each election.

Ballot Adjudication/ Write-in Review Process

Ballot Adjudication is the process of reviewing ballots, cast by mail or at vote centers, that require a clarification/resolution to interpret and capture the voter’s intent. This process is done in conformity with the Secretary of State Uniform Counting Standards. Ballot adjudication is conducted under the two-person rule.

There can be multiple reasons a ballot may require adjudication:

- Ambiguous (marginal) marks – the voter has not properly or clearly marked any of the voting targets.
- Overvotes – the voter has marked more choices than permitted for the contest.
- Undervotes – with the voter has marked fewer choices than permitted for the contest.
- Blank Ballots – the voter has left one or more ballot Cards blank or has not marked any contests.
- Blank Contests – A ballot card where a voter has left one or more contest blank.
- Write-In Choices – the voter has written in the name of a candidate in the write-in space for one or more contest.

Uniform Vote Counting Standards

ROV complies with the standards set by the Secretary of State who have developed the standards to define the circumstances under which "marking" of a ballot constitutes a vote and when a vote will or will not count. The standard can be found at the following website:

<https://www.sos.ca.gov/elections/uniform-vote-counting-standards>

Statement of Vote

This is a report generated at the time of election certification providing a detailed accounting of the voting results for each voting precinct, contests, and voting method. The details include contest and candidate information, count of votes, and totals for each jurisdiction, as well as additional higher political jurisdictions such as county, supervisorial, senate, assembly, and congress.

1% Manual Tally Recount

California Elections Code Section 15360 requires that, prior to certifying the election, a random sample of ballots from every election must be recounted manually to verify the computer count. The manual tally must include, at minimum, votes cast in one percent (1%) of the precincts. Additional precincts are counted to manually verify each contest on the ballot. This manual tally recount must be completed before the election is certified. The 1% manual tally recount is open to the public.

County Manual Automatic Recount

Pursuant to the Board of Supervisors' Policy 3.63, the County of Santa Clara performs an automatic manual recount for contests with a margin of victory less than 0.25% (one-quarter of one percent) of ballots cast, or where that margin is equal to or less than 25 total votes.

The automatic manual recount applies only to contests whose jurisdictions are wholly contained within Santa Clara County. The automatic manual recount will be performed manually except in the case of a countywide or City of San Jose citywide contest, in which case the recount will be conducted by tabulation machine. The recount will be conducted prior to the certification of election results.

The automatic manual recount will be conducted concurrently with the 1% manual tally recount as an extension of that tally, pursuant to Elections Code Section 15360(a)(1)(B)(ii). Contests qualifying for the recount according to the above criteria will be based on the most recent results reported prior to commencement of the 1% manual tally recount and following the completed tally of all outstanding Vote by Mail, provisional and conditional ballots. Ballots will be pulled and prepared for the automatic recount concurrent with and in the same manner as the regular 1% manual tally recount.

Public Requested Manual Recount

Under California's Election law, following completion of the official canvass, any voter may file a written request for a recount of the votes cast for candidates for *any* office, for slates of presidential electors, or for or against any measure. If the office, slate, or measure is voted on statewide, the request is filed with the Secretary of State.

Unsigned Ballot Statement Form and Signature Verification Form

The unsigned Ballot Statement and Signature Verification form and curing process for a voter starts when one of the following events occurs:

- Voter DID NOT sign the returning Vote by Mail envelope,
- Voter signs the returning Vote by Mail envelope different than the official registration on file,
- Voter DID NOT sign the PV or CVR envelope while voting at vote \center, or
- Voter DID NOT sign the voter registration card while voting CVR method at a vote center.

ROV will mail an “Unsigned Ballot Statement” or “Signature Verification Statement” form, requesting the voter sign and return it by the date on the notice. After the election staff validates the signature, the ballot can be processed and counted.

Technology Services and Solutions (TSS)

TSS is the County’s information services and technology department that supports the ROV’s IT and security infrastructure needs and requirements.

TSS group supports, maintains, and monitors the following:

- Maintain security controls and standards for cybersecurity frameworks.
- Monitor county’s network systems to detect and prevent intrusion.
- Use software applications or hardware appliances that monitor traffic moving on a network to search for suspicious activity.
- Strengthen barriers between secure trusted networks and outside or untrusted networks, such as the Internet.
- Maintain and service County’s network firewalls and servers to the latest technology and standards.
- Gate keeper for permitting connections to other authorized systems *only* when necessary.
- Maintain and upkeep technological security to prevent unauthorized access to election management systems, including while exchanging data.
- Maintain and deploy encryption of data while at rest and during transmissions.
- Conduct routine database backups.
- Support regular and routine back-ups of election data that can prevent data loss should other systems break down or be taken out of service.
- Maintain network access system, granting employees access on an “as needed” basis, establishing a minimum of two-factor authentication, and unique credential parameters for each employee.
- Maintain infrastructure for physical access to the ROV protected by use of employee badges. Further limitations on employee access to voting systems, servers, and other sensitive areas on an “as needed” basis.
- Maintain and support Virtual Private Network connections, encrypted drives, secure FTP or other methods that enable restricted access for data and confidential election related information.

Security Camera System

Security cameras are installed within the County secure network and serviced by two separate County security groups. This system is not maintained or under control of ROV. In order to view/request any footage, there are at least three levels of access requests. Such requests will only apply when a nefarious

activity investigation ensues by ROV or other legal means. The surveillance system continually records movement within its' view and retains the footage for 30-60 days depending on type of equipment and location they are stored in. The video footage is under the control of the County security group within several layers of security access surveillances. The footage may only be requested under legal requirements and with chain of authorized approvals. All security cameras are placed in strategic locations such as wide-angle general view, as well as entrances and exits to restricted areas and rooms.

EMS and Voting System Servers

ROV EMS and voting system servers are installed within County secure locations and serviced by TSS. These systems are maintained or under control of ROV. In order to physically access these servers, there are at least three levels of access requests. Such requests will only apply when authorized update or limited access is needed strictly for ROV or other legal needs. The access to these servers is allowed only with chain of authorized approvals from ROV.

Security and TSS Support Plan

Prior to election, TSS provides a support plan to the ROV with information for TSS subject matter expert personnel, vendor contact support information, including escalation and back up contacts. This plan contains related information such as but not limited to network, website, hardware, software, telecommunications, vendors, and county/state/federal authorities.

County of Santa Clara Information Security Office (ISO)

ISO provides integrated systems and cybersecurity support to protect the County's networks, devices, programs, and data.

County information systems and data are globally targeted since we are essentially Silicon Valley. Highly sophisticated cybercriminals, "hacktivists," and foreign intelligence services have become increasingly adept at exploiting the vulnerabilities of cyberspace.

In response to these intractable challenges, ISO was created to transform the County's Cybersecurity Program to move to a proactive security posture, based on an established Cybersecurity Framework. CISO provides overall cybersecurity program management, governance, risk and security operations, oversight, and compliance with applicable County and federal regulations and statutes.

ISO provides the ROV with routine assessments, testing, and reporting of our EMS and other systems for vulnerabilities and compliance with all applicable regulations and statues in regard to physical and cyber security.

Public Information

ROV Web Page

ROV creates, maintains, and continually updates the www.sccvote.org website to inform the community of upcoming elections, election procedures and processes, legal information posting, election related knowledge base, frequently asked questions and answers, statistical data, outreach information, language translated content, detail district/precinct information, instructional videos, and other useful information.

ROV website is the main communication method to voters, along with other supporting ROV social media outlets such as Facebook, Twitter, Instagram, and YouTube.

Knowledge Bases and FAQs

ROV creates, maintains, and continually updates the knowledge base and Frequently Asked Questions (FAQ) and answers on our website www.sccvote.org. The knowledge base consists of various election related categories such as, but not limited to, voting methods, registration instructions, voter center information, various election processes, how-to instructions and guidance, resource documents and forms, volunteering and employment, and many other activities related to elections. The FAQ pages cover a wide range of information such as, but not limited to, voting situations, myths, misinformation, what to do, security, procedural methods and solutions, resource information, and many other election questions.

The FAQ is categorized by topic within the content menu of the website.

RECENT IMPROVEMENTS IN ELECTION SECURITY

Over the past years the County of Santa Clara's Registrar of Voters, along with TSS, ISO, and the County Privacy Office, have been working together to review systems, make improvements, increase awareness and training, and raise the County's security posture to protect our elections.

Key Actions the County Has or Is Taking to Protect Our Elections

- Improving cybersecurity through focused cyber threat prevention, protection, response and recovery by joining both the Multi-State Information Sharing and Analysis Center and the Elections Infrastructure Information Sharing and Analysis Center.
- Enhancing physical security and protection by partnering with state and federal governmental agencies such as Homeland Security, CISA, FBI, and California Office of Emergency Services.
- Sharing ideas and best practices with similar agencies in the state and nation through larger associations and organizations.
- Upgrading and improving systems and procedures, such as investing in new voting technologies, upgrading servers and firewalls, and training staff on how to recognize threats.
- Increasing public awareness and sharing information on how voters can help combat disinformation and misinformation.

How The County Protects Voter Registration Data

- Follows the National Institute of Standards and Technology (NIST) model as a guide for protecting election management systems.
- Developed a "defense in-depth" approach to security, designing multiple layers of protections and increasing staff training about data security and recognizing threats.
- Reviewed and amended how data is shared by thoroughly vetting applicants and requests.
- Restricting access to only authorized users who must have an access key or provide answers to multiple questions.
- Encrypting data using a minimum of Advanced Encryption Standards.

How the County Protects Our Votes

- Upgraded voting technology that meet new standards for improved functionality and auditability.
- Ensuring voting systems utilize paper ballots that can be voter-verified.
- Implementing new security standards for delivery and storage of voting equipment.
- Conducting thorough testing before any voting system can be used and conducting a post-election manual audit to confirm results.
- Redesign of official ballot drop boxes for improved security and protection of Vote by Mail ballots.
- Thoroughly testing all voting equipment before and after each election, to ensure proper functionality.

- Practicing “air-gapping” to physically separate two installations and all associated devices, protecting against the spread of viruses.
- Maintaining chain of custody documentation and following the “two-person rule” requiring a minimum of two people present with all voting equipment and voted ballots during an election.
- Verifying the name, address, and signature on the envelope of each voted Vote by Mail, Provisional and Conditional voter ballot before they can be counted.

CONCLUSION

In conclusion, the Registrar of Voters' Office is committed to providing fair, accurate, inclusive elections to all voters in Santa Clara County. We take pride in providing the best available methodologies, equipment, and resources for our community to have the ability to vote in a safe, secure, and private manner. The procedures and processes articulated here will support further understanding of ROV's abilities and maintain voters' confidence.

Key Takeaways

- Security and Integrity is of utmost priority for ROV operations.
- ROV will, with best of our abilities and with available latest technologies, continue to provide fair, accurate, and inclusive elections for our community.
- ROV will continually strive to be the model for election industry by means of upkeeping with latest technology, diverse implementation methods, and follow the laws.



FOR MORE INFORMATION

Below are links to sccvote.org where more information on these topics is available.

[Five Things You Can Do to Be a Mindful Voter](#)

[Key Actions to Protect Our Elections](#)

[How the County of Santa Clara Protects our Votes](#)

[How the County Protects Voter Registration Data](#)

[Election Security Frequently Asked Questions \(FAQ\)](#)

APPENDIX A: NEW VOTING TECHNOLOGY

Starting in 2020, the County of Santa Clara ROV rolled out new, more modern voting equipment to enhance voting and improve our elections.

Updated Technology Improves Security and Accessibility

In 2015, California’s rules for testing and approving voting systems and equipment were updated and improved. In 2017, the Secretary of State approved newer, more modern systems with better security and auditability features that are based on the updated 2015 rules. In 2020, counties in the State began using new voting systems after the Secretary of State removed the permission for counties to continue to use older systems.

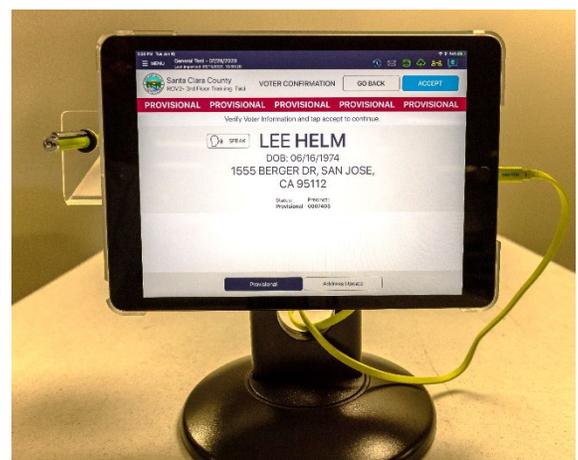
[How will I use the new equipment to vote at a Vote Center?](#)

Voting instructions can be found inside the voting booth and you can ask an Election Worker to assist you with using the new equipment. A sample of your official ballot and instructions on how to mark your choices are included in your County Voter Information Guide. Voting instructions can also be found on our website under the tabs, “Vote in Person” and “Vote by Mail.”

The biggest changes are how you sign in when you arrive, and how you can cast your own ballot. It is now counted on the spot! Some of the new systems you may use at a vote center are:

New Computerized Roster (or Electronic Poll Book) Replaces the Paper Roster of Voters

- When you arrive at a vote center, an Election Worker will locate you in the new tablet roster, called an electronic poll book (EPB). They will ask you confirm your information and sign your name on the signature line.
- With a computerized roster of voters, the Election Worker can find you by name, address, date of birth, or state ID. If your name is not located in the roster, you can still vote as a provisional or conditional voter.
- EPB have the County’s entire roster of voters, enabling you to vote at any voter center you choose.

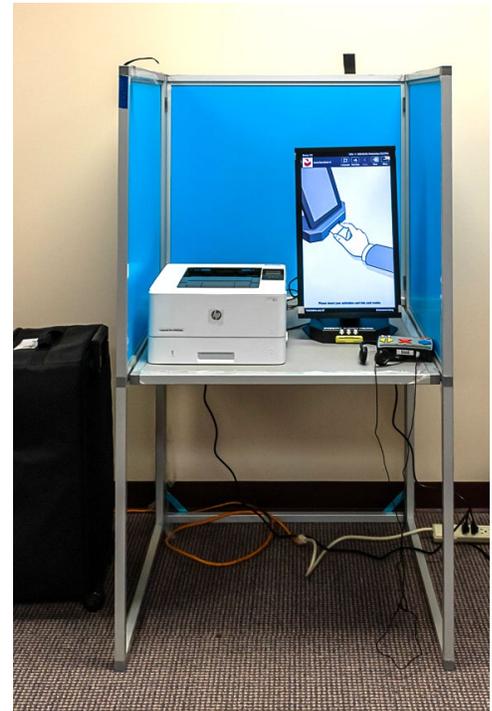


New Blue Voting Booth with a 19" Accessible Ballot Marking Tool

The Election Worker will ask if you will be marking your paper ballot by hand or using the new 19" ballot display and marking tool – it's your choice! Depending on your choice, the Election Worker will give you either a paper ballot to mark by hand, or a small activation card that you will take to a blue voting booth, insert into the ballot marking tool to activate the system, and begin to vote.

Features of using the new accessible ballot marking tool are:

- Simplified voting – just touch the voting square next to your choices on the display screen.
- Allows you to easily change your vote just by selecting a new voting square.
- Enhanced accessibility options include an audio feature and the ability for voters to connect their own tools, such as sip-and-puff, paddle switches, and Audio-Tactile Interface (ATI).
- Helps you avoid marking too many choices in a contest, called overvoting, reducing your need to ask for new ballot.
- Uses an onscreen keyboard to make voting for a write-in candidate easier. Touch the write-in space on the screen and a keyboard will display.
- Reminds you to review all your ballot choices before you print your ballot.
- After confirming your choices, your voted ballot is printed inside your voting booth. Place the ballot inside your secrecy sleeve, and take it over to the new voting machine to be counted!



New All in One Machine Scans Your Ballot and Counts It on The Spot

- The same machines are used to count all ballots voted at the vote center, whether completed with the 19" ballot marking system, or completed by hand. This improves your voting experience and makes processes for Election Workers less complicated.
- If you've marked your ballot by hand, the new scanner may emit messages to you about possible errors. For example, if you've overvoted a contest by mistake, the scanner will offer you a chance to remake your ballot before you cast your vote. An overvoted contest is when you mark too many choices than available. For example, you have voted for three candidates for city council but there were only two seats up for election.

- The same machines will both count ballots and tally all votes cast at the vote center. After the close of polls, memory devices from the voting machines are returned to the ROV and data is added to the results, eliminating the need to hand process ballots on Election Night.

Visit the Secretary of State's [Office of Voting Systems and Technology Assessment](#) website for more details on how to use California's approved technologies, including the County's new voting system.

APPENDIX B: GLOSSARY OF TERMS

[What is acceptance testing?](#)

The process of examining a voting system to verify and validate the performance of all devices to ensure they meet certification requirements and that the system that was delivered is the same certified system that was purchased or leased.

[What is adjudication of ballots?](#)

Ballot Adjudication is the process of digitally reviewing ballots, cast by mail or at vote centers, that require a clarification/resolution to interpret and capture the voter's intent. This process is done in conformity with the Secretary of State's Uniform Counting Standards. Ballot adjudication is conducted under the two-person rule. See also, "**What is ballot duplication?**"

There can be multiple reasons a ballot may require adjudication:

- Ambiguous (marginal) marks – the voter has not properly or clearly marked any of the voting targets
- Overvotes – the voter has marked more choices than permitted for the contest
- Undervotes – with the voter has marked fewer choices than permitted for the contest
- Blank Ballots – the voter has left one or more ballot Cards blank, or has not marked any contests
- Blank Contests – A ballot card where a voter has left one or more contest blank
- Write-In Choices – the voter has written in the name of a candidate in the write-in space for one or more contest

[What is an air gap?](#)

An air gap is a physical separation between systems that requires data to be moved by some external, manual procedure, such as by disc, flash drive or other portable media. An air gap is necessary between two systems that (a) are not connected physically and (b) where data transfer is never automated and is only accomplished under human control. Election systems use air gaps intentionally to prevent or control access to a system. The election system cannot be connected to the internet at any time.

[What is authentication?](#)

The process of identifying a user, usually by means of multiple factors such as a username and password combination. Election systems use these authentication methods to ensure that only those users with appropriate authority are permitted access.

[What is a ballot?](#)

The form of ballot you have used to cast your vote in an election has changed over history. From voting by marble, to voting on paper, to using computer devices to assist people in voting, the advancement of technology has broadened the idea of what a ballot is. The California Elections Code defines “ballot” as any of the following when referring to the election process:

- a. The combination of a card with number positions that is marked by the voter and the accompanying reference page or pages containing the names of candidates and the ballot titles of measures to be voted on with numbered positions corresponding to the numbers on the card.

This is commonly referred to as a “butterfly ballot.”

- b. One or more cards upon which are printed the names of the candidates and the ballot titles of measures to be voted on by punching or marking in the designated area.

Voting by “punching” a hole to indicate your vote were commonly referred to as, “punch-card ballots” and are no longer in use.

- c. One or more sheets of paper upon which are printed the names of candidates and the ballot titles of measures to be voted on by marking the designated area and that are tabulated manually or by optical scanning equipment.

This is the most commonly used approved ballot system in California. This system is used in the County of Santa Clara in combination with the ballot described in (d)(2) below.

- d. (1) An electronic touchscreen upon which appears the names of candidates and ballot titles of measures to be voted on by touching the designated area on the screen for systems that do not contain a paper ballot.

(2) An electronic touchscreen may qualify as a ballot even for systems that contain paper ballots if the votes are tabulated manually or by optical scanning equipment. This is used in combination with ballot system described in (c) and is beneficial to voters with mobility or vision impairment issues and enables voting independently.

[What is ballot duplication?](#)

This term refers to the process of a “human-eye” review and remaking of ballots that are damaged/torn/bent and otherwise unreadable by a machine cannot be read by the ballot counting machine. This important process is done in order to interpret and capture the voter’s intended vote. Ballot duplication is conducted under the two-person rule.

See also, “**What is adjudication of ballots?**”

[What is a ballot marking device?](#)

A ballot marking device is used as an additional tool to assist voters in marking their paper ballot. A ballot marking device is used in combination with a paper ballot and optical scanning equipment, where the voter uses the ballot marking device to make their vote selections, prints their ballot while in the voting booth, and then places their ballot through the optical scanning equipment for the ballot to be tabulated.

The County of Santa Clara’s ballot marking device consists of a 19-inch touch sensitive screen that is used to display the official ballot. The voter may choose to display or hear their ballot in a language provided by the Registrar of Voters. The ballot displayed on screen can be marked by hand-touch or by using an alternative assistive device of their own, such as pedals or sip-and-puff.

Another type of ballot marking device can be the Remote Accessible Vote by Mail System.

See also, **“What is an electronic touchscreen or touch screen voting machine?”**

[What is a blank ballot?](#)

A blank ballot is one on which the voter has not made any mark(s) in any of the voting position target areas (bubbles), or one which has been marked with a pen or pencil that cannot be read by the machine, or one which has been consistently marked outside of the voting position target area on the ballot so the scanner cannot see it.

[What does chain of custody mean?](#)

Chain of custody means documenting each time items change hands. For example, each time a piece of voting equipment moves from the vendor to the State for testing, from the State back to the vendor after certification, and then from the vendor to the election’s official, and so on, this exchange is documented by capturing the name and serial number of the equipment and the date, time and name of the people who are exchanging it. Chain of custody must also follow the two-person rule.

[What is a district?](#)

When used in relation to administering an election, a “district” includes any regional agency that has the power to tax, to regulate land use, or to condemn and purchase land that is governed by elected officials who have the authority to call an election. Examples may be the State of California, the County of Santa Clara, the City of San Jose, the Campbell Union School District, the Santa Clara Valley Water District, etc. Voters who reside within the legal boundaries of the regional agency or district have the right to vote on candidates and measures the regional agency or district has placed on the ballot.

You can find a list of the elected representatives in elective districts within Santa Clara County on our website under the “Candidates & Measures” pull down menu and selecting the List of Officeholders. You may look up your own election districts and members by selecting, [“Look Up Your District”](#) under our Popular Services link on our home page.

See also, **“What is an electoral jurisdiction?”**

[What is an Election Administration Plan \(EAP\)?](#)

Counties who have adopted the Voter's Choice Act (VCA) must propose an Election Administration Plan (EAP), which is a detailed plan on the conduct of elections under the VCA. Visit our website for more information about and the most current version of the [Election Administration Plan](#).

[What is an electoral jurisdiction?](#)

When used in relation to election administration, the term "electoral jurisdiction," means the physical limits of the agency or district area within which the voters reside who are qualified to vote for the officer or measure on the ballot. This can mean the boundaries of a state, county, city, school or special district or agency, or any subdivided area or division within.

See also, "**What is a district?**"

[What is an electronic touch screen or touch screen voting machine?](#)

This is a voting system that uses an electronic device with a screen that reflects the names of candidates and ballot titles of measures to be voted, where the voter marks their ballot choices by touching the designated area on the screen. This system may be used in conjunction with a paper ballot that is printed and cast on a separate machine, as is the system in use in the County of Santa Clara, or may include a voter verifiable paper cast vote record for the voter to review their ballot before it is cast electronically.

A touch screen voting machine is also known as a direct recording electronic device, or DRE, that was first used widely under the Help America Vote Act accessibility requirements as it enables a voter with physical or vision difficulties to vote independently. California election laws mandated that any county using a touch screen voting machine, or DRE, must have a voter verifiable paper record of their votes that they can review and approve before their ballot is electronically cast. This paper record is also used to audit and verify the election results obtained from the system. This system is not in use in the County of Santa Clara.

See also, "**What is a touchscreen voting machine?**"

[What is an EMS, or an EIMS?](#)

An Election Management System (EMS), or also called an Election Information Management System (EIMS). The complete database containing the historical list of registered voters, the elective districts and political subdivisions contained within Santa Clara County, candidate and elected official data and forms, vote by mail information, and other items related to an election.

[What is encrypted data?](#)

Encrypted data means data is “translated” into another form, or code, so only people with access to the secret password or key can read it.

Encryption denies access to the receiver of the message unless it can be decrypted with the secret password or key, which turns the message into plain text or another usable format. Voting systems can encrypt data within its components before the data is transmitted to other devices.

[What is escrow?](#)

Escrow generally refers to the process when items are being held by a third party, on behalf of other transacting parties, where the third party has no interest in those items being held. Under California Election Law, escrow facilities serve as an independent third party that give the Secretary of State direct access to the exact versions of software and firmware that have been approved for use in California. All voting system vendors, Remote Accessible Vote by Mail system, and Election Management System vendors are required to do this.

Click [here](#) for more information on California’s Escrow Facility Requirements.

[What is a facsimile ballot?](#)

A facsimile ballot is an exact duplicate of an official ballot, except that it is not available as an or printed on official ballot paper and cannot be used to cast a vote or be tabulated by machine. A facsimile ballot is used by voters who may need additional language assistance to understand their official ballot that is not printed in their native language.

[What is a firewall?](#)

A firewall refers to a network security device (a router in a computer network) that monitors incoming and outgoing network traffic (applications and users) and allows or blocks traffic based on specific security rules. Firewalls are key stopping points for data coming in or leaving the network and establish a barrier between known trusted networks and untrusted networks, such as the Internet.

[What is a marginal or ambiguous mark on a ballot?](#)

A marginal mark, also referred to as an ambiguous mark, can be a mark outside of the intended vote target area (the circle the voter is to complete), marks that are too light or use of ink other than blue or black that cannot be read (such as red or green, or yellow highlighter), marking with a checkmark, X, or a partially filled or overfilled vote target. A marginal mark is often unreadable by the ballot counting machine and are separated out from other voted ballots for adjudication by no less than two-people.

See also, **“What is a stray mark on a ballot?”**

[What is multi factor authentication?](#)

A security process that requires the user to provide a minimum of two different pieces of information to identify them as an authorized user. It makes it harder for attackers to gain access to a system, account, data, etc. as it requires more information to pass the authentication check.

A user may be required to provide two or more of the following: something you know (e.g., Password or PIN), and/or something you have (e.g., a security token device or program that generates a one time “key”), and/or something that identifies who you are (e.g., name, email, biometrics).

[What is an overvote?](#)

An overvote occurs when the voter selects too many options than allowed in a contest. For example, a school district may have three governing member offices on the ballot, directing the voter to, “Vote for not more than three” candidates. The voter “overvotes” this contest if they complete the circle next to the name of *more than three* different candidates. All other properly marked contests on the voter’s ballot will be counted. The overvoted contest cannot be counted as the voter’s intent is unclear.

See also, “**What is an undervote?**”

[What is a penetration test?](#)

A penetration test, also known as a pen test, is a planned and simulated cyberattack done in order to improve a system’s security. The intent is to breach a computer system to find things that must be corrected. This should not be confused with a vulnerability assessment.

[What is Pre-LAT?](#)

Pre-LAT is a term, or acronym, that refers to the pre-election logic and accuracy tests conducted on all voting equipment prior to use in any election. This is a series of tests done on each piece of voting equipment in order to determine the accuracy of the systems’ computer vote counting and tabulating programs.

[What is a recount?](#)

Under California Election law, a “recount” is the activity of recounting the number of ballot cards cast and retallying votes to confirm the results of the election are accurate.

[What is redistricting?](#)

Redistricting refers to the process of redrawing political district lines in an effort to “equalize” the number of voters in elective districts (federal, state and local). Redistricting occurs every 10 years and is based on the results of the decennial US Census.

Visit our page on [redistricting](#) for additional Frequently Asked Questions about the process.

[What is a Remote Accessible Ballot Marking System \(RAVBM\)?](#)

This Remote Accessible Ballot Marking System or device means a mechanical, electromechanical, or electronic system and its software that is used by a voter with disabilities or a military or overseas voter to mark an electronic copy of their Vote by Mail ballot. The voter then prints their paper ballot, places it inside the blue Vote by Mail return envelope to be returned to the elections official. A remote accessible vote by mail system shall not be connected to a voting system at any time.

[What is a residual vote?](#)

A residual vote is a vote that could not be counted or allocated to a candidate or ballot measure due to the inability to determine the voter’s intent if the contest was clearly overvoted or undervoted.

[What is risk-limit auditing?](#)

Under the California Elections Code, this term refers to a post-election process that involves hand-to-eye, human inspection of ballots in such a manner that if a full manual tally of all the ballots cast in the contest would show different outcomes than the results reported by the voting system, there is at most a five percent chance that the post-election process will not lead to such a full manual tally. If this post-election process does lead to a full manual tally, the winner or winners according to that full manual tally replace the winner or winners as reported by the voting system if they differ.

Risk-limiting audits provide statistical assurance that election outcomes are correct by manually examining portions of paper ballots or voter-verifiable paper records. California Counties may be permitted to conduct a “risk-limit audit,” starting with the March 3, 2020 Presidential Primary Election in place of the manual tally required before the election can be certified.

[What is software?](#)

In terms of an election, “software” includes all programs, voting devices, cards, ballot cards or papers, operating manuals or instructions, test procedures, printouts, and other nonmechanical or nonelectrical items necessary to the operation of a voting system.

[What is a source code?](#)

In general, a source code is the version of a computer program in which the programmer's original statements are expressed in a source language which must be compiled or assembled and linked into equal machine-readable object code, resulting in the executable software program. For purposes of elections escrow, this applies to voting system source code, ballot marking system source code, and election management system source codes.

[What is a stray mark on a ballot?](#)

A stray mark can be an accidental hesitation mark made when a voter has rested their pen on the ballot paper leaving a mark, or a mark left by dragging their pen across the ballot creating a line near the vote target area. A stray mark outside of a vote target area is not detected by the ballot counting machine.

See also, "**What is a marginal or ambiguous mark on a ballot?**"

[What is a tamper-evident seal?](#)

Tamper-evident makes unauthorized access to the protected object easily detected. Tamper evident seals and security labels are often used to detect tampering of containers, ballot boxes, and access points to election systems. When removed, the seal will show tamper evidence by self-destructing, leaving the word "VOID" or "OPENED" to indicate that the seal has been broken. This type of tamper evident seal is referred to as holographic or prism and is extremely difficult to replicate.

Tamper-evident designs have been a feature of letters since ancient times, often using wax, clay, or metal seals to signify that the letter had not been opened since it was written. For example, unique to the person who owned them, an old signet ring could be pressed into the hot wax seal forming a type of signature, or mark, which could not be easily duplicated by somebody attempting to re-seal the letter.

[What is a touch screen voting machine?](#)

A touch screen voting machine is also known as a direct recording electronic device, or DRE, that was first used widely under the Help America Vote Act accessibility requirements as it enables a voter with physical or vision difficulties to vote independently. California election laws mandated that any county using a touch screen voting machine, or DRE, must have a voter verifiable paper record of their votes that they can review and approve before their ballot is electronically cast. This paper record is also used to audit and verify the election results obtained from the system. This system is not in use in the County of Santa Clara.

See also, "**What is an electronic touch screen or touch screen voting machine?**"

[What does a trusted build mean when referring to the new voting system software?](#)

According to the U.S. Government Accountability Office (GAO), when on the subject of a trusted build: *“The voting system’s source code is converted to executable code in the presence of at least one VSTL representative and one manufacturer representative, using security measures to ensure that the executable code is a verifiable and faithful representation of the source code. This demonstrates that (1) the software was built as described in the technical documentation, (2) the tested and approved source code was actually used to build the executable code on the system, and (3) no other elements were introduced in the software build. It also serves to document the configuration of the certified system for future reference.”*

[What is the two-person rule?](#)

In general, this means that no less than two people must be included in the procedure. While not defined by law, the “two-person rule” has become a best practice for California election officials. The Santa Clara County Registrar of Voters employs the two-person rule to the entire balloting process, including retrieval and processing of Vote by Mail ballots, and Provisional and Conditional Voter ballots in addition to all voting equipment and official supplies from Vote Centers. The two-person rule often also includes documented chain of custody.

[What is an undervote?](#)

An undervote occurs when the voter marks fewer choices than they are allowed in a contest. For example, a school district may have three offices on the ballot, directing the voter to, “Vote for not more than three” candidates. The voter has “undervoted” this contest if they did not vote for up to three different candidates, voting for just one or two candidates instead. This contest is counted.

See also, “**What is an overvote?**”

[What is a voting position target?](#)

A voting position target area refers to that space on the ballot adjacent to each candidate or measure, or that area of the ballot, specifically designated to record the voter's choice for that contest. The term applies to all types of voting position targets on ballots, regardless of what form they may take, including, but not limited to, rectangle, oval, circle, square, hole punch, cross punch, slotting and open arrow.

[What is a Vote by Mail ballot drop box or Vote by Mail drop-off location?](#)

As defined in the California Elections Code, a “Vote by mail ballot drop box” is a secure container established by the county or city and county elections official where a voter can deposit their Vote by Mail ballot and return it directly to the elections official.

A “Vote by mail ballot drop-off location” is a location set up by the elections official where a secure vote by mail ballot drop box is located.

Vote by Mail ballot drop boxes and drop-off locations are considered a voting location under the rules of “electioneering,” meaning campaigning or soliciting a voter within 100 feet from the drop box while a voter is returning their ballot is prohibited.

[What is a Vote Center?](#)

A vote center is a larger polling place that is capable of permitting any registered voter to receive and cast a ballot, regardless of their assigned precinct. Prior to the 2020 elections, Santa Clara County voters would be assigned a specific voting location, called a polling place, based on their residential address and neighborhood precinct. Polling places were only equipped to provide voting services to voters who were assigned to that location, and any other voter would be redirected to their assigned voting location or be provided a provisional ballot.

[What is the Voter’s Choice Act \(VCA\)?](#)

The Voter’s Choice Act, also known as VCA, was introduced as State Senate Bill 450 and approved by the Governor in 2016 that allows certain counties to conduct their elections by mailed ballot, as long as they meet certain conditions. The Registrar of Voters has developed a webpage on the [Voter’s Choice Act](#) to help the voters in Santa Clara County better understand and participate in the election process.

For more information on the Voter’s Choice Act law, see [Sections 4005 - 4006](#) of the California Elections Code.

[What do the different terms, “Votes Cast,” “Total Votes,” and “Voter Turnout” mean in the Statement of Votes of the election results?](#)

The term, “Votes Cast” is used to reflect the total number of ballots that were cast in the particular election contest.

“Votes Cast” is different than “Voter Turnout,” as it is used to describe the ballots cast in a particular contest (like mayor or state assembly), whereas “Voter Turnout” is typically used to describe the total number of voters who cast a ballot in the entire election. There may be a difference in the “Votes Cast” for the US Senate candidate contest than there is total “Voter Turnout” for the entire election.

The number reflected in the column, “Votes Cast” may also differ from the number listed in the “Total Votes” column, where a voter eligible to vote in a particular contest in the election may choose to skip a contest but still cast their ballot. For example, Voter A casts a ballot in the election, which increases the number listed in the “Votes Cast” column, but that voter chose to skip voting on the contest and did not mark any candidate name, therefore, that would not affect the number listed in the “Total Votes,” column of the Statement of the Vote.

[What is voter turnout?](#)

Voter turnout simply refers to the total number of people who participated in the election and cast a ballot. The total turnout would be the total number of voters, which can also be broken down and reflected as Vote by Mail voter turnout and voters who turned out to vote in person.

It is often reflected in percentages, such as, “...voter turnout at the June Election was 80%” and is the result of calculating the total number of voters who are recorded as having voted with the total number of eligible voters at the election to determine the percentage of voters that turned out or cast a ballot.

[What is VSTL?](#)

The [Voting Systems Test Laboratories](#) (VSTL) is a branch of the Election Assistance Commission (EAC) required under the Help America Vote Act (HAVA) that provides accreditation and revocation of accreditation of independent, non-federal laboratories that are qualified to test voting systems under Federal standards.

[What is a vulnerability assessment?](#)

Vulnerability assessment refers to the process of identifying risks and weaknesses in computer networks, systems, hardware, applications, and other parts of the information technology system. These tests are critical in helping protect systems and data from unauthorized access and data breaches as they provide security teams with the information they need to analyze and prioritize corrective actions.