ELECTION
MANAGEMENT
GUIDELINES

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TABLE OF CONTENTS

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Introduction

Following the passage of VVSG 1.0 in 2005, the U.S. Election Assistance Commission (EAC) set out to draft a series of election management guidelines "to assist State and local election officials in effectively managing and administering elections." The original Election Management Guidelines (EMG) covered 11 areas relevant to all election officials, no matter the jurisdiction. Over time, the EMG grew to 19 chapters with input from local and state election officials and other election administration stakeholders.

Now, over 15 years later, the EAC and election administration have changed in significant ways. For the EAC's part, the re-establishment of a quorum of EAC Commissioners and increased funding have enabled the agency to modernize the Voluntary Voting System Guidelines (VVSG) and increase staffing levels necessary to carry out the agency's critical mission. Election security has long been a priority for election officials. Since the designation of elections as critical infrastructure in 2017, the physical security, cybersecurity, and continuity of operations in the event of a disaster have become essential components of national security. State election laws and regulations, election technologies, and best practices are constantly evolving to meet the needs of resilient and secure election systems. Thus, the EAC has updated the EMG with a new EAC Clearinghouse team staffed with election and accessibility subject matter experts.

Many of the concepts outlined in the original EMG remain relevant today. The updated EMG maintains most of the original topics with a few additions and incorporates references to many of the latest Clearinghouse resources. One significant change was the addition of a chapter dedicated to Post-Election Audits. The original EMG included a paragraph on audits in the Recounts chapter. However, the updated EMG needed to expand upon the topic due to the increased public focus on audit types and procedures. Conversely, the Technology in Elections chapter was eliminated. Instead, relevant technologies are discussed throughout the updated EMG based on the area the technology supports.

As with the original EMG, providing detailed guidance officials can employ in every elections office remains challenging. However, the EMG's goal is to familiarize election officials with election processes and challenges they will likely encounter during their tenure. New election officials and office staff members can use the EMG as an introduction to unfamiliar aspects of election administration. For experienced officials, the concepts covered are likely familiar; however, they may find ways to update or improve their procedures. There is something for everyone in the EMG.

Elections Office Administration

The elections office is often the smallest agency in local government until Election Day, when it becomes the largest. The public might perceive election officials as "only working on one day of the year," but managing an elections office is a full-time job with some of the most complex responsibilities expected of a public servant. The Election Administrator Competencies wheel shown in Figure 1 captures the wide range of election officials' responsibilities.

In addition to the increased responsibilities during "election mode," an elections office handles tasks similar to those of other governmental agencies, including data entry, processing incoming and outgoing mail, responding to requests for information, accounting and payroll duties, staff recruitment, training, etc. As Election Day nears and the workload increases, however, the available resources do not always increase correspondingly.

In many elections offices, administering elections is only one of the offices' many responsibilities and duties. Many election officials are also their jurisdiction's clerks, recorders, auditors, or treasurers. These multifunction "elections" offices face additional burdens because they tend to exist in small jurisdictions with few full-time staff members and tight budgets. Elections offices in small jurisdictions still must meet all federal, state, and local requirements for conducting an election.

The logistics of managing internal office processes, facilities and equipment, staffing, budgeting, and administering an election are unique in public administration. Moreover, the programmatic expectations and budget vary yearly based on the number of elections in the jurisdiction. This chapter provides an overview of an election official's typical management responsibilities and common technologies used in elections offices.

Election Administrator Competencies

Figure 1: *Election Assistance Commission's Election Administrator Competencies Wheel*

■ **Ongoing**

■ **Election Preparation**

■ **Election Night & Beyond**

Managing Internal Processes

Election officials shoulder all the responsibilities of a typical public servant and coordinate complex jurisdiction-wide events multiple times a year. Whether the chief election official has responsibilities outside the elections process, it is essential to operate under clear and detailed policies and procedures to ensure accuracy and uniformity of service. The following sections discuss guidelines for election officials as they manage their office and prepare for an election.

Standard Operating Procedures (SOPs)

Election officials should develop SOPs for every function of the elections office. SOPs are the office's foundation for day-to-day functions and the integrity of each election. The Election Management Guidelines and Quick Start Guides cover many topics to address in SOPs. The **Quick Start Guide: Standard Operating Procedures** includes several tips for developing and revising SOPs.[1]

SOPs provide both staff and the public with a greater understanding of the election process. For election officials, following written procedures ensures all staff members and seasonal workers follow the same steps when carrying out responsibilities. Additionally, providing the public with the procedures followed increases transparency and helps create an understanding of the work election officials do to ensure the integrity of the election. For example, adopting a written procedure for signature checking on candidate petitions guides staff in completing the task and sets expectations for candidates and the media.

Most election officials conduct post-election tabulation audits; however, elections are more than just the final results. SOPs can guide election officials in auditing the procedural aspects of an election to ensure office staff and poll workers follow procedures throughout the election cycle. SOPs address critical components of the election process like chain of custody, absentee ballot processing, and voting location procedures. After each election, election officials should review their office's SOPs and revise them as necessary if procedures are not followed or have gaps.

Workflow diagrams based on the written SOPs illustrate the processes for all internal and external activities. Some election officials encourage staff to develop these diagrams and then allow staff members from one division to review proposed workflows for staff members of another division. This collaborative opportunity allows all staff members to understand how their work affects the entire organization's mission and provides a chance for staff to work together to achieve efficiency in fulfilling their responsibilities.

Project Management

Election officials use different processes to track staff's work and deadlines. For example, some officials automate staff responsibilities with project management software. When an employee comes into the office, the software lists tasks and due dates. Critical events or tasks are highlighted, and staff and supervisors can provide updates and feedback on each task. If staff does not complete tasks on time, the software notifies the supervisor.

Election project management becomes more intense during the weeks leading up to early voting and Election Day. Staff members often work long hours to accomplish required tasks. Many elections offices use statistical data to monitor workflow, review the number of absentee and early voters, and respond to staff and voter needs. The need to reach key milestones may translate into a need for additional seasonal employees. Seasonal staff can perform data entry, answer phones, manage incoming and outgoing absentee ballots, etc.

Finally, all election preparation should include contingencies in the event of a natural disaster or other disruption to election activities. Election officials plan responses to possible scenarios that might occur during the election to prepare staff well in advance. Conceivable challenges include a shortage of ballots at the polls, voting locations that are inaccessible on Election Day, poll workers who fail to arrive on time, power failures, road closures, and sudden changes in weather conditions. See Chapter 2 of the Election Management Guidelines on Contingency Planning for a complete description of contingency planning.

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[1] https://www.eac.gov/sites/default/files/electionofficials/QuickStartGuides/SOPs_EAC_Quick_Start_Guide_508.pdf

Budgeting

Funding sources for election administration vary across the country. Some states provide funding in certain circumstances, while in other jurisdictions, elections are funded entirely at the local level. Elections are just one part of the overall budget for election officials who also serve as the local Clerk or Recorder. Too often, election officials must find creative ways to implement new, expensive policies without a corresponding increase in funding.

Funding needs vary depending on the type of election year. Many election officials view their budgets as based on a four-year election cycle. While most governmental agency budgets are compared year-to-year, election officials need to compare similar election years. The budget for a Presidential election year should be compared to the previous Presidential election year. Consider any relevant policy changes or trends from the intervening years and make necessary adjustments. The following are typical items included in an elections office's budget each year:

- **Salaries** – for full-time, part-time, and seasonal or temporary staffing

- **Poll Workers** – pay for training, Election Day, and mileage (if applicable)

- **Polling Locations** – rent for Election Day and early voting locations (if applicable), including any maintenance or cleaning fees

- **Ballot Production** – cost of programming the ballot, programming electronic voting equipment, and printing mail and in-person ballots

- **Advertising** – required legal notices, voter outreach, and public communication

- **Postage** – bulk mail permit, business reply mail, and general postage for mailing notices and ballots

- **Vendor Fees** – licensing and maintenance fees for voting equipment, election software, and general office software and equipment

- **List Maintenance** – cost of use of NCOA vendor, if applicable, to identify voters who have moved, office personnel expenses, and necessary paper and postage costs for list maintenance mailings.

The budget needed to cover these items may vary by the type of election year. Additionally, many offices have jurisdiction-specific costs associated with running an office. For example, some elections offices may contract for facility maintenance or IT services.

When the county or municipality funds an election, election officials may have the chance to present a budget proposal and provide underlying data to justify the budget proposal. Election officials should provide written documentation (e.g., quotes or estimates from vendors) of what the office is asking for and the reasoning for changes from previous requests, such as an election-year budget. If the elections office must implement a new program or procedure due to a law or policy change, include information on the change and how the requested funds fulfill the new requirement.

Finally, election officials should communicate potential contingencies or long-term expenses with the budget authority. If there is a possibility of a special election that may require funding but is not included in the budget proposal, make sure it is at least mentioned. Similarly, communicate any significant expenses that are on the horizon. If voting equipment is nearing the end of its life, start discussing funding for replacement years in advance. Providing notice allows everyone involved to plan for contingencies and large purchases.

Procurement, Retention, and Disposal of Records

As with all other public administrators, election officials must acquire, maintain, replace, and dispose of various records and pieces of technology. Election officials should include the procurement and retention schedules in their SOPs so that all elections office staff understand the process and their responsibility to retain records. Election officials should review state statutes and regulations concerning access to public information. Include the procedure for facilitating or denying requests for access to election materials in the SOPs.

Procurement

Local election officials are often responsible for acquiring or replacing significant technological resources, including software, hardware, and entire voting systems. Election officials may need to go through a bidding process for services like ballot printing and absentee ballot mailing, depending on the jurisdiction. Following state and local requirements, election officials should include the procurement process in the SOPs.

No piece of technology lasts forever—inevitably computers and voting systems will need to be replaced and will be one of the elections office's most significant expenses. Planning is essential. The EAC has compiled tips on issuing a Request for Proposal specifically for voting equipment.[2]

Retention

The elections office should adopt a retention policy and include it in the SOPs. The policy should cover the retention schedule, storage and tracking practices, and destruction procedures. Additionally, the policy must follow federal, state, and local retention laws and regulations. While state and local laws may vary across the country, all elections offices must retain federal election records for 22 months.[3]

The retention schedule describes the various types of records the elections office handles. The categories should include election-specific records (e.g., used and unused ballots, candidate and issue filings, absentee ballot envelopes, etc.) and administrative records (e.g., email correspondence, payroll records, meeting notices and minutes, etc.). Each category should be defined, given a unique code, and include the length of retention. Include the citation if a law or regulation sets the category's retention timeline.

Given the volume of records elections offices accumulate, tracking is essential. For each type of record, track the following:

- **Record category** – use the category's unique code as the identifier

- **Election date** – for election specific records, including the election date, so they can easily be found in the event they need to be reviewed or are subject to legal action

- **Brief description of the record**

- **Storage location** – include a box number for paper records

- **Retention length**

- **Date of disposal** – include if the disposal is routine and open to the public

Large offices may use specialized software, while small offices may track retention with a simple spreadsheet. Before placing an item in storage, label it with the same information recorded in the software or spreadsheet.

Disposal

A written retention policy is essential, but it is only effective if followed. Retention software may provide notice when records are ready for disposal. Still, the retention policy should include a monthly review to check if records are up for disposal. Occasionally, a court order may require holding records past their retention date. Election officials should note any court-ordered hold in the retention schedule, on the record's label, and update the destruction date to 'pending.' Otherwise, it is important to consistently dispose of records when they reach the end of their retention period. Selectively adhering to the retention schedule might give the appearance of impropriety. Additionally, timely disposing of records serves the practical purpose of ensuring the elections office has sufficient storage space.

Election officials have different options for destroying records per the records retention schedule. Some counties maintain centralized records facilities that may store the materials and notify the elections office when records are due for disposal. Records center employees or elections office staff may dispose of the records. Election officials may contract with a third-party shredding company or burn facility to dispose of records at the office's storage facility. If non-elections office staff or a third-party dispose of records, elections office staff may be required to oversee the process, as directed by statute.

[2] **The Process of Procuring and Implementing Voting Systems: RFP Best Practices**
   https://www.eac.gov/sites/default/files/voting_equipment/EACProcuringImplementingRFPbestpractices.pdf
[3] **52 U.S.C. § 20701.**

Whether the elections office staff is responsible for disposal of materials or if another entity carries out disposal, record the disposal date. Just as election officials have security procedures for printing, storing, distributing, and retrieving ballots, election officials will benefit from a record of disposal, noting that the material was destroyed according to the records retention schedule. A ballot's chain of custody does not end until its disposal after it has reached the end of its retention period.

Election records often contain voters' personally identifying information, and election officials must ensure the information is kept private. Officials should consider the physical security of storage facilities in the elections office's security plan, especially for records stored in another county or municipal facility. For more information on physical security, see *Chapter 7 - Physical Security*.

Facilities Management

Election officials are generally responsible for the facilities that house election operations and the equipment necessary to run elections. Depending on the jurisdiction, election facilities might include the central (and perhaps satellite) elections office, a warehouse for voting equipment, and numerous voting locations during early voting and Election Day. At these facilities, election officials may be responsible for staffing, contracting for janitorial services and utilities, providing equipment and security, and planning for continuity of operations.

Election officials must maintain the chain of custody of equipment and supplies at all facilities. They may use paper-based checklists, a barcoding system, or GPS and RFID chips. No matter the specific system, officials must track materials at all stages of the election process. For more information on chain of custody, see the EAC's **Best Practices: Chain of Custody**.[4]

Barcode tagging and asset management software efficiently track the location and status of office and voting equipment. Additionally, election officials can use the software to monitor inventory. SOPs should include information on all facilities housing election equipment and the security protocols in place to protect it. In the case of election technology, election officials can indicate which areas of their facilities are climate controlled and, thus, suitable for the storage of the voting system.

SOPs should include layouts for facilities used for poll worker training, polling places, early voting, canvassing, auditing, etc. The layouts should show the most efficient setup for the room in each configuration so staff understand how to organize the area. Review the layouts after each election cycle to make necessary modifications. It is helpful to diagram the following facilities and to update them to achieve the most efficient configurations:

- Early and Election Day voting locations, including equipment setup, check-in areas, voter staging areas, secure voting area, entrance and exit, location of all signs, etc.

- Poll worker supply check out and election night check-in areas

- Staging area for logic and accuracy testing, recounts, canvassing, provisional ballots, audits, etc., including the workflow diagram for each task

- Outgoing and incoming mail ballot processing areas

Preparing for an Election

Election officials retain full responsibility for effectively managing a government agency on top of the unique task of coordinating a jurisdiction-wide event with many moving parts. The responsibilities and needs of the elections office vary from year to year based on several factors, many of which are outside the control of election officials. For example, an elections office may administer three elections one year and only one election the following year. Special elections usually occur with little warning or time for preparation. To handle this varying schedule of elections, most elections offices use an election calendar and manage a sizeable staff of seasonal employees.

Election Calendar

An election calendar includes all deadlines for the tasks and responsibilities that make up the election cycle. A comprehensive election calendar can serve multiple purposes for election officials. It keeps an office on track, serves as a checklist so no task is forgotten, and can create public awareness of the immense effort to ensure the integrity of

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4 https://www.eac.gov/election-officials/chain-custody-best-practices

every election. Many states issue election calendars that include deadlines set by state law with a description of the activity and citation. Local election officials can use the state calendar as a starting point for their calendars.

In addition to statutory deadlines, election officials should include all tasks necessary to the election on their offices' calendars. The calendar should start with the earliest task or deadline for the election and continue through Election Day to the last deadline for election contests. For example, the calendar may start with the first candidate filing deadline and end with the deadline for requesting a recount or contesting the election. In between, officials should include start dates and deadlines for activities like ballot building, proofing, testing, poll worker training, UOCAVA mailing, early voting, absentee ballot application deadline and cure periods, posting legal notices, post-election audits, and certification.

Assign each task on the calendar to two staff members to ensure they complete it on time. Building in redundancy avoids tasks falling through the cracks, especially if one staff member is unexpectedly out of the office. Many tasks on the calendar are contingent upon one another. For example, officials cannot send UOCAVA ballots before the ballot is programmed and proofed. Note contingencies on the calendar—where different staff members are involved in each task, the calendar can help them understand how their work affects other processes.

The calendar should include deadlines for the elections office and deadlines that affect third parties. Many states have deadlines for protests of petition filings, observer filings, etc. While these deadlines do not necessarily require action by election officials, it keeps staff and the public informed of when the deadlines have passed.

Sharing the election calendar with the public provides notice of deadlines that may affect them and insight into the election process. Most voters' experience with the election process only includes casting a ballot and seeing unofficial results on election night. Election officials' efforts to facilitate secure elections largely go unnoticed. Sharing the elections calendar is one small, simple way to provide access to the larger election process.

Staffing

Jurisdictions choose their election officials in different ways throughout the country—some are elected, appointed by political parties, or hired by a board of elections or county supervisors. The size of the elections office varies significantly from one or two full-time staff members who handle all election functions to offices with hundreds of full-time staff with separate departments dedicated to particular parts of the elections process. In any configuration, election officials need to hire, train, manage, and retain a mixture of full-time, part-time, and seasonal staff (not to mention hundreds or thousands of poll workers) to administer elections successfully.

Recruiting Staff

Working in elections is dynamic, challenging, and rewarding. No other public position is as central to American democracy. While often subject to public scrutiny, prior to the 2020 Presidential Election, election officials reported high levels of job satisfaction.[5] The field is ripe for individuals who embrace change, like creative problem solving, and are eager to serve every segment of the voting-age population. While recruiting, highlight these benefits and look for committed or willing individuals to commit themselves to public service.

Election work is not a traditional 9 to 5 undertaking. In the months before and after Election Day, election officials work weekends and nights to facilitate and complete the election process. Include this information in job postings and be transparent about periods of long hours. Elections offices across the country run elections throughout the year; tell candidates about periods of restricted leave.

Many candidates may not be aware of the physical demands of election work. In addition to the long hours, election officials often move heavy equipment and supplies. If election officials expect the candidate to help with physically demanding tasks, include that in the job description.

Succession Planning

Succession planning is one of the main reasons to create detailed SOPs. Many jurisdictions elect their chief election official, leading to staff turnover when an incumbent is defeated or chooses not to run for re-election. Additionally, while rewarding, election work is high stress, and turnover in elections offices is all too common. To avoid losing institutional memory when an experienced staff member leaves, election officials must ensure clear job descriptions and SOPs exist.

Include an organizational chart in the SOPs and train multiple team members to handle each task. Cross-training is essential to mitigate the potential harm of the departure or even absence due to the routine illness of an experienced staff member.

Managing Staff

Having a common goal is the first step to managing a motivated staff. With input from staff, many election officials develop a mission statement and a list of core values for the office. The mission statement and values typically reflect the office's view of its role in facilitating the voting process. Additionally, both can serve to guide staff in completing their work. For example, emphasizing open communication among staff from all departments encourages departments to coordinate their work.

Develop a functional statement for each staff member's role. A functional statement is similar to a job description; however, it provides a detailed listing of specific responsibilities for the role. The functional statement should overview the knowledge, skills, and abilities necessary for an employee to succeed. Necessary knowledge includes understanding election laws and regulations, data entry software, and SOPs. The skills and abilities section might include working well with others and providing superior customer service to the voting public. Responsibilities relate to the specific job requirements such as inputting registration information, answering phones, maintaining the voting systems, etc.

Finally, because of limited staff resources, the best way to maximize staff output in the elections office is to encourage employees to learn all of the different aspects of managing an election. Election officials might develop an office organizational chart to distribute to all employees that outlines the chain of command in the office. This chart helps employees see which employee has responsibility for different areas of administering elections and where their help might be most appreciated.

Seasonal Employees

As Election Day approaches, the local elections office typically requires additional staffing to assist with the increased workload. Election officials should use the election calendar to determine when they will need additional help for things like processing absentee ballots and in-person early voters. The calendar should account for the recruitment, training, and managing of seasonal workers and Election Day poll workers. Seasonal staff only have limited access to sensitive data and the voting system as required to fulfill their duties. Additional information on providing access to election technologies can be found in *Chapter 6 – System Security*.

Some election officials use temp agencies to fill part-time job slots. These part-time employees generally perform data entry tasks associated with voter registration, process absentee ballots, and answer the voter information hotline as Election Day nears. One benefit of using a temp agency to hire part-time staff includes reduced training costs, especially if the agency repeatedly assigns the same temp employees to the elections office.

Offering flexibility to seasonal workers will attract a larger pool of potential workers. Jurisdictions typically have long-time poll workers who may also be interested in working in the elections office in the build-up to Election Day. Assisting with early voting, logic and accuracy testing, or absentee ballot processing increases their knowledge of election processes. This knowledge is helpful in assisting voters and following procedures on Election Day.

Voting Technology

Technology has led to greater efficiency in maintaining voter information, tracking candidate files, defining ballot styles, etc., but it also requires maintenance and oversight. Maintaining and securing the voter registration database, voting system, electronic poll books, and the elections office's computer network is a full-time job. This responsibility falls on election officials in small elections offices or those without dedicated IT help. *Chapters 6 – System Security* and *7 – Physical Security* provide more information on securing these systems.

Voter Registration

Voter registration can affect an elections office's staff resources. Data entry consumes much of the time involved in adding new registrations or updating existing records. Elections office staff must transfer the data from handwritten paper records to the voter registration database to compare the data for eligibility. Many states and local jurisdictions have begun automatically transferring registration data directly from other state databases to ease the burden of processing paper records.

Automatic data transfers can result in three significant efficiencies: reliability, time, and accuracy. First, automatic data transfers can be more reliable than paper data transfers. Instead of waiting for external offices that collect voter registration forms to deliver paper records, the elections office receives the data electronically. By removing the need to transport paper records, election officials can track the record's chain of custody to its source. Election officials can either make the transfers in real-time or in batches. Real-time transfers occur when the data is sent immediately. The more common batch transfer occurs at a set time on a regular schedule. For instance, if the batch transfer occurs after the close of business, the registration data accumulates during the day into a 'suspense queue'. Then all of the data in the suspense queue is transferred to the elections office in one transaction.

The second efficiency is the reduced staff time required for data entry. If a motor vehicle agency sends the registration information, the data entered is in a usable, validated, electronic format for inclusion in the statewide voter registration database. Since the transferring agency completed the initial data entry, elections office staff can focus on their other responsibilities to serve voters.

The third efficiency in automatic data transfer is accuracy. At times, elections office staff have difficulty understanding handwritten registration forms. Any data delivered to the elections office in an electronic format could improve the accuracy of the voter registration database and reduce the number of errors when staff manually reenters the data from handwritten forms.

Arizona started offering online voter registration in 2003 and now most states offer their citizens the opportunity to register to vote online. Online voter registration systems generally share standard requirements. The individual who is registering must have a valid driver's license or non-driver state-issued identification card from the state in which they are registering. The digital signature provided by the registrant to the state when the voter applies for a license or state-issued identification card automatically transfers into the statewide voter registration database. The potential online registrant affirms their identity and authorizes the use of their digital signature. These signatures may serve as the signature for matching purposes on mailed and provisional ballots. Many states provide the registrant with confirmation at the end of the registration process as proof of the transaction.

Accessible Voter Registration

Accessible voting typically focuses on the act of casting a ballot; however, election officials must ensure the entire election process is accessible—including voter registration. Accessible voter registration includes providing instructions in plain language, providing forms in non-English languages, providing accessible online registration, and more. In developing registration forms and websites, election officials should work with people with disabilities and minority language speakers. The EAC's **Best Practices: Accessible Voter Registration** report provides a checklist for election officials to use to ensure their voter registration is accessible to voters with disabilities.[6] Additionally, the EAC's **National Mail Voter Registration Form** is available in 21 languages.[7]

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6 https://www.eac.gov/sites/default/files/bestpractices/Accessibility_Checklist_Voter_Registration.pdf
7 https://www.eac.gov/voters/national-mail-voter-registration-form

Election Databases

Election officials manage employees, recruit thousands of poll workers, and coordinate all activities required to facilitate elections and voting. Creating efficiencies in the management process can result in an improvement of services for voters. Election databases help election officials manage all workflows in the elections office. In managing workflows, inexpensive solutions can maximize staff effectiveness.

Election databases can contain information on voters, polling places, candidates, poll workers, provisional ballots, absentee ballots, early voting, and more. The voter registration database may provide modules that house this data, or election officials may maintain separate databases for each type of information. Typically, these databases are designed to do the following:

1. Allow elections office staff to contribute to and share stored data

2. Control the information each elections office staff member can view or edit

3. Aid in easy storage and retrieval of data

4. Reduce duplicate input

5. Improve the ease of report writing

6. Improve communication among office staff

Databases can be built in-house, purchased off the shelf, or contracted out to a vendor depending on the staff and monetary resources available in the elections office. Whether a jurisdiction decides to contract out for an election database or builds one in-house, elections officials evaluate the system's security to protect personally identifying information (PII) and protect the system from cybersecurity and physical exploitations.

Voting Systems

The Help America Vote Act (HAVA) defines voting systems as the total combination of mechanical, electromechanical, or electronic equipment (including the software, firmware, and documentation required to program, control, and support the equipment) used—

- to define ballots
- to cast and count votes
- to report or display election results
- to maintain and produce any audit trail information

Voting systems are more than voting machines. A system is a collection of unified components that consist of subsystems, such as scanners, election management systems, and other equipment necessary to tabulate vote results and produce vote tally reports. Voting systems also interface with other systems in elections offices. A voting system is the core technology that drives and integrates the election system.

Most states require federal certification or state certification of voting systems. The EAC is responsible for testing and certifying voting systems at the federal level, and HAVA mandates that EAC accredit voting system test laboratories and certify voting equipment. State participation in EAC's certification program is voluntary.

The EAC publishes Voluntary Voting System Guidelines for testing and certifying voting. A complete copy of the current guidelines, a list of certified voting systems, and additional information about the EAC's testing and certification program are available at **www.eac.gov**.

State-level tests generally are designed to ensure that the voting system complies with state laws and regulations. Generally, the state elections office provides local jurisdictions with a list of voting systems that are certified for use in the state.

In addition to federal and state certification requirements, jurisdictions conduct acceptance testing on newly acquired voting systems and components. However, election officials should note that acceptance testing is only one of the types of testing that they can conduct on their voting machines. An acceptance test is performed on an individual unit of a voting system to verify that the unit is physically, electronically, mechanically, and functionally correct. Correct means that the unit is identical to the system certified for use in the jurisdiction, including the software and firmware.

Acceptance testing assures election officials that the voting system is functioning correctly, that the voting system complies with the conditions of the product acquisition document, and that the voting system is correctly configured for use in an election. For a complete description of acceptance testing, see *Chapter 9 - Acceptance Testing*.

Election Night Reporting

Typically, after the polls close, local elections offices tabulate results and periodically report them to the state elections office. The state accumulates results and displays unofficial results for statewide races and ballot questions. Localities also share their jurisdictions unofficial results.

There are many ways to display election results on websites. Posting election results in PDF reports with cumulative data for an entire jurisdiction is a common practice. However, it is not always useful or accessible for election analysts, candidates, voters, and the media. Election officials can use technology to visually display downloadable election results by voting precincts, contests, or other geopolitical boundaries, to help better analyze election data. Additionally, election officials should clarify that election night results are not official and provide information on outstanding ballots yet to be counted. See the EAC's **Best Practices: Election Results Reporting** and **Checklist for Securing Election Night Reporting Systems** for more information about displaying and securing election night reporting tools.[8]

The National Institute of Standards and Technology (NIST) published the Election Results Reporting Common Data Format Specification Revision 2 in March 2020 to assist election officials with standard methods for election results reporting. These formats will increase transparency and reduce costs to election jurisdictions by reducing the complexity in election management. Read more at **https://pages.nist.gov/ElectionResultsReporting/**.

Electronic Poll Books (E-Poll Books)

When voters go into a voting location, a poll worker confirms their identity against voter registration information contained in poll books to ensure they are registered to vote and did not already receive or cast a ballot. These poll books can be paper-based and printed before the election, or they can be electronic. E-poll books are becoming more common. According to the EAC's 2020 EAVS report, 17 states use e-poll books in all jurisdictions, and 40 states use them in some capacity.

E-poll books in use across the country include some or all of the following features:

- Complete access to the statewide voter registration database

- Contain precinct or jurisdiction-wide voter registration data

- Ability to credit a voter for having cast a ballot

- Identification card swipe or barcode scanning capacity for easy sign-in

- Print a ballot on-demand or program a ballot activation card for touchscreen voting machines

- Provide real-time voter turnout and wait time data

Election officials can also use e-poll books to collect data about election administration at the polls, such as the length of time it takes a poll worker to verify a voter during the check-in process and the times during the day when most people vote. These data can help election officials more effectively allocate their resources in future elections.

E-poll books can include the entire statewide voter registration database or just the jurisdiction-specific information depending on the jurisdiction's needs. Most e-poll books can search the jurisdiction's voter registration list, and some also search the statewide voter registration database if the voter is not registered in the local jurisdiction.

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8   https://www.eac.gov/election-officials/election-results-canvass-and-certification#Election_Results_Reporting
   https://www.eac.gov/documents/2017/10/23/checklist-for-securing-election-night-reporting-systems-data-election-administration-security

Some e-poll books include peripherals such as signature pads, identification card swipe or barcode scanning of a driver's license, state-issued non-driver identification card, or coded voter registration card to facilitate the check-in process. This technology helps to ensure that the correct voter is marked as having signed in and voted and eliminates the potential problem of giving credit for voting by mistake to a voter with the same name or a similar name.

Cost and Replacement

All technology has an expected lifespan. The cost of new technology, software upgrades, maintenance, storage, and replacement necessitate constant planning. It can be crucial to discuss the long-term plans with the elections office's budget authority because voting systems will not last forever. Once funding is secured, the next step is often advertising a Request for Proposal (RFP). Election officials can learn from each other's experiences when writing an RFP for the first time. See the EAC's **voting procurement website** for examples from several states.[9]

Election officials will need to develop a transition plan to migrate to a new voting system with minimum disruption. Election officials will need to evaluate new space, security requirements, and operating requirements of the new system. They will also need to plan for delivery, acceptance testing, and training on the new system.

Election officials must use caution and follow legal and security requirements when disposing of old voting systems, including election data and media. Many old systems will have archived election data stored internally or on media. Most vendors will not permit the sale of used equipment that contains their proprietary or licensed software. For more information about managing aging voting systems, see the EAC's guide **Ten Things to Know about Managing Aging Voting Systems**.[10]

Conclusion

No matter the size of their jurisdiction, election officials throughout the country face similar challenges. Large and small elections offices can benefit from written SOPs and an organized project management system. Election technology, including the voter registration system and supporting databases, can enhance the elections office's efficiency and accuracy. Building and maintaining a strong elections office staff allows election officials to meet and overcome new challenges in the ever-evolving field of elections.

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[9] **https://www.eac.gov/voting-equipment/voting-technology-procurement**
[10] **https://www.eac.gov/documents/2017/10/14/ten-things-to-know-about-managing-aging-voting-systems-voting-technology-voting-systems-cybersecurity**

Elections are important events that must continue even during extreme challenges. Through Continuity of Operations Plans (COOP), election officials can plan to address how critical election operations will continue under a broad range of circumstances. The planning process fosters recovery and survival in and after emergencies. A COOP handles emergencies from an all-hazards approach. It establishes policies and guidance to ensure critical election functions continue and personnel and resources are relocated to an alternate facility in emergencies. A COOP should develop procedures for:

- Alerting, notifying, activating, and deploying employees
- Identifying critical business functions
- Establishing an alternate facility
- Developing a roster of personnel with authority and knowledge of agency functions

The first step to creating a contingency plan is to identify the critical operations of elections offices that must continue in the face of emergency situations. Below is a specific example and five steps to consider when contingency planning:

1. **Set a goal** – What is the intended result of implementing the contingency plan?

   Example: If there is a flood in the elections warehouse, all voting equipment will be free of damage and moved temporarily to a new secure facility.

2. **Define the purpose** – What is the scope of the plan?

   Example: Establish policies and procedures to reduce the impact of flooding on voting systems. In the case of a flood, these procedures could be to regularly inspect the condition of the facility, store all sensitive materials off the ground, and establish a secure backup location that is unlikely to be affected by the same flooding event.

3. **Specify objectives** – What are the specific outcomes of the plan that support the overall goal?

   Example: To mitigate any damage caused by flooding to voting equipment:

   a. Store all voting equipment at least one foot off the ground.

   b. Inspect the roof of the storage facility every six months or immediately following an extreme weather event.

   c. Check the floors, walls, and ceilings for evidence of water damage.

   d. Identify and reserve a secure location that can store all voting equipment that is unlikely to be affected by a similar event (for example, a room above ground level or in a different location).

4. **Develop an action plan** – What are the specific actions and resources required to meet each objective?

   Example: Objective 1 – Store all voting equipment at least one foot off the ground.

   a. **Facilities:** Does the warehouse have the room to store equipment off the ground?

   b. **Budget:** What materials will need to be purchased to accomplish this objective (shelving, carts, forklifts, etc.)?

   c. **Staff:** Who is responsible for this task?

   d. **Training needs:** What does staff need to know to meet this objective successfully?

5. **Implement action plan** – How will the organization follow through on the action plan and evaluate the plan for success?

   Example: Evaluate the current status of the warehouse. Assign tasks to staff to implement mitigation strategies—budget for any materials that need to be purchased to implement the plan. Develop an evaluation for the overall contingency plan and determine which areas were successful and which need improvement or revision.

Threats

The example above is for one specific type of emergency. Many variables go into conducting an election, and there are many opportunities for problems to arise. While it is essential to think through likely emergencies for your community, here is a quick guide of the types of issues that may require the activation of a contingency plan:

Identifying Possible Emergencies

NATURAL DISASTERS	MAN-MADE DISASTERS	CYBERSECURITY AND TECHNOLOGY DISASTERS	ELECTION-SPECIFIC DISASTERS
Droughts	Active Shooter	Power Outages	Ballot or Supplies Shortages
Dust Storms	Bomb Scares	Equipment Failure	Changes in Polling Hours
Earthquakes	Explosions	Malware	Communications Failures
Extreme Cold	Fires	Phishing	Polling Location Access Issues
Extreme Heat	Hazardous Material Spills	Ransomware	Poll Worker Shortage
Flooding	Structural Failures	Denial-of-Service (DOS) Attack	Relocating a Polling Place
Hurricanes	Terrorism	SQL Injections	
Landslides	Traffic Accidents	Zero-Day Exploit	
Lightning	Violence		
Pandemic			
Snow/Ice			
Tornados			
Volcanoes			
Wildfires			

Once election officials have identified the most likely disasters to affect their community, it is helpful to conduct simulations or tabletop exercises (TTX) to work through the possible outcomes of these emergency scenarios. These discussions can help validate plans and procedures already in place or assess the types of plans that need to be created. CISA has developed several tabletop exercise packages specifically for election officials.[1]

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[1] https://www.cisa.gov/cisa-tabletop-exercise-packages

Goals

Thinking through likely disaster scenarios is just the first step of creating a contingency plan. The plan should have goals—the result you would like the contingency plan to achieve. State goals broadly and align them with the critical operations of your agency.

Begin setting goals by thinking about the desired outcome for each emergency. For example:

Threat: Poll workers do not show up at their assigned polling place.

• **Goal:** Ensure polling places are fully staffed throughout Election Day.

The emergency in this example is that poll workers cannot staff their assigned locations on Election Day. The goal is not about this specific emergency—instead, the goal is a broad statement that should be true about the election in general. In this case, that every polling location should be fully staffed.

Purpose

After setting a general goal, define the purpose. The purpose refers to the scope (i.e., parameters, authority). It gives the plan a specific framework to operate, giving it focus. For example:

Threat: Poll workers do not show up at their assigned polling place.

• **Goal:** Ensure polling places are fully staffed throughout Election Day.

• **Purpose:** Establish procedures for ensuring adequate staff members are present at all polling locations throughout the day to ensure the polling place can remain in operation during polling hours.

The example above focuses on addressing the issue of a poll worker shortage on Election Day. The plan aims to develop procedures to handle a poll worker shortage at a polling location and how to keep the site in operation.

Objectives

Objectives refer to the specific outcomes that support and help achieve the goals of the contingency plan; these should be clear, measurable, achievable, realistic, and timely. The

objectives further narrow the plan into individual, more easily accomplished pieces. And since these objectives are measurable, election officials can assess whether the contingency plan adequately meets these objectives.

Threat: Poll workers do not show up at their assigned polling place.

• **Goal:** Ensure polling places are fully staffed throughout Election Day.

• **Purpose:** Establish procedures for ensuring adequate staff members are present at all polling locations throughout the day to ensure the polling place can remain in operation during polling hours.

• **Objectives:**

1. Maintain operation of the polling location during polling hours.

2. Identify the minimum number of staff members needed in each location to maintain operations.

3. Hire and deploy an adequate number of poll workers for each polling location.

4. Develop a waitlist of backup poll workers trained and able to fill a last-minute vacancy.

5. Cross-train poll workers so that they can fill in if a vacancy occurs in any position.

These steps are clear and direct. The polling place must remain open during polling hours. Each polling place should have a minimum staffing level. Enough poll workers should be hired to fill these vacancies, and additional staff should be on hand in case of emergencies. Finally, cross-training poll workers can give polling place managers greater flexibility when staffing polling locations. Theoretically, any properly trained staff member in a polling location can fill in for any other staff member, at least temporarily. Cross-training will help the polling location maintain operations throughout election day, even if there is a temporary decrease in poll workers.

Action Plan

Election officials can develop an action plan after establishing a goal, purpose, and objectives. The action plan consists of steps

that relate directly to a particular objective. The plan should also include the staff, budget, time, training, and resources needed to execute the plan successfully and achieve the overall goal.

Threat: Poll workers do not show up at their assigned polling place.

- **Goal:** Ensure polling places are fully staffed throughout Election Day.

- **Purpose:** Establish procedures for ensuring adequate staff members are present at all polling locations throughout the day to ensure the polling place can remain in operation during polling hours.

- **Objectives:**

  1. Maintain operation of the polling location during polling hours.

  2. Identify the minimum number of staff members needed in each location to maintain operations.

  3. Hire and deploy an adequate number of poll workers for each polling location.

  4. Develop a waitlist of backup poll workers trained and able to fill a last-minute vacancy.

  5. Cross-train poll workers so that they can fill in if a vacancy occurs in any position.

- **Action steps:**

  1. At least 75 days before each election, identify the minimum and maximum number of poll workers needed to staff each polling location. (Objective #2)

  2. At least 60 days before each election, assign poll workers to polling locations. (Objective #3)

  3. At least 20 days before each election, fill all poll worker vacancies and develop a waitlist for backup poll workers. (Objective #4)

  4. At least 15 days before each election, create final polling place assignments and assign backup poll workers. (Objective #1)

  5. At least 15 days before each election, create a triage plan for covering essential polling place operations in the event of a temporary staffing shortage. (Objective #1)

  6. At least 14 days before each election, begin training poll workers. Provide enough time to cover all essential polling place operations. (Objective #5)

Each of the steps in the action plan corresponds to one or more objectives. This provides clear, measurable, and timely targets for implementing your contingency plan.

Putting It All Together

Once the action plan is complete, election officials can start the work of implementing the plan. To do this, identify the resources (time, budget, staff) needed to complete each action step. Election officials can organize the contingency plan into a simple document to use for planning purposes. The example at the end of the chapter is for the poll worker shortage example used throughout this chapter. A sample template that election officials can use to start the process of contingency planning is also included.

Depending on the critical operations the COOP covers, election officials can also engage relevant third parties as they develop and implement the plan. For example, election officials should consult local law enforcement and emergency management agencies while developing plans applicable to natural and man-made disasters. The third parties may be able to identify available resources of which election officials are unaware. Additionally, engaging those who may be necessary to the response early in the planning process opens lines of communication and creates a better understanding of the COOP.

Conclusion

Election officials routinely deal with changing circumstances in election administration. Contingency planning anticipates and mitigates potential negative consequences of all types of emergencies. The plan organizes office staff and ensures everyone knows their role and responsibilities in high-stress situations. After an elections office has implemented a contingency plan, election officials should evaluate its effectiveness and make necessary revisions.

Example Contingency Plan Worksheet

Threat	Poll workers do not show up at their assigned polling place.
Goal	Ensure polling places are fully staffed throughout Election Day.
Purpose	Establish procedures for ensuring an adequate number of staff members are present at all polling locations throughout the day to ensure the polling place can remain in operation during polling hours.

Objectives	Action Steps	Timeframe	Resources	Assessment
Maintain operation of the polling location during polling hours.	At least 15 days before each election, create final polling place assignments and assign backup poll workers.	15 days before Election Day	Backup poll workers Poll Workers Poll Worker Database Staff Time	If a vacancy occurred, were backup workers available and deployed?
	At least 15 days before each election, create a triage plan for covering essential polling place operations in the event of a temporary staffing shortage.	15 days before Election Day	Training materials Staff time	Did the polling place operate with normal staffing levels for the whole day?
Identify the minimum number of staff members needed in each location to maintain operations.	At least 75 days before each election, identify the minimum and maximum number of poll workers needed to staff each polling location.	75 days before Election Day	Backup poll workers Poll Workers Poll Worker Database Staff Time	Did each polling location have a minimum and maximum number of worker positions assigned?
Hire and deploy an adequate number of poll workers for each polling location.	At least 60 days before each election, assign poll workers to polling locations.	60 days before Election Day	Poll Workers Poll Worker Database Staff Time	Were enough poll workers hired to cover at least the minimum staffing levels determined by Objective #2?
Develop a waitlist of backup poll workers who are trained and able to fill a last-minute vacancy.	At least 20 days before each election, fill all poll worker vacancies and develop a waitlist for backup poll workers.	20 days before Election Day	Backup poll workers Poll Worker Database Staff Time	Were all open poll worker positions filled? Was a backup list of poll workers developed?
Cross-train poll workers to fill in if a vacancy occurs in any position.	At least 14 days before each election, begin training poll workers. Provide enough time to cover all essential polling place operations.	14 days before Election Day	Training materials Staff time	Were all workers trained in all critical polling location functions? Were poll workers able to cover all tasks if a temporary vacancy occurred?

Contingency Plan Worksheet template

Threat	
Goal	
Purpose	

Objectives	Action Steps	Timeframe	Resources	Assessment

Accessibility

Election officials work every day to make elections more accessible to the public. "Accessibility" in the elections office means removing barriers that make it difficult or impossible for voters to vote. It can refer to the built environment (for example, the voting location), technology (e.g., the voting systems), or language access. By providing accessibility in election administration, election officials ensure that voters with disabilities or who speak non-English languages can participate independently in the electoral process. Accessibility supports democracy, civil rights, the guiding principle of non-discrimination and privacy and independence in voting.

Federal laws such as the Americans with Disabilities Act (ADA), Voting Rights Act (VRA), and the Help America Vote Act (HAVA) ensure that the physical voting location, voting materials and information, and voting systems are accessible. When available, EAC grant funds can be used by states and units of local government to ensure access to the polls for individuals with disabilities.[1] State laws may impose additional requirements on election officials. For example, some state laws govern information technology accessibility and ensure elections offices' websites are accessible for everyone regardless of disability.

Accessibility covers all aspects of running an elections office—registering to vote, accessing a website, recruiting and training poll workers, entering an accessible voting location, operational accessible voting machines and independent ways to cast a secret ballot. Accessibility needs are far-reaching and covered throughout the Election Management Guideline's chapters and the Quick Start Guides. This chapter on accessibility provides many examples of ways to improve accessibility and incorporate these good practices into all aspects of election administration.

Managing an Accessible Elections Office

Every aspect of election administration can incorporate accessibility accommodations. This section will focus on the areas of election administration that occur outside the physical voting location. These programmatic aspects include training,

accountability, outreach, and information and communications technology. *Chapter 14 – Voting Location Management* addresses the accessibility of in-person voting locations.

Staff and Poll Worker Training

First, election officials should review all training materials for full and part-time staff and poll workers to evaluate accessibility accommodations. Elections office staff and poll workers are the public faces of the elections office, and a staff well trained on accessibility will improve the voting process for all voters. Knowing some basic tenets of disability etiquette will help election officials, staff members, and poll workers interact with voters with disabilities more effectively. The basics include:

1. Do not make assumptions.

2. Ask before helping.

3. Do not initiate physical contact.

4. Provide contact information for staff focused on accessibility.

For example, it is better to offer an arm when leading a voter who is blind to a voting station rather than grabbing the voter's arm and pulling the voter. Service animals, such as guide dogs, are allowed in the voting location. Election officials should emphasize during training sessions that it is not appropriate to pet these service animals while they are working. Election officials should include etiquette tips in poll worker training materials. Several disability etiquette resources are included at the end of the chapter.

> Poll workers should face people instead of looking down at the poll book when talking to them. Poll workers should also address the voter with a disability rather than the person they brought to assist them.

Poll workers do not always understand when and how to provide accommodations for voters with disabilities. Election officials should clearly outline the assistance poll workers

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[1] 52 U.S.C. § 20901.

can provide to voters with disabilities who are in the process of voting. Good communications skills ensure that all voters can understand staff and poll workers. Election officials can add training modules about interacting with voters with disabilities to poll worker training programs. For the basics in building a sound system for managing poll workers, election officials can review the EAC's **Successful Practices for Poll Worker Recruitment, Training, and Retention**.[2]

Voters with disabilities may not be aware of available accommodations. For example, a voter may report difficulty seeing where to sign at the check-in table. A poll worker trained in disability awareness and etiquette might offer a magnifying glass for the signature sheet. Such an offer could also serve as an opportunity to explain information about voting systems with screen magnification options. Identifying an inaccessible sign is also an opportunity to increase accessibility by modifying the font, color contrast, or providing auditory signage.

Election officials do not have to create training modules from scratch or by themselves. Disability organizations may welcome an invitation to present a component of poll worker training on sensitivity to disability issues. Election officials can find many free, governmental resources online that they can adapt to their jurisdictions, including several identified at the end of this chapter.

> Contra Costa County, California, developed its "A Simple (Accessible) Path for All" initiative to promote accessibility. The initiative included an Accessible Polling Place Location and Equipment (APPLE) class, which provided instruction on establishing and maintaining accessible polling places. Since its launch in January 2018, more than 700 election workers have taken APPLE training—nearly half of the county's total Election Day volunteers.

Accountability

Elections offices should implement a procedure for receiving and responding to inquiries and complaints from the public about accessibility. Election officials may not always proactively provide accessible accommodations in all aspects of the voting

experience. However, voters who may have encountered an unexpected obstacle are often willing to share these experiences in the hope that election officials will resolve the issue.

If staff levels allow, election offices can benefit from one staff member assuming responsibility for all disability issues during election administration in the jurisdiction. This staffer would be responsible for receiving and responding to inquiries and complaints and ensuring that voters with disabilities have all the information they need to register to vote and use the accessibility features of voting systems.

Disability Outreach

Election officials can leverage many types of outreach to improve the accessibility programs they implement. They might review all printed material available to the public and make sure to offer it in alternative formats, such as large print, audio, and in various languages. For example, some jurisdictions provide large print sample ballots for voters with vision impairments at the polls. If a document can be made available electronically on a website, it will allow voters to familiarize themselves with the process before going to the voting location.

State and local jurisdictions might partner with disability groups to pool resources and develop accessibility solutions. From poll worker accessibility training to checklists for inspecting voting locations for accessibility, election officials can take advantage of many existing resources. Election officials can tailor most of these solutions to fit the needs of just about any jurisdiction. For more information about partnerships that election officials might pursue, refer to *Chapter 4 - Building Community Partnerships*.

Outreach to Voters

Election officials should develop an outreach plan to raise awareness among voters with disabilities about accessible voting locations and accessible election programs in the jurisdiction.

The outreach might address the following issues:

- Do voters with disabilities know how to—

  o Register to vote?

  o Use the accessible voting system?

- Do voters with disabilities know about various available accommodations, such as—

  - Information in large print on paper?

  - Are the documents and other information viewable in advance on an election website?

- Do voters with disabilities know to whom to complain if they have a problem?

Election officials should raise awareness among language minority communities of the availability of in-language materials and assistance. Promote available assistance and resources online and through the media and prominently display resources at voting locations to foster increased awareness.

Languages Access outreach may include:

- Making announcements over the language community's radio or television stations and social media

- Publishing notices in language community newspapers

- Partnering with community organizations to conduct voter outreach at community events

Outreach to Government

Election officials have many governmental resources at their disposal. For example, many states have a Governor's Commission on Disability that advises the state government on disability issues. Additionally, state elections offices often have staff members dedicated to accessibility. Local election officials can utilize these state-level resources to improve accessibility in the elections process.

Moreover, many counties have local commissions on people with disabilities. These organizations may help local election officials reach those individuals in the community who need information on the various accessibility accommodations. In jurisdictions without a local commission, election officials can establish an accessibility advisory board or create a committee that focuses on election administration. Election officials can schedule regular meetings to solicit input and gather suggestions and ideas about making the voting process and voting locations more accessible to individuals with disabilities.

EXAMPLE

The Wisconsin Elections Commission (WEC) established an Accessibility Advisory Committee to address accessibility concerns and continue their strong commitment to serving voters with disabilities. The WEC regularly hosts forums and meets with the Wisconsin Disability Coalition to provide updates, solicit input, and address concerns. One notable success from this collaborative partnership was a webinar for municipal clerks on accessible polling place setup.

Outreach to Nonprofits

The local disability community is another potential partner for election officials looking to promote the awareness of accessibility accommodations. Disability organizations may provide assistance or advice about marketing strategies, usability testing, material reviews, or training. Election officials can give the organizations materials on voter registration and accessible voting options to distribute. Additionally, the organizations are an excellent resource for recruiting poll workers with disabilities and can more effectively perform outreach than elections office staff.

Disability organizations can help evaluate voting systems as part of the procurement process. If no governmental commission is advising agencies about disability issues, election officials can reach out directly to the disability community to assist with selecting appropriate equipment. After purchasing equipment and before each election, the disability community may help election officials with the ballot's design and audio ballot testing.

Staff or volunteers at disability organizations may also review draft documents from an accessibility perspective. These materials might include marketing materials, emergency evacuation procedures, voting instructions (including audio ballots), or public service announcements.

Finally, disability organizations may welcome an invitation to review or to help with a component of poll worker training on sensitivity to disability issues.

Information and Communications Technology

Technology related to election administration includes telephones, websites, voting systems, and electronic documents (such as an online voter registration application). Accessibility guidelines and standards help vendors and election officials design and purchase technologies that people with disabilities can use. For example, the Voluntary Voting System Guidelines (VVSG) allow voting system vendors to develop HAVA-compliant voting systems.

To make websites more accessible, elections office web designers may use the Electronic and Information Technology Accessibility Standards issued by the U.S. Access Board and Web Content Accessibility Guidelines (WCAG 2.0) developed by the W3C Web Accessibility Initiative. Web designers sometimes use web accessibility tools to make their jobs easier.

Web accessibility evaluation tools are software programs or online services that help determine if a website meets accessibility standards and guidelines. Although web accessibility evaluation tools can significantly reduce the time and effort needed to evaluate websites, no tool can automatically determine the accessibility of a website. Officials can use a combination of these tools to address specific aspects of the evaluation process.

> Election officials can find a list of web accessibility evaluation tools at the W3C Web Accessibility Initiative website: **http://www.w3.org/WAI/RC/tools/.**

When posting information on a website, election officials should provide accessible materials in a word processor-formatted document or HTML. Voters with impaired vision who use a text-to-audio screen reader can read documents in these formats more easily.

> Use alt-tags for graphics, such as illustrations, caption audio information, and visual descriptions of videos.

Providing an Accessible Voting Experience

Election officials can also provide accessible accommodations during the voting experience. Physical access to the voting location, voting technology, check-in procedures, and even the shortest lines can present challenges for voters with disabilities and older people.[3] Some voters with language needs may not be comfortable interacting with poll workers with whom they are unfamiliar. In such cases, language minority voters should be allowed to bring an assistant of their choice (with the exception of an employer or union representative) into the voting booth, per Section 208 of the Voting Rights Act. States and localities have come up with myriad ways to enhance the accessibility of in-person voting locations, voting by mail, and serving voters in long-term care facilities.

Election officials can provide language assistance that supports voting in written and oral forms, including:

- Multilingual signage at the polls, election offices, registration locations, and other sites that indicate language assistance is available

- Translated ballots and voting materials, both paper and electronic

- Interactions with bilingual poll workers

- Telephone helplines

In-Person Voting

Whether voting in-person early or on Election Day, election officials must provide all voters with an independent and private voting experience. All voting systems have some accessibility features to enhance usability. HAVA requires accessible voting systems for voters with disabilities in all voting locations: "The voting system shall... be accessible for individuals with disabilities, including nonvisual accessibility for the blind and visually impaired, in a manner that provides the same opportunity for access and participation (including privacy and independence) as for other voters...."[4] The EAC publishes the Voluntary Voting System Guidelines (VVSG), which guide voting system manufacturers in designing voting systems to meet HAVA's requirements. HAVA requires that all in-person voting locations include at least one accessible voting device.

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[3] Additional information on providing an accessible in-person voting, refer to the EAC's Best Practices: Accessible In-Person Voting at **https://www.eac.gov/sites/default/files/Accessibility_Checklist_In_Person_Voting_1.pdf**.
[4] 52 U.S.C. §21081(a)(3)

Election officials should be proactive in providing an accessible voting device and facilitating its use for those who may need it. Early voting staff and Election Day poll workers must be comfortable offering the accessible device to voters. Staff and poll worker training should include setting up and using the device and how to assist voters in using it. Assistance may include demonstrating how to use the device and its accessibility features to the voter. Training should also familiarize workers with common assistive technologies voters may use in addition to the accessible voting device, including hearing aids, neck loops, mobility aids, switches, and magnifiers.

In addition to providing accessible voting equipment, some elections offices allow voters who cannot enter the voting location to vote from their vehicles if state law allows. Frequently called curbside voting, election officials designate curbside parking spaces at each voting location. Depending on the jurisdiction, the voter may ring a buzzer or call a dedicated phone number to alert poll workers they are ready to vote. Teams of two poll workers (preferably bipartisan) then take all necessary materials to the voter at the vehicle. The Quick Start Guide – **Curbside Voting** provides several best practices election to facilitate effective curbside voting.[5]

Chapter 14 – Voting Location Management provides more accessibility and in-person voting information.

Poll Workers

Election officials should recruit individuals with disabilities and bilingual individuals to be poll workers. For some voters, the presence of a poll worker with a disability or who speaks their language can make the voting experience more comfortable and increase the likelihood that they will be receptive to offers of assistance. Disability organizations are great places to look for potential poll workers with disabilities.

Election officials should consider the following practices to improve conditions for poll workers with disabilities:

- **Split shifts**—Some poll workers with disabilities would benefit from having the option to reduce their time at the polls to a shift with more manageable hours.

- **Environmental sensitivities**—Some poll workers may be sensitive to substances, such as perfumes and air fresheners.

- **Simple adaptive technologies**—Poll workers may have problems with dexterity or be visually impaired. These individuals would benefit from soft-grip tools and magnifying strips at the polls.

Key considerations for bilingual poll worker recruitment and training:

- Actively engage your language communities. Encouraging involvement, outreach, and engagement with language communities can make poll worker recruitment more sustainable.

- Prioritize recruitment of bilingual poll workers. Bilingual poll workers can serve both English-speaking individuals and those who speak another language.

- Incorporate cultural sensitivity training into the training programs for all poll workers. Awareness of the challenges other cultures and language communities may experience to voting promotes a more accessible elections process.

After the election, election officials can survey poll workers to identify ways to improve the accessibility of future elections. Poll workers may see issues election officials cannot, and they can provide ideas and solutions for addressing accessibility needs on the next Election Day.

Voting by Mail

Traditionally, voting by mail meant that a voter completed a paper ballot and mailed it back to the local election official via the United States Postal Service. For many voters with disabilities, their inability to perform the physical act of filling out the ballot makes it impossible to vote by mail independently. These individuals may have to compromise their privacy to vote by mail. The EAC's **Best Practices: Accessibility for Voting By Mail** outlines best practices and provides checklists for election officials to ensure the accessibility of voting by mail.[6]

Some states are experimenting with new mail voting technology. One alternative to mailing a traditional paper ballot is to provide voters with an electronic ballot that can be read and marked using assistive technology. Voters with disabilities can complete the ballot on their home

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[5] https://www.eac.gov/sites/default/files/electionofficials/QuickStartGuides/Curbside_Voting_EAC_Quick_Start_Guide_508.pdf
[6] https://www.eac.gov/sites/default/files/bestpractices/Accessibility_for_Voting_by_Mail_Part_III_Accessibility_Checklist.pdf

computer, print it, and mail it to the local elections office or drop it off at the elections office, a ballot drop box, or other designated site as allowed in the jurisdiction. Vote by mail voters do not have the opportunity to ask poll workers for clarifications, so the voting packets need to include the necessary instructions and materials in a concise, organized design. A clearly indicated helpline phone number or email with language assistance can also be helpful.

Voting in Long-Term Care Facilities and Mobile Polling

Election officials can develop and implement policies and practices that facilitate registration and voting processes for residents of nursing homes, assisted-living facilities, and long-term care facilities, and especially for people with cognitive and other brain impairments. It is essential that residents understand and can exercise their right to vote. Election officials may work with a designated staff member at the facilities to coordinate voter registration and voting.

Election officials can share the elections calendar with important deadlines with staff for display at their facilities. In some jurisdictions, election officials may conduct voter registration for new residents or remind staff that new residents need to update their registration before any voter registration deadline. Depending on state law and local practices, election officials may send teams (preferably bipartisan) of staff or poll workers to the facility to assist with voting. Alternatively, voters may opt to mail their ballot, or the facility may arrange transportation for residents to the in-person voting location.

Conclusion

Election administration is primarily a customer service function, and election officials must ensure accessibility is considered in every aspect of the process to serve all voters. Election officials should promote a culture that promotes accessibility starting with staff and poll worker training. Working with community organizations and soliciting feedback from voters will help election officials to improve service to voters with disabilities and voters from language minority communities.

ADDITIONAL ACCESSIBILITY RESOURCES

- American Association of People with Disabilities
  http://www.aapd.com

- American Bar Association Commission on Law and Aging Voting and Cognitive Impairments
  http://new.abanet.org/aging/Pages/voting.aspx

- Disability and Business Technical Assistance Centers (DBTACs) **http://www.votingaccess.org/**

- The Election Center **http://www.electioncenter.org**

- National Federation of the Blind (Nonvisual Election Technology) **http://www.nfb.org/nfb/HAVA_intro.asp**

- National Institute of Standards and Technology
  http://vote.nist.gov

- United States Access Board **http://www.access-board.gov**

- United States Department of Justice, Civil Rights Division, Disability Rights Section
  http://www.justice.gov/crt/drs/drshome.php

- Web Accessibility Initiative (WAI) **http://www.w3.org/WAI/**

DISABILITY ETIQUETTE RESOURCES

- United Spinal's
  https://www.unitedspinal.org/pdf/DisabilityEtiquette.pdf

- Eastern Paralyzed Veteran Association
  https://ds.gmu.edu/wp-content/uploads/2020/08/disability-etiquette-epva.pdf

- Respectability **https://www.respectability.org/inclusion-toolkits/etiquette-interacting-with-people-with-disabilities/**

- New York City Board of Elections Accessibility Videos
  https://www.youtube.com/watch?v=YFJcBNFYxuE

- Disability Rights Texas
  https://www.disabilityrightstx.org/en/asl-videos/voting/

Building Community Partnerships

The success of an election is directly impacted by the engagement of the community. Before Election Day, an operation that usually consists of one central office with a small staff can grow to hundreds or thousands of poll workers spread across the entire geographic area of the jurisdiction, stretching already limited resources and capacities. Election officials may reach out to community organizations and other governmental agencies to help augment the elections office's limited resources.

Election Day is a community-wide event. State and local election officials have a lot of responsibility for making Election Day a success, but they do not have to do it alone. Throughout the country, election officials use community resources, civic commitment, and intergovernmental partnerships to make elections work better for everyone.

Intergovernmental Partnerships

The challenges in election administration continue to become more complex and often require collaboration and resource sharing. Election officials must be creative to meet the needs of their voters, plan for contingencies, and stretch resources. Internal brainstorming sessions can lead to innovation, but it also may be helpful to reach out to other election officials and governmental agencies for ideas.

The EAC serves as a clearinghouse for election administration best practices and resources.[1] Additionally, the EAC's four Federal Advisory Committee Act (FACA) boards, including the Standards Board, Board of Advisors, Local Leadership Council, and Technical Guidelines and Development Committee, and CISA's Election Infrastructure Subsector Government Coordinating Council (EIS GCC) bring together federal partners, state and local election officials, stakeholders, experts, and vendors. Statewide election organizations offer opportunities for election officials in the state to network and collaborate. National organizations, like the Election Center, the International Association of Government Officials (IGO),

National Association of Counties (NACo), and the International Institute of Municipal Clerks (IIMC), also connect election officials across the United States.

Intergovernmental partnerships between elections offices can be advantageous for all parties involved. Within states, collaboration may include:

- Coordinating media messages and advertisements

- Collaborating poll worker recruitment efforts

- Coordinating purchases of voting systems or other major purchases

- Combining efforts when ballot programming and proofing

- Sharing materials for poll worker training or voter education

These partnerships are typically informal. Election officials are typically eager to share materials they believe will assist their colleagues in other jurisdictions. However, it may be beneficial to formalize any partnerships that involve significant costs or third-party vendors. For example, if two or more jurisdictions are sharing ballot production services, there should be a clear agreement regarding the responsibilities of each party involved. (Who is responsible for ballot production? When will ballot data be available? Who is responsible for ballot proofing?) Each jurisdiction's legal counsel should review the specifics of any intergovernmental agreement.

Election officials can also establish partnerships with city, county, and state government entities. For example, local election officials may need to partner with their county or local emergency management agencies to respond to natural disasters or other disruptive events. These organizations can assist election officials with contingency planning (see *Chapter 2 - Contingency Planning* for more information) and provide critical emergency support for essential elections operations.

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[1] The latest clearinghouse resources for election officials can be found at **https://www.eac.gov/election-officials**.

Election officials can also leverage an emergency management agency's existing relationships to respond to emergencies. For example, emergency management agencies may have arrangements with local school districts or other community organizations that can host a polling place in case of an emergency. These agencies may also have transportation plans with local road commissions or transportation departments that could ensure polling places remain accessible during extreme weather events.

Some state and local governments provide their staff with paid leave if they serve as poll workers during an election. If allowable by law, these individuals may receive their regular salary and a poll worker stipend for their work. This arrangement can be particularly beneficial for elections offices since local government employees may already be familiar with certain aspects of serving as a poll worker, including the location of polling places and the IT systems poll workers use. Local government and schools may be a valuable resource in recruiting poll workers and bilingual poll translators.

Community Partnerships

When seeking community assistance, local election officials may find willing partners who are also enthusiastic supporters of the election process but may not be sure of how they can be of assistance. Partnering with community organizations can bring tangible benefits to elections offices. These partnerships allow election officials to strategically use resources to fulfill otherwise unmet needs. Moreover, the partnering organizations benefit from increased visibility and the opportunity to serve their community. Election officials may form partnerships with a variety of community organizations, including:

- Nonprofit, religious, and charitable organizations
- Businesses and trade groups
- High schools, community colleges, and universities
- County and local government agencies
- Local political parties and voting rights organizations

Election officials should form partnerships based on their community's unique needs. Some communities rely on their political parties to recruit poll workers from both parties, while some communities recruit only nonpartisan

poll workers. Communities with local universities will find challenges and benefits in serving student voters on campus. Election officials can tailor their efforts to the needs of their communities to better serve voters.

Civic Organizations

Election officials often partner with area civic organizations to recruit poll workers. These groups have regular meetings, and election officials can inquire if there are opportunities to speak at one of these events. Civic organizations may send regular newsletters or email communication to their members. Election officials can ask these organizations to include information about serving as a poll worker in these communications.

Civic organizations can also benefit directly from recruiting poll workers among their membership. Since 1998, the Orange County, Florida, Supervisor of Elections has hosted an Adopt-A-Precinct program. Local organizations "adopt" a precinct by providing poll workers. Instead of paying poll workers for their service, the Supervisor of Elections provides these funds to the adopting organization. According to their website, the Orange County elections office provided over $464,000 to local community organizations participating in this program across three countywide elections in 2020. More information about this program can be found on the **Orange County Supervisor of Elections website**.[2]

High Schools

When authorized by state law, many election officials rely on high school students to serve as poll workers. Students may earn credit for community service requirements in addition to earning a poll worker stipend. Election officials can connect with civics teachers and school administrators to give presentations to high school classes and provide information about how students can serve as poll workers in their community.

Election officials have collaborated with community organizations and local high schools to bring together poll workers of different generations and backgrounds. For example, election officials have worked with local nonprofits focused on civic engagement to recruit high school students and veterans to serve as poll workers together.

[2] **https://www.ocfelections.com/adopt-precinct**.

Such programs can bring together groups who would not traditionally interact, benefiting all involved, including the jurisdiction's elections office and voters.[3]

Language Minority Communities

Section 203 of the Voting Rights Act requires jurisdictions with more than 10,000 or over 5 percent of the total voting-age citizens in a single political subdivision (typically a county or a municipality) who are members of a single language minority group to provide registration and voting materials in the applicable language, as well as in English. However, local election officials do not have to be covered by Section 203 to partner with their local language minority communities. Local election officials can collaborate with language minority communities to recruit poll workers and disseminate voter education materials.

Establishing working relationships with language minority communities through active engagement and outreach can help local election officials develop language programs and ease implementation.[4] Election officials can do the following:

- Early on, conduct outreach to gauge the level of assistance your language minority communities need and better understand their specific challenges.

- Throughout the development of language assistance processes and resources, engage language groups to build buy-in and establish trusting relationships. Members of the language community can help review new materials or even provide translation assistance.

- Even after language assistance processes and resources are in place, continue to engage your language minority communities. Continued engagement can ease bilingual poll worker recruitment efforts and make the language program more sustainable.

- Seek opportunities to be physically present and visible in areas with a large concentration of language minority voters, like organizing a voter registration table at relevant community events.

Some election officials have realized the benefits of collaborating with their local language minority communities. Specifically, election officials have successfully recruited bilingual high school students to serve as poll workers. Officials identified the language needs of their communities and sought out bilingual high school students who could serve in precincts with language needs.[5]

Local election officials have also reached out to their local language minority communities to create I Voted stickers featuring local artists and a variety of languages. For the 2020 election, the Alaska Division of Elections featured I Voted stickers that Alaskan artist Barbara Lavallee designed and were available in English, Spanish, Koyukon, Gwich'in, Aleut, Tagalog, Alutiiq, Northern Inupiaq, Nunivak Cup'ig, and Yup'ik.

Figure 1: Alaskan "I Voted" Sticker in the Yup'ik language

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3 **https://www.eac.gov/election-officials/the-city-of-ely-mn-2018-clearinghouse-award-winner**.
4 All of the EAC's language access resources are available at **https://www.eac.gov/election-officials#Language%20Access**.
5 **https://www.eac.gov/election-officials/minneapolis-minnesota-clearinghouse-award-2017**.

Disability Community

Election officials must comply with state and federal regulations regarding serving voters with disabilities. However, election officials can go beyond these regulations and work closely with their local disability communities to ensure that all voters can cast a ballot privately and independently.

Election officials can partner with nonprofit or community organizations to gather ideas and input from organizations dedicated to serving their jurisdiction's disabled community. Such partnerships may even lead to more formal advisory committees to assist the elections office in addressing accessibility concerns. An advisory committee focused on the rights of voters with disabilities can ensure accessibility remains a priority.[6] Additionally, local election officials can coordinate with these groups to conduct mock elections to demonstrate how to use accessible voting equipment, train poll workers on serving voters with disabilities, and use their facilities as an accessible polling place.[7]

Additionally, the EAC created a **voter rights guide** for voters with disabilities.[8] The guide outlines voters with disabilities' federal voting rights. State and local election officials can request copies of the guide to provide to voters and community partners.

Establishing Polling Places and Vote Centers

Election officials commonly struggle to find polling places before each election. While many communities have long-standing partnerships with the organizations that host their polling places, it can be challenging to find new locations that meet all the legal and operational requirements of a polling place. Building strong community partnerships can help election officials establish polling places that serve voters and remain consistent for years to come.

When establishing new polling locations, election officials need to review all relevant state laws and ensure formal agreements address legal requirements. In most instances, electioneering and campaign activities must not occur within 100 feet of a polling place. Election officials should notify any organization hosting a polling location of such requirements and how workers will address any violations.

Other items that election officials may need to incorporate in an official agreement include:

- Any requirements of the property owner for opening the building, including odd hours and weekends

- Specific times and dates when the facility will be available for setting up and breaking down voting equipment

- Contact information for building maintenance, utility providers, and other essential emergency contacts

- Designated parking spaces for voters to use during the hours the polls are open

For more information about polling places and vote centers, see *Chapter 14 – Voting Location Management*.

Managing Partnerships

All partnerships are unique, but election officials can employ best practices to manage their established community partnerships. Below are a few ways election officials can maintain and foster their partnerships:

- Collaborate with the other partnering organizations to establish a mission statement and goals for the partnership.

- Decide on a leadership structure. Discuss whether one person will be in charge or if all decisions will be made democratically. Creating a leadership team or joint advisory board empowered to make key decisions might be necessary.

- Define how the elections office staff will interact with the partnering organization(s). Decide if one staff member will be the single point of contact, acting as a liaison, or if the responsibility will fall on each staffer as they conduct daily tasks.

- Encourage communication and cooperation in the partnership so members of each group can learn from each other. It might be helpful to provide training on each organization's work or offer job-shadowing opportunities or other trust-building activities.

- Create a budget for the partnership and a clear strategy for cost-sharing, if appropriate.

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[6] https://www.eac.gov/election-officials/wisconsin-elections-commission-2020-clearinghouse-award-winner.
[7] https://www.eac.gov/election-officials/el-paso-colorado-clearinghouse-award-2017.
[8] https://www.eac.gov/election-officials/voting-accessibility.

- Build on each partner's strengths to maximize effectiveness.

- Brainstorm relevant stakeholders and, from the first day, involve them in the partnership planning process.

- Seek out media-friendly champions for the partnership to increase visibility and investment in the partnership's programs. Set clear timelines and responsibilities for all participants in the partnership.

- Publicize the goals and accomplishments of the partnership through appropriate media outlets.

Recognizing Partners

Everyone who participates in election administration works hard and is a dedicated team member. Partnering organizations and volunteers are no exception. Consider creating an award for outstanding service to recognize the important work that these individuals have accomplished. While not every individual or organization wants to be recognized publicly, a small gesture will help partnering organizations feel like valued members of the election team and inspire future collaborations.

Conclusion

Election officials can take advantage of the benefits establishing partnerships create. Collaborating with other election officials can develop efficiencies and allow sharing of best practices in election administration. Engaging groups with different purposes and serving diverse populations provides elections offices with perspectives they otherwise may lack. Not only does this engagement inform the elections office's work, but it also gives the partners valuable insight into the elections process.

Communicating with the Public

Elections are in the spotlight more than ever, and the public receives information about the election process from multiple outlets. The public needs a credible, accurate resource on which they can rely for everything from the most basic election administration information—such as where, when, and how to vote—to more complex issues such as eligibility. Elections are highly local, decentralized activities, with varying laws and rules in every state. Election officials throughout the nation continue to be the ultimate authority on the election administration process to ensure that voters and candidates can successfully participate. However, news sources are primarily national, and social media platforms have made it more difficult for local election officials to compete for voters' attention in this informational environment.

Election officials' efforts to educate and communicate with the public directly affects voters' chances of having a successful election experience. Election officials need to understand where voters are getting most of their information and use that knowledge to inform the elections office's communication plan. Next, election officials need to collect voters' most common questions. These questions and answers begin a communication strategy targeted at election officials' specific communities.

Preparing a communication strategy ahead of time will increase efficiency and save resources. Election officials always expect the unexpected and should be prepared to communicate about developing situations or other unforeseen circumstances. Being prepared helps keep the public informed and minimizes interruptions during the election cycle.

This chapter aims to help election officials craft an effective communication plan and develop and distribute information to voters. It is important to remember that every community has different needs and operates under different laws. Local election officials should work with their local boards, where applicable, and state elections offices to ensure that their communication plans align with local and state communications requirements.

Planning a Communication Strategy

Election officials' first step in formulating a communication strategy is to define the audiences. Most election officials have two primary audiences: voters and candidates. The media may also inform the public on a mass scale, but it is primarily the responsibility of elections offices to act as the official resource for accurate and timely election information.

To begin, election officials should determine the kind of information voters and candidates want and the best ways to disseminate that information. One of the biggest challenges election officials face is presenting and organizing a large amount of information logically and intuitively so that people can easily find the information they seek. One approach categorizes all the available information into topic areas and then implements it across multiple platforms.

When creating informational materials, election officials should produce them in accessible formats that are compliant with Section 508 of the Rehabilitation Act[1] (discussed later in this chapter). Also, election officials in jurisdictions covered by Section 203 of the Voting Rights Act[2] will need to ensure they translate all information available in English into other required languages for individuals with limited English proficiency.

Creating an Effective Communications Plan (What to Communicate)

The best place to start creating an effective communication plan is to create a calendar with every important date and deadline for an election. Start with a particular deadline, and then work backward from that date to determine what information will be relevant to convey to the public and when. For example, if a candidate filing deadline is 15 weeks before an election, consider how long it takes for candidates to complete the required paperwork:

- Do candidates need to file petition signatures?
- How long does the signature-gathering process take?
- How long does it take the elections office to review these signatures?

[1] 29 U.S.C. § 794d.
[2] 42 U.S.C. § 1973aa-1a.

In this example, it may take several weeks to gather signatures and several days more for the elections office to verify them. Elections offices should communicate candidate filing deadlines early enough to provide candidates adequate time to file for office and for the elections office to notify candidates of any potential filing issues before the deadline if permitted.

After election officials determine dates and deadlines and set target communication dates, consider what information the public will need to participate in each step of the elections process. For example:

What information and materials will candidates need to file for office successfully?

- Do candidates need access to official filing affidavits or petition forms?

- How many signatures need to be gathered for a particular office?

- Is there a filing fee?

It may also be helpful to provide candidates with district boundary maps and information about local campaign finance filing requirements.

The next step of the elections office's communications plan should link the elections office's audience to someone who can directly provide customer service. Using candidate filing as an example, this may include:

- Hours and locations where candidate filing materials can be accepted

- Contact information for staff members who can answer questions about candidate filing materials

- Links to other offices or agencies which can provide more details on a given office (for example, if a candidate is filing for an office that points at the state level)

Distributing Communication Materials (How to Communicate)

Election officials should understand how voters in their jurisdictions consume information and tailor their distribution strategy to those patterns. One of the most critical ways election officials communicate with voters is through direct mail. Election officials send voter registration cards, voter information guides, ballot applications (where required), official ballots, and official notices. Elections offices may also mail newsletters or postcards with critical communications to every residence in a community.

Depending on when election materials are mailed, it may be important to include additional relevant voting information. For example, a voter registration card may include contact information for the elections office, social media links, upcoming election dates, or other helpful information in addition to what is legally required.

Working with the News Media

The public expects election officials to provide timely and accurate information, and the traditional news media plays a vital role in helping to meet this responsibility. Because election officials and the media have many common goals—they both want to inform the public, explain the process, and report developments before, during, and after Election Day—their partnership is natural.

Election officials should understand what the media might need and get the information they want to disseminate to the public. Building relationships with print, radio, television, and online journalists can help election officials communicate with the broader community. Election officials should understand how to communicate with the media to share election information with the public broadly. One way to accomplish this goal is by writing press releases in a format that is clear and easy to read. For example:

- **Title the press release with an engaging headline:**

> *County Elections Office Providing Information on Election Security*

- **Start the press release with a clear hook that tells the reader what happened:**

  > *The County Board of Elections has launched a new website with information for the public about election security, www.SampleCounty.gov/ElectionSecurity.*

- **Provide the reader with additional information about the product or service being launched:**

  > *The new election security page provides voters with information about how the county ensures that each election is secure. It includes procedures for handling official election materials, securing voter information, and conducting post-election audits.*

- **Tell the reader where they can find more information:**

  > *For more information on this service, contact [Name], Director of Elections for Sample County, at [phone number] or [email]. To stay up to date on news from Sample County Board of Elections, follow us on [social media platform] @SampleCountyElections.*

In addition to disseminating press releases for individual events, consider preparing a media kit for reporters. Some essential information that may be helpful for reporters includes:

- Total number of registered voters
- Total number of absentee voters
- Total number of military and overseas voters
- Historical voter turnout data
- Historical election results
- Important voting dates and deadlines
- Official candidate listings
- Sample ballots
- Polling place information

The media kit should also include contact information for the elections office's designated spokesperson(s). This information should be forwarded to reporters and made available on the elections office website.

It is also important to remember that different media outlets may require different information or resources from the elections office. Some reporters may need a place to record an interview, and television journalists may request live shots or b-roll footage. If providing television reporters access to the elections office, consider what information may be in view of the camera. If the elections office processes documents with personal information, ensure that those materials are stored securely to protect individual privacy. If a reporter has requested access to film inside a polling location, ensure they follow all state legal requirements and cannot see any voted ballots. Election officials must always maintain a balance between voter privacy and transparency.

Reporters do not have much time to dedicate to a story, so information the elections office provides them should be concise. Election officials should do their best to educate reporters well before Election Day. The official might consider inviting reporters to observe the pre-election voting system testing and setup. Many jurisdictions hold a pre-Election Day media briefing, which includes providing information about the laws for media at voting locations and the contact information of elections office staff.

Election officials should readily admit when they do not know the answer to a press question. Speculating about rapidly developing situations often does more harm than good. Election officials should acknowledge that an event (such as extreme weather or a power outage) happened and that elections office staff will keep the public updated as more information becomes available.

Other helpful tips for interacting with the media include the following:

- Be honest and friendly.
- Turn off phones and devices before an interview.
- Always try to accommodate reporters on deadline.
- If a mistake or inaccurate statement is made, admit it, correct it, and move on.

- Never be defensive, even if the reporter is.
- Anything e-mailed could end up in the newspaper or on the internet.
- Do not try to provide an answer you do not have.
- Remember to speak to the voters, not the reporter.
- Remember the top priority: always inform voters.

Developing Internal Procedures for Staff

Election officials deliver a large amount of information to the public. Sometimes, facts change, unforeseen circumstances arise, and courts make decisions that affect voters. Election officials need to respond by quickly distributing updated information. To manage rapidly changing conditions, election officials should formalize staff roles and establish internal procedures.

Before making any statements to the public, elections offices should develop a strict hierarchy of who is authorized to make official statements. Larger jurisdictions may have professional communication staff that handles all press inquiries. Small and medium-sized jurisdictions may not have communications staff, and in these instances, the local election official themselves may be the most appropriate individual to respond to media requests.

Election officials might find it necessary to create a formal decision hierarchy, including an approval process for information released to the public to ensure that the message is accurate and current. In such a hierarchy, election officials may designate one or more high-level members of the staff to issue the final approval for all documents. This structure fosters consistency and minimizes inaccuracies.

To ensure that all spokespeople have the same information, the elections office should hold pre-election training sessions covering poll worker duties, voting equipment, and other basics of election administration. Additionally, the staff member in charge of communication should develop a logistics and staffing plan for communicating in the weeks leading up to and after Election Day. This plan may include:

- Roles and responsibilities for all department staff
- Times when information is scheduled to be released to the media

- Locations where the media may gather for press conferences
- Contact information for appropriate staff members

To help disseminate material to the public, election officials may consider giving reporters direct access to office staff and timely information. Elections officials should aim to be the ultimate resource of election information in the jurisdiction, which often means being responsive on short notice. As it gets closer to Election Day, election officials may need to be available outside regular business hours to answer press requests.

Finally, the elections office should consider creating a communication contingency plan that addresses how communication with the public and the media will continue in situations such as loss of power, bad weather, and any other disruptions. If there is an emergency during a critical juncture on Election Day, make sure that the staff member assigned to respond to press inquiries is available to focus on executing the crisis communication plan. While this may not be possible for smaller offices, it is essential to account for crisis communication (and any associated staffing shortages) as part of the office's more extensive contingency plans. For more information about creating contingency plans, see *Chapter 2 - Contingency Planning*.

Official Websites

When voters need information about registering to vote or to view a sample ballot, they often turn to the internet. Even if voters do not know to go directly to their state's election website, they may be directed to this site by several other online sources. Having a website that is easy to navigate, and provides critical services to voters, is one of the best ways to communicate with voters effectively. An easy-to-navigate elections website may have the added benefit of reducing the number of calls or in-person visits received by state and local elections offices during high-traffic periods of the election cycle.

Many states already offer several online services for voters, including:

- Finding voter's polling places
- Viewing sample ballots
- Checking a voter's registration status
- Tracking a voter's mailed ballot
- Tracking ballots for Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) voters

One example of a simple, easy-to-navigate local election website is shown in the template below and is available by third parties or vendors.[3] The elections office's website should use simple graphics and language to direct voters. Office contact information should be readily available at the bottom of the page. A website should answer common voter questions, including:

- How do I register to vote?
- What's on the ballot?
- Where do I vote?
- How do I request a mailed ballot?
- Where can I track my ballot?
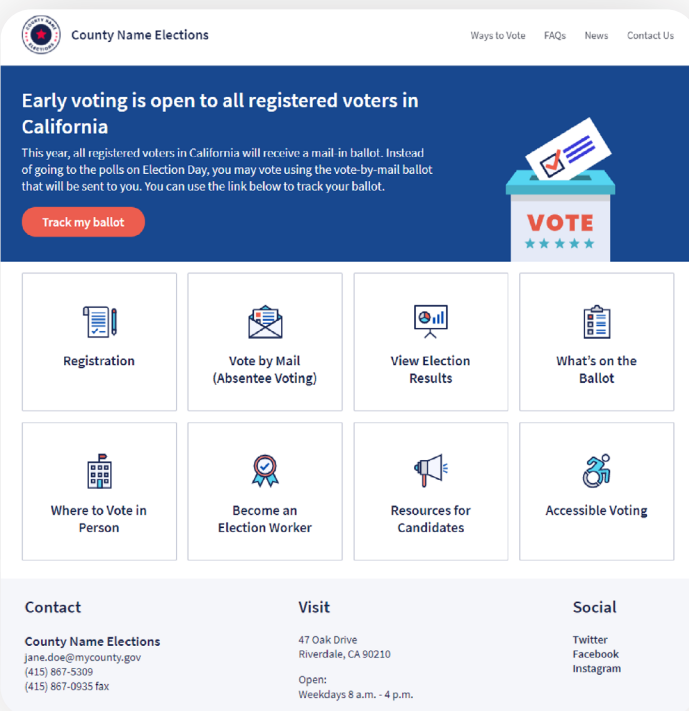
Additionally, election officials should ask the following questions to determine if their website contains voter-friendly design elements:

- Is the elections office's website URL easy to remember?

- Is the elections office's website easy to navigate?

- Is the elections office's website accessible and Section 508 Compliant?

- If the jurisdiction is subject to the language provisions of the Voting Rights Act, is the elections office's website Section 203 compliant?

- Does the elections office's website provide voters with the tools they need? For example, can voters:

  o Check their registration status
  o View a sample ballot
  o Check the status of their mailed, UOCAVA, or provisional ballots
  o Find their polling locations
  o Request a mailed or absentee ballot
  o Find contact information for their local elections office

- Does the elections office's website use plain language?

- Does the elections office's website show upcoming election dates?

- Does the elections office's website provide transparency? For example, does it help voters find:

  o Official election results
  o Audit reports
  o Meeting minutes
  o Candidate information
  o Campaign finance reports

When designing official elections office websites, election officials should ensure the design will enable all voters to participate independently in the elections process. All federal agencies must make their websites Section 508 compliant for users who have disabilities. Although mandates similar to the Federal 508 requirements vary among states,

[3] https://www.usdigitalresponse.org/our-projects/county-elections-website-template/

the U.S. Access Board — a federal agency committed to accessible design for people with disabilities — has extensive information about meeting the standards on its website.[4]

Finally, election officials must secure all communication channels to avoid unauthorized access to websites. Elections office websites use two-factor authentication and .gov domains to further secure government accounts. Utilizing a .gov domain assures voters that the site is an official government website. Registration is free and can be completed at **https://home.dotgov.gov/registration/**. Information needed for registration includes:

- Desired domain name
- DNS hosting information
- An authorization letter[5]
- Name server addresses

Election officials can also work with their IT support to develop a vulnerability disclosure policy. Vulnerability disclosure policies provide guidelines to researchers on conducting vulnerability discovery activities and how to notify the jurisdiction of any vulnerabilities found. The policy allows the jurisdiction to mitigate vulnerabilities before bad actors can exploit them. For example, the EAC's Vulnerability Disclosure Policy can be found at **https://www.eac.gov/vulnerability-disclosure-policy**. The EAC's policy applies to vulnerabilities that may be found on the EAC's website or any subdomain of EAC.gov. It provides clear limits on which systems researchers can test and the test methods authorized.

Social Media

Social media can serve as a powerful tool to drive voters to official sources of information, including tools and resources available on official state or local election websites.

Social media is also a source of misinformation—unintentionally bad information—or disinformation—intentionally meant to deceive voters. Providing proactive, accurate, and local information to voters via social media can help direct voters to official sources of information.

Social media also offers state and local election officials the opportunity to be more transparent than ever before. Some election officials have shared online election worker training videos and live-streamed voting equipment testing and auditing. These activities are excellent sources of voter information and can demonstrate election officials' steps to ensure integrity in elections. Election officials should plan social media content well in advance and focus on the public's needs.

When planning social media activity, election officials consider the following:

- Pick the right platform(s). Election officials should focus on the platforms the public is most familiar or comfortable with. There are always new and emerging technologies, but these may not be the best avenues to reach voters. If an elections office has an existing social media presence, they can use their built-in following to grow audiences on new platforms as they gain popularity.

- Verify the elections office's social media accounts. State and local election officials are the most trusted sources of election information, and their official social media accounts should be authenticated. When an account is verified, it confirms that voters can rely on the information as accurate. Also, social media accounts should include official seals and have contact information prominently displayed.

- Provide the information that the elections office's audience needs to know. Before deploying facts, election officials should evaluate if the information is relevant to voters. Posts should be concise and focused on a single topic.

- Provide timely information. Post information about voting dates and deadlines with enough time for voters to act on the information. It may take a few days for elections information to circulate to followers and local communities.

- Create a community of trusted voices. Social media offers election officials the opportunity to engage across jurisdictional boundaries. Cross-jurisdictional engagement can be a valuable tool to collaborate on voter education, poll worker recruitment, and other critical functions of the elections office.

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[4] **http://www.access-board.gov**
[5] Template authorization letters are provided at **https://home.dotgov.gov/registration/authorization-templates/**

Communicating Effectively During a Crisis

Unexpected events happen during elections. If there is an emergency or voting is interrupted, the media and public will likely press election officials for facts and information about what will happen next. The elections office should prepare answers for any possible situations and consider how best to communicate with every segment of the public, even those without access to typical means of communication.

Several months before Election Day, election officials should share the communication contingency plans with anyone who plays a role on Election Day, including individuals or agencies outside the elections office who can distribute critical information to the public. Some agencies and organizations that can partner with elections offices include law enforcement, local fire departments, school districts, tribal communities, utility companies, and emergency management agencies. The elections office's communication contingency plan should coordinate with the local government's continuity of operations plan.

When a crisis occurs, an election official will not have time to reread the laws and consider the wording of a press release or public statement. The elections office should consider the following recommendations to prepare elements of a contingency plan that anticipate disruptions:

- Educate staff about state laws that may affect elections, such as who has the authority to reschedule or cancel an election.

- Develop scripte messages for front-line staff.

- Develop separate messages for threats of violence, extreme weather, or other disasters.

- Develop draft press releases and e-mails to distribute in the event of a disruption. To disseminate the information quickly, have all contact information for media members, poll workers, and other stakeholders readily available.

- Contact utility companies to notify them of Election Day activities, including a complete list of voting locations. Request that they limit activities that could disrupt power.

- Provide law enforcement and emergency management officials with a complete list of all voting locations, including the number of registered voters at each site.

In addition to these communication channels, election officials should use social media to communicate alerts directly to voters. Social media is a great way of alerting voters to last-minute voting location changes or court-ordered changes in voting hours.

Evaluating Communication Efforts

After Election Day, it is vital to assess the success of the elections office's outreach activities. To make changes for the future, election officials need to know what worked and what did not. One way to assess the effectiveness of public communication efforts is to review website analytics. Some data points to look for may include:

- Which pages of the website received the most views?
- How much time did the average user spend on the site?
- Which external websites brought in the most traffic (Google, Facebook, local news organizations, etc.)?

Social media platforms provide helpful analytics that show which messages received the greatest number of views or the most public engagement. These data points give election officials information about which materials made the most impact in their communities.

Finally, election officials can review election stories from traditional and news media to improve their communications efforts in the future. When reviewing news stories, consider the following questions:

- Were voters' needs met in a timely and proactive way?

- Did communications adequately support the mission of the elections office?

- Were the media provided sufficient information to report on elections issues clearly and accurately?

- Were voters able to find the resources that they needed to vote successfully?

- Were there areas where elections office staff needed to provide better information?

Creating a communications plan is an essential undertaking for every elections office. While these efforts take time and resources, an effective communications plan will save voters and election officials time during critical points in the election cycle. This efficiency provides voters with better customer service and helps voters to participate in the electoral process.

Conclusion

Election officials have many tools to communicate with voters. Developing a communication strategy for each tool well before Election Day streamlines the communications process. Additionally, communicating information based on anticipated voter needs and questions can preempt voter calls and emails, freeing up election office staff time.

System Security

There is no "one size fits all" for voting system security. Appropriate policies and procedures for a large elections office with over a dozen staff members may be overly burdensome for a small, two-person elections office. However, there are four factors working together in concert that will enhance the overall security of any computer-based voting system:

1. Use of software should be limited to the very basic functions required to perform the voting system's processes. In addition, the software should provide audit logging to track the sequence of events that occur on the system and, to the extent possible, identify the person(s) who initiated the events. The software should also employ a sufficient level of encryption or validation protocols to prevent changes made without proper authorization.

2. Use well-defined policies and procedures to control access to the voting system, the circumstances under which users can access the system, and the functions users are allowed to perform. Develop a plan to ensure that all policies and procedures are strictly enforced.

3. Maintain strong physical custody of all equipment, software, and key or control materials at all times. This includes using physical security and access logs and using fences, walls, doors, locks, and seals to control and limit access to the system.

4. Use a two-person accountability and control system. Access, control, and custody should always involve two or more personnel.

The following sections provide guidelines for implementing these four factors within the election environment. A range of acceptable procedures is presented where possible.

Software Security

Initial Installation

The first step in securing voting system software is ensuring that the software installed on the system is the exact software version that has been certified by the state or the Election Assistance Commission's (EAC) federal certification program, as required by state law. This starts with obtaining the software from a trusted source, such as directly from the state elections office or a Voting System Test Laboratory (VSTL) that performed the tests for EAC certification.

Once installed, voting system software should be validated using a cryptographic hash provided by the same trusted source that supplied the software. Instructions for performing hash validation vary from system to system. The voting system manufacturer should provide instructions for hash validation as part of the documentation they deliver with the system. Election officials should reach out to their state certification authority or the EAC, if they are unsure about the process for completing hash validation.

Although it is important for the voting system software to be complete and correct, installing only the certified voting system software on the voting system components is equally important. Do not allow any software installation on the voting system components except for the certified voting system software itself. Specifically, do not allow office automation software such as Microsoft Word, PowerPoint, Excel, or networking software such as e-mail, network browsers, or other utilities unless it is certified, is specifically authorized by the manufacturer, and is provided with the trusted build or otherwise obtained from a trusted source.

Trusted Installers

As a final step in the testing and certification process, a VSTL produces a "final build" or "trusted build" of the system. The output of this final build is removable media that contains the system source code, the object code, and various documents that are delivered to the state, the EAC, or placed in escrow

for access in the event the manufacturer goes out of business. In addition, the VSTL also produces installers to load the system on the various voting system components.

A copy of the trusted installers is required to reinstall the system. If the state elections office does not have the software, it can request the voting system manufacturer authorize the test lab that performed the certification tests to send the disk to the state office or directly to the local elections office. State elections office staff should be able to assist local elections officials in reinstalling the software.

The installers load the election management system on the central election computer and other system components. If the firmware for the voting stations or ballot scanners needs to be reinstalled, election officials should ask the voting system manufacturer to provide guidance on what is necessary from the state elections office or the test lab to complete the installation as specialized equipment may be required.

Networking

> Never connect a voting system component to any network that is not under the elections office's direct control. Election officials should seal all unused connections on the system, precluding unapproved network, modem, USB, parallel, or other port connectivity.
>
> Wireless networking capabilities (Wi-Fi) should be disabled to the greatest extent possible such as removing drivers, disabling Wi-Fi networking, and ensuring only system administrators have access to enable any Wi-Fi functionality.

The possibility of fraudulently altering voting system software is based on the assumption that hackers have access to the system. Election officials can mitigate this type of attack by never connecting the voting system to a network that is not under the officials' complete control. Such networks include the internet and any local network, unless it is wholly contained within the elections office, controlled by a trusted organization, and segregated from all other networks.

Modem Transmission of Unofficial Results

> If modems are used to transmit polling place results to the central office, consider these results unofficial, and always verify them against the results on the media that is physically transported to the central office.

Jurisdictions may authorize the use of modems to transmit results on election night. Caution must be exercised if they are to be used. While compromising these communications or the devices connected to them is not trivial, sophisticated malicious actors such as nation-states have these capabilities and present a credible threat. These modems should not be connected or enabled until all other operations on the voting device have been completed, such as closing polls and printing results from each device. Delaying the connection can help ensure that election officials can compare the original results reports from each device with the transmitted results as part of an audit process. Election officials should always compute the official results from the media that poll workers physically transport from the polling place to the central office.

Audit Data

A voting system has several different audit logs. These logs record each event that occurs on the system from the time used to initially begin an election until the final vote tally and the devices are shut down. Audit logs on precinct-based voting equipment begin when the election media is inserted into the device until the election is closed and the equipment is shut down.

Election officials should review the audit log documentation or obtain a complete description of audit log codes or descriptions from the voting system manufacturer for the audit logs available on the voting system. Election officials should become familiar with the content of these logs and learn how to print them out. Familiarization will help officials recognize events that look anomalous or that they do not belong.

Election officials should print and examine these audit logs as part of pre- and post-election activities.

Policies and Procedures

Elections offices should have policies outlining who can access the voting system and only permit the minimum access needed to fulfill their job duties. Each staff member with access to the system should have unique login credentials. Additionally, the policy should address vendor access to the system. For more information on physical security and access to the voting system, see Chapter 7 - Physical Security.

Election officials should develop equally specific procedures for each person who has access to the voting system, including elections office staff and vendor personnel. Policies and procedures for accessing voting systems should include the following:

• Require positive identification of each person that requests access to the voting system.

• Keep a log of everyone that accesses the voting system. The log should include the person's name, the date and time the access begins, the purpose of the access, and the time the access ends.

• Someone other than the person accessing the system should write the access log entries. The entries in this log must be complete and detailed. For example, "System Maintenance" is not an acceptable entry. The entry should state the exact maintenance performed and why it was performed.

• Contactless card reader systems that require users to enter and exit a secured area are a good solution but will only log the time and date that someone with the card (not necessarily the authorized individual) entered and exited an area. Where these systems are used, it is a good practice also to utilize cameras that can help identify the person.

It is not uncommon to find an elections office in which the voting system has been installed for a considerable length of time. If an election official is unsure if anyone has had access to the system unsupervised by election officials, they should consider the following recommendations:

• If election officials suspect someone has modified the voting system software, archive all existing data, wipe the drive, and reinstall the voting system software with a copy obtained directly from a trusted source.

• If election officials maintain strong physical custody of the system but seek assurance that the correct software is loaded, performing a hash validation of the installed software allows officials to maintain the existing data without wiping and reinstalling the system software.

Elections Office Staff

Elections office staff should only be allowed the level of access to the voting system necessary to perform specific tasks related to their job description. Staff members should not be issued a credential that will allow them to perform functions on the voting system that they are not authorized to perform. It is highly recommended that whenever possible, elections staff work in pairs. This procedure will greatly reduce the potential for accidental errors and virtually eliminate any opportunity for deliberate mischief or fraud.

Vendor Personnel

There is no such thing as "routine system maintenance." A vendor can void a voting system's certification by making a change to the system that the state or the EAC has not approved.

Election officials should never allow vendor personnel access to the voting system unless it is certain the state and the EAC, as necessary, have approved the change, upgrade, or maintenance they intend to perform. All approved modifications or upgrades to an EAC-certified voting system are documented with a certificate or other supporting documentation, such as an Engineering Change

Order (ECO). If the vendor cannot produce a copy of this certificate or documentation, do not allow them to access the voting system. Election officials should call the state elections office or the EAC for clarification when in doubt.

Election officials should never allow vendor personnel to access the voting system unless a member of the election staff is present. Election officials should emphasize to the vendor that this requirement is as much for their protection as it is for the elections office.

Everyone else

There is absolutely no reason, or circumstance, to ever allow anyone other than elections office staff or vendor personnel access to the election management system (EMS). A consultant working under contract to the elections office is considered elections office staff; however, consultants should be monitored as closely as vendor personnel. Elections office policy should outline that access to sensitive data and the voting system are limited to only those who need access to perform their duties.

User Access

Effective use of user permissions and roles is essential to the overall security of a voting system. The first step in managing user access is to know what capabilities are available on the voting system for assigning users to roles. The EAC Voluntary Voting System Guidelines Section 7.2.1 General Access Control Policies states, "…the vendor shall provide a description of recommended policies for effective password management." Obtain this description from the vendor and provide a copy to every employee authorized to access the voting system.

The following sections provide guidelines for effective user management.

User Administrator – Election officials should designate someone in the elections office as the user administrator, either the Chief Election Officer or a senior member of the staff. The user administrator's duties are as follows:

- Define and assign users to groups or roles
- Issue passwords

- Maintain a master list of all user credentials issued
- Reissue passwords periodically
- Monitor access

Defining and Assigning Roles – Election officials should assign users to roles utilizing the concept of least privilege. In other words, users should only be given the access they need to complete the tasks that are necessary for their work. Where possible, limit access to applications or functionality that isn't required for a particular user to complete their work. Users may be organized by group or role depending on the system design. Each of these is similar and typically consists of a very small group of administrators with other groups specific to each role they fulfill, such as a tally operator, adjudication user, or someone creating election definitions. If the system does not allow for granular role definition, election officials may give users limited access to applications within the system.

Issuing Passwords – Passwords issued to employees should only be used to grant initial access, with the employee changing the password during their initial login. The user administrator should control passwords issued to temporary personnel or contractors. Passwords should use passphrases of random words that are at least 20 characters in length.[1] If this is not possible, passwords should have the following alternative characteristics:

- Passwords should be at least six characters long, preferably eight.
- At least one character should be an uppercase letter.
- At least one character should be a lowercase letter.
- At least one character should be numeral.
- At least one character should be a special symbol. Remember that passwords are case sensitive. For example, ABC*123# and Abc*123# are different passwords.

Passwords should be easy to remember (so there will be no need to write them down) yet sufficiently vague that they cannot be easily guessed. It is best to avoid using personal information (name, date of birth, anniversaries, pet's names, etc.) and using single words (certain technology enables individuals trying to predict passwords the capability of trying every word in the dictionary). It is best to use a randomly generated mix of different words containing 4 or 5 words and at least 20 characters.

Election officials should never issue a system password to anyone other than an elections office employee, not even vendor representatives. If someone other than an election official needs to access the system, either have an election official login for them or create a one-time use password and then delete it as soon as the session is over. (Remember, someone from the elections office staff should monitor all vendor and consultant access to the system and log this activity, including date, time, names, and reason for access.)

Maintaining a Master List of User Credentials Issued – It is okay to allow individual employees to make up their own passwords; however, the user administrator must manage all user credentials (usernames, user tokens/keys). The voting system should verify that the passwords comply with the requirements above. Election officials should keep a printed copy of a user list in a safe and secure place and only use it in the event of an office emergency. Only the Chief Election Official and the user administrator should use the list even in an emergency.

"Safe" and "secure" do not mean the same thing. A fireproof filing cabinet may be safe, but it is not secure unless it is locked and only the Chief Election Official and the password administrator have access to the key. Similarly, an encrypted file as a backup on a disk drive may be secure, but it is not safe. Disk drives can fail.

Reissuing Passwords on a Periodic Basis – Election officials must change all voting system passwords periodically. A recommended period is one election cycle or at least once a year. Election officials should also consider using multi-factor authentication if their system supports it.

Monitoring Access – Election employees' system access should be monitored and periodically audited. Devise monitoring activities that are appropriate for the elections office, but election officials should consider the following:

- Watch for passwords on post-it notes posted on the side of monitors or in desk drawers. To avoid this, choose passwords that are easy to remember. Remind staff that if they forget their password, they can have it reset by the user administrator.

- Review audit logs to verify that employees work only within their assigned responsibilities.

¹ https://www.eff.org/dice

Conclusion

Ensuring the security of the voting system is a critical responsibility for election officials. Local officials can implement practical policies like two-person accountability and physical security and access logging to promote the system's security. Additionally, limiting user access to the least privilege necessary and periodically reviewing audit logs can further mitigate risks to the voting system. Trusted partners, like state elections offices, can assist with more complex procedures like verifying software versions and, if necessary, installing trusted builds.

Physical Security

The physical security of elections consists of standards, procedures, and actions taken to protect voting systems and related facilities and equipment from natural and environmental hazards, tampering, vandalism, and theft. Physical security safeguards are required for voting systems while in storage, in transit, in the polling place, and in use on Election Day through the post-election canvass and certification process. Beyond the voting system, election officials must also secure numerous physical locations, the elections office, personnel, and office equipment.

Documentation of the election process, from ballot proofing to post-election audits, is the foundation for security in elections. Elections office staff document actions taken throughout the election cycle, and poll workers do the same on Election Day to form an audit trail for the election and establish proof that all components of the election are secure at all times. The audit trail may even serve as evidence of the election's integrity in the event of a recount or contested election.

This chapter identifies important factors for conducting a security review and details guidelines for personnel security, elections office security, and physical security during the election cycle. Election officials should review these guidelines and consider incorporating them into their processes.

Conducting a Security Review

One of the most important proactive steps election officials can take is to conduct an election security review. Walking through procedures, performing physical inspections, and considering all aspects of security can identify possible threats and vulnerabilities. An election security review identifies key areas where election officials should take steps to ensure the security and integrity of election administration.

The following activities should be part of an election security review:

- Perform an election administration risk assessment.

  ○ Identify potential steps in the election administration process where election security and integrity are vulnerable to destruction, disruption, tampering, or corruption from internal or external sources. Examples include fire, power failure, after-hours theft, malfunctioning sprinkler system, bomb scares or terrorist acts, disruptions by voters or poll watchers, and other similar scenarios.

  ○ List the potential security exposure and the impact on the election from each threat.

  ○ Consider whether the likelihood of each threat is high, medium, or low, and develop plans to mitigate or eliminate each threat starting with those considered high.

- Review overall policies to ensure proper separation of job duties throughout the election administration process.

- Review the audit trail from the last election in its entirety. Analyze whether sufficient documentation exists to validate the integrity of the election. Create or update the master election audit trail checklist with all documents necessary to complete the trail and ensure all steps require two-person (preferably bipartisan) sign-off.

- Inventory the list of procedures used throughout the election administration process. Evaluate each procedure to determine whether it needs to be updated based on the security review.

- Perform a physical security review to evaluate access controls of all office and storage facilities. Consider the relative security of other agencies sharing the facilities.

- Review work areas to ensure office space is appropriately isolated and undetected unauthorized access is impossible.

- Review the list of personnel who have keys to elections office work areas and voting equipment storage to ensure all keys are accounted for and only authorized personnel has keys.

- Review chain-of-custody procedures, the use of tamper-evident seals, and inventory control/asset management processes to ensure voting machines and associated equipment are securely and adequately controlled and accounted for throughout the election administration process.

During any review, follow the general principle that no person should review their own work—objectivity and independence enhance the review's integrity. A minimum of two people (preferably bipartisan) should conduct the reviews.

Federal Resources

The EAC provides several resources for election officials to assist with improving security and addressing incidents. Importantly, the EAC administers and provides guidance on the use of HAVA Section 101 funds for election security. Prior to 2022, HAVA funds distributed to state and local election officials to primarily improve election cybersecurity defenses and the physical security of election equipment and facilities. In response to concerns for the physical safety of election officials, the EAC provided further **guidance** outlining the permissible use of funds for physical security services and social media threat monitoring.[1] Information and guidance on election security funds can be found at **https://www.eac.gov/payments-and-grants/election-security-funds**.

In addition to grants, the EAC also creates and maintains resources for state and local election officials to assist with improving physical security. The **Election Official Security** resource focuses on the physical security of election officials and outlines how to report threats to the FBI's Election Crimes Taskforce, what to do if officials receive threats, and guidance on removing personal information from internet searches.[2] Information on the security of election processes and technology is available on the **Election Security** section of the EAC's Clearinghouse Resources for Election Officials.[3]

Since the designation of election systems as critical infrastructure in early 2017, the Department of Homeland Security (DHS) and Cybersecurity & Infrastructure Security Agency (CISA) have partnered with the EAC and state and local election officials to offer additional services to assess and mitigate both physical and cybersecurity risks. These services can be especially helpful to smaller offices without dedicated IT support

and sometimes without more than one or two full-time employees. CISA provides Protective Security Advisors who can assist elections offices in evaluating their facilities and developing security and response plans.[4] More information on CISA's services can be found in the **Election Infrastructure Security Resource Guide**.[5]

Personnel Security

Another important factor in determining the vulnerability of a system is the people involved; they must implement security policies and procedures and defend against any attacks.

• Perform background checks on all employees. Adopt policies and provide training to mitigate risk of insider threats—CISA's Election Infrastructure Insider Threat Mitigation Guide provides helpful information on insider threat mitigation.[6]

• Determine who can operate and administer (e.g., create databases, define ballots, test and maintain equipment) the voting system and only give users the minimum access level needed to complete their job.

• Custodians of voting machines must be fully competent, thoroughly trained, and sworn to perform their duties honestly and faithfully.

• Develop a detailed "Rules of Security Behavior" and provide training for all levels of personnel responsible for using the voting system (election director, poll workers, rovers, field technicians, etc.).

• Establish policies and procedures for visitors and observers. Use a sign-in/sign-out log, provide visitors with a numbered visitor badge to wear, provide different colored vests for visitors and observers for easy identification, and require a staff member to accompany them at all times.

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[1] https://www.eac.gov/sites/default/files/paymentgrants/Allowable_Use_of_Funds_Physical_Security_Services_and_Social_Media_Threat_Monitoring_EAC.pdf
[2] https://www.eac.gov/election-officials/election-official-security
[3] https://www.eac.gov/election-officials/election-official-security
[4] https://www.cisa.gov/sites/default/files/publications/physical-security-of-voting-location-election-facilities_v2_508.pdf
[5] https://www.cisa.gov/sites/default/files/publications/cisa_election-security-resources-guide-Sept-2020_1.pdf
[6] https://www.cisa.gov/sites/default/files/publications/election_insider_threat_mitigation_guide_508_0.pdf

Election officials entrust critical steps of the election process to hundreds, if not thousands, of poll workers. When staffing polling places, consider the following:

- Ensure there are enough workers at each polling place to enforce security procedures.

- Incorporate two-person integrity security measures into polling place procedures and cover security measures in poll worker training.

- Provide administrative access to voting equipment only to staff specifically trained to address voting equipment issues.

In addition to ensuring personnel are trustworthy and follow security procedures, election officials must also consider the physical safety of their staff and poll workers. Staff frequently work into the night and on weekends when otherwise fully occupied government buildings are vacant. The EAC's **Personal Security for Election Officials** checklist outlines many steps election officials can take to coordinate with law enforcement, protect themselves online, document threats, and ensure their mental health.[7] Consider the following in developing plans to ensure the physical security of elections office staff:

- Ensure the exterior of the elections office, walkways, and the parking lot are well lit and monitored, if possible.

- Ensure workers leave the office together when working late.

- Partner with local law enforcement and:

  o Notify them of dates when staff may be working late during the election cycle and ask them to patrol the area more frequently.

  o Ask for training for staff on personal security, including de-escalation techniques and steps to take if de-escalation does not work.

  o Provide them with plans for election equipment delivery (including routes) and all drop box and polling place information.

Election officials are encouraged to report threats or violent acts to the FBI at 1-800-CALL-FBI (225-5324) (prompt 1, and then prompt 3) or go to **tips.fbi.gov**. The **Election Official Security** resource details how to document and report threats or incidents.[8]

Security of the Elections Office

Elections are more than voting equipment. The elections office as a whole requires careful attention to security to maintain the integrity of the entire voting process. In general, election officials must develop and follow procedures to ensure the security of all components of the election process—from voter registration through final certification. In developing security procedures, consider:

- Who needs access to each area of the office?

- Who may visit, and how will they be tracked? Remember to consider vendor representatives, maintenance and janitorial staff, members of the public, etc.

- Do you have staff that work from home? What steps are taken to ensure the security of their laptops, mobile devices, etc.?

- Do you utilize drop boxes outside of your office?

- Do you store records outside your office (e.g., records on retention)? If so, how are those spaces secured?

When it comes to voting equipment:

- What procedures are in place to assure the physical security of voting machines and paper ballots before an election?

- How and where are equipment, ballots, and ballot stock stored? How is the facility secured against theft, tampering, and vandalism?

- What protections are in place to assure access is permitted only for authorized personnel?

- Who installs equipment upgrades, a county official or a vendor?

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7   https://www.eac.gov/sites/default/files/Personal_Security_for_Election_Officials.pdf
8   https://www.eac.gov/election-officials/election-official-security#document-everything

- Do vendors ever handle voting equipment?

- If vendors can handle voting equipment pre-election, are local officials required to be present?

While specific areas of concern are addressed below, the security plan should take the following into account for the overall security of the elections office:

- Control access based on each employee's role. Only allow employees to access spaces and systems necessary to complete their work. Election officials can physically restrict access with unique locks and keys or an electronic keypad tied to a security system.

  - Establish sign-in/sign-out procedures for secured areas if access is not automatically logged.

- Utilize video monitoring for critical spaces and motion and glass break detection for after-hours security.

  - Routinely test the security system to ensure it is functioning.

- Maintain an inventory of general office equipment (voting system inventory is discussed below) and supplies, including office computers not tied to the voting system.

  - Blank ballot stock must be tracked before, during, and after each election.

- Establish procedures for onboarding and offboarding personnel. When offboarding an employee, cut off access to facilities and IT systems, including changing physical locks, if necessary.

Voting Equipment Storage and Inventory Control

The election administration security risks associated with voting systems equipment go beyond the obvious concerns of theft and destruction. Everything from building security, access control, and configuration management of the voting system equipment is an important component in overall election security.

- Maintain a key control list of all personnel with keys and access to the facilities. Maintain an access log including sign-in and sign-out dates and times for all personnel and visitors specific to the storage facility/area.

- Implement two-person (preferably bipartisan) integrity security measures when setting up the voting system equipment for an election. Never allow a voting system vendor or employee to have uncontrolled access to election equipment storage and maintenance facilities and ensure staff always accompany vendors.

- Take into consideration long-term storage and security needs when designing storage and workspace.

- Implement an effective asset management and inventory control system for all voting system components. Consider testing procedures, and verify all equipment returned from the vendor after maintenance to ensure proper hardware, software, and firmware versions. The EAC's **Voting System Security Measures** covers common security measures election officials employ to secure storage facilities and the voting system throughout the election cycle.[9]

Maintain physical security of all voting system equipment and peripheral devices at all times. The security measures should include the following:

- Maintain complete and accurate inventory of all voting system equipment, including voting machines, optical scanners, communication equipment, supervisor or administrator devices, ballot activation devices, and storage media.

- Assign personnel the responsibility of maintaining accurate inventory. Inventory should track:

  - Equipment – maintain a list of equipment, serial numbers, and quantity in the storage facility

  - Machine Checkout – inventory control should track equipment when it is (1) being released and returned for an election, (2) released and returned for a demonstration, and (3) accepted from or returned to the vendor for maintenance or repair

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[9] https://www.eac.gov/sites/default/files/electionofficials/security/Voting_System_Security_Measures_508_EAC.pdf

- o Usage History – maintain a history of elections for which each piece of equipment has been used

- o Repair History – maintain a history of repairs to individual devices

- Provide physical access control to the storage facility only to authorized personnel. The following is a list of recommendations:

  - o Make sure all personnel have signed security agreements on file.

  - o Track all staff members, vendors, and visitors' entry and exit. Staff members should always wear identification badges.

  - o Authenticate all visitors, vendors, and maintenance personnel using appointments and identification checks to access the voting system equipment.

  - o Before a vendor is permitted to conduct maintenance on any voting equipment, verify who is scheduled to perform the work and check identification when the vendor representatives appear.

- If the elections office uses surveillance cameras, schedule regular checks to verify they are fully operational, and keep in mind that it may take time for tampering to be discovered, ensure the system saves the video for an appropriate amount of time.

- Change keys or combinations on locks as necessary for each election.

Explore using a barcoding system to track the location of voting system equipment. All electronic storage media should be permanently identified with a unique serial number. Record the serial numbers as part of the internal inventory audit trail.

Security During the Election Cycle

Paper Ballots

Protecting the security of paper ballots is also a component of providing physical security. Election administrators should have a documented plan in place to provide for the management of optical scan or paper ballots, ballot-on-demand ballots, and all ballot stock. This plan should include details about the audit trail and chain of custody for the ballots with strict control over the ballots and ballot stock at all times.

- The security of paper ballots includes security in the elections office facility and at the polling place on Election Day. At least two election officials (preferably bipartisan) should oversee all processes, including transferring ballots and other election materials from the central office to the polling place and vice versa.

- Two or more staff members (preferably bipartisan) should receive the ballot order and verify the accuracy and quantity of ballots against the ballot order request. Once validated, store the ballots in a secure area with restricted access.

- Ballot-on-demand is often used to supplement printed ballot stock. If used, election officials should implement internal controls to safeguard ballot stock from fraudulent or inappropriate use. For example:

  - o Two or more election officials (preferably bipartisan) should monitor, record, and balance daily ballot-on-demand activity.

  - o Election officials should reconcile the number of blank ballot stock received from the vendor to the number of printed, spoiled, and unused stock.

Transporting Equipment

Elections offices use multiple methods to get voting equipment and supplies to each polling place before the opening of the polls. Volunteers, county/municipal maintenance departments, or private delivery companies may deliver voting equipment with poll workers picking up supplies in the days before the election. No matter how delivery is accomplished, security of the equipment and supplies during delivery and while at the polling place is essential.

Consider the following questions when forming a plan for equipment and supply delivery:

- Who will transport voting equipment and ballots? County officials or poll workers? Will a delivery vendor assist?

- How and when are voting equipment and ballots transported to the polling places? How and when will it be returned to the elections office?

- If poll workers transport voting equipment and ballots, when do they receive the equipment and ballots? If poll workers receive the voting equipment and ballots before Election Day, how and where are the materials stored until polls open?

- Are detailed logs kept of who takes custody of equipment and ballots with their contact information?

- How are voting equipment and ballots secured from tampering from the time they leave elections office custody to the time they are delivered to the polling places?

- Are serial numbers or other secure, tamper-evident devices or seals placed on all ports where memory cards are inserted?

Below are a few guidelines for developing a physical security plan for voting equipment delivery:

- If voting equipment must be delivered before Election Day, meet with a representative from each polling place and develop a plan to secure the equipment at the location in an area with restricted access.

- Develop an operational plan defining what will be delivered, where, by whom, and when. Even if using third parties to assist with delivery, elections office staff should oversee the entire process.

- Create a checklist for delivery at each polling place to track the delivery of each device. Include the device serial number and the serial number of all tamper-evident seals used to secure the equipment. Provide a duplicate checklist to the lead poll worker at the location to verify delivery of the correct equipment and the condition of the seals. Some elections offices use Radio Frequency Identification (RFID) or Bluetooth tracking technology to monitor equipment delivery.

- It is recommended that the auxiliary voting equipment and supplies (ballot activation devices, administrator devices, communication equipment, seals for poll closing, etc.) remain in possession of election officials until election morning. If the voting equipment is delivered to the polling place before Election Day, it must be secured (e.g., cabled together and locked or secured in a locked room). Any other equipment or supplies should also be secured. Designated poll manager(s) should verify receipt and sign-off on the delivery of voting equipment and necessary election supplies.

- Election officials should move voting systems in a controlled transportation mode. In other words, the equipment should be locked and sealed in the vehicle or container before transport and unsealed at the delivery point. Sealing and unsealing should be logged and completed only by election officials.

Equipment Security During Early Voting and on Election Day

One challenge with securing voting equipment during early voting and on Election Day is that elections offices must rely on temporary staff and poll workers to carry out security procedures. Below are some guidelines for developing plans for equipment security during voting. Officials should also consider how they will train their workers to follow the plan and provide guidance on what to do in the event of a breach.

Consider the following questions:

- Are all paper ballots and electronic storage media in the possession of at least two election officials or poll workers (preferably bipartisan and using the two-person accountability principle) during its transport to the central or remote count locations?

- What physical security measures are in place for the room containing the computer running the tabulation software?

- Are printed result tapes and a backup copy of the tabulations in locked storage in a secure location?

- Is there a complete chain of custody with two-person integrity security measures for all election materials?

Below are a few general guidelines for securing voting equipment during voting periods:

- During early voting:

  - The electronic storage media and paper ballots should be secured each night in a tamper-proof location, preferably within the elections office.

  - Voting equipment should be closed, sealed, and secured at the end of each day. Record the number on all protective seals and public counters. In addition, verify seals and counters before the voting equipment is used the following day.

  - Every evening, any mobile unit containing voting equipment should be returned to the elections office and stored within a secure facility.

- If voting equipment and election supplies are delivered to the polling place by anyone other than poll managers, the poll manager(s) should verify the serial numbers of all voting equipment and necessary election supplies (ballot activation devices, administrator devices, communication equipment, closing seals, etc.).

- Voting equipment setup should be as follows:

  - Access to the voting equipment's power control, counter controls, and electronic storage media must be controlled within the voting machine and inaccessible to the voter.

  - Voting equipment should be in plain view of the poll managers at all times.

- On Election Day, a team of two poll workers (preferably bipartisan) should:

  - Verify the serial number and seal number on each voting machine and look for signs of tampering.

  - Activate the machine and verify the date, time, and public count.

  - On machines with a voter-verified paper audit trail, verify that it functions.

  - Sign-off on paperwork indicating all procedures were followed.

DROP BOX SECURITY

Election officials must include ballot drop boxes in their security plans. The Quick Start Guide: Ballot Drop Boxes highlights several tips for ensuring the security of the drop box and collection procedures.

https://www.eac.gov/sites/default/files/electionofficials/QuickStartGuides/Ballot_Drop_Boxes_EAC_Quick_Start_Guide_508.pdf

Additionally, the EAC chaired the Elections Infrastructure Government Coordinating Council and Sector Coordinating Council's Join COVID Working Group and developed guidance on drop box security that addresses placement, security, and collection practices.

https://www.eac.gov/sites/default/files/electionofficials/vbm/Ballot_Drop_Box.pdf

Throughout the voting day, train workers to implement the following procedures to promote the security of the voting process:

- The area around the voting equipment must be secure at all times. Only poll workers, legally authorized personnel, and registered voters should be allowed in the voting machine or voting booth area. A voter should not be allowed to enter this area until a voting machine or booth is available for their use.

- Each poll worker should have a clearly defined role, so voters can identify them and their particular responsibilities as they move through the polling place.

- Poll workers should direct provisional voters to a separate check-in table or area to ensure provisional ballots are handled uniformly and establish ballot accountability for auditing purposes.

- Poll workers should periodically inspect the voting machines for any damage or tampering and ensure the machine is powered by electricity.

- Poll managers should periodically balance the number of voters checked in to the number of votes recorded (public counter) on the voting machines or precinct scanners.

After all voters have cast their ballots at the close of polls, poll workers must secure all voting equipment and ballots. If poll workers tally the votes at the polling place, the closing process must include the tallying procedure.

- Poll managers should validate that the equipment and supplies issued to the polling place are collected and secured for return to the elections office.

- The voting equipment should be secured using the numbered closing seal. Poll managers should return the signed validation to the elections office with the number of the closing seal, voting equipment identifier, the number on the public and protective counter, and the voting precinct recorded.

Securing the Voting Equipment After Polls Close

- Print out end-of-day vote totals from each voting machine or optical scanner and deliver the printed tapes to the elections office in a secure manner.

- Electronic storage media from all voting machines or optical scanners within the polling place should be accounted for and reconciled.

- Electronic storage media and printed tape(s) should be secured in a numbered, sealed pouch and transported from the polling place to the elections office or designated collection point.

- Secure paper ballots (including provisional ballots) and VVPATs with tamper-evident seals.

- Establish procedures to securely transport election results from optical scanners to vote tabulation computers if the optical scanners are in a different location from where the vote tabulation takes place.

Securing the Voting Equipment During Tabulation at the Elections Office

- If paper ballots are centrally counted, verify the numbered seals before removing the ballots from their containers, immediately restore them to the container after scanning, and secure them with another tamper-evident seal.

- The tabulation location must be secure. Do not allow unauthorized or unescorted personnel to be in contact with the tabulation equipment. Only authorized election officials should be allowed in the tabulation room.

- Consider the use of video monitoring to secure the vote tabulation area.

- Consider uniformed security or police officers to secure the ballot room and voting equipment.

- Verify the seal numbers on the pouch containing storage media and the serial numbers of storage media match those recorded in the audit trail documents before inserting them into the tabulation computer. After uploading the data into the tabulation computer, reseal storage media and store in a secured location.

Securing the Voting Equipment Post-Election

- Only designated personnel should transport voting equipment to the storage facility. Custodians of the equipment should verify receipt of all devices, confirm that the equipment has not been tampered with during transport, and sign-off on the receipt of the voting equipment.

- Only designated personnel should transport election supplies (administrator devices, ballot activation devices, communication equipment, etc.) to the elections office. Local election officials should verify receipt and sign-off on the delivery of the election supplies.

- Conduct a debriefing to identify lessons learned about issues and problems encountered during the election cycle. This activity should become a regular part of closing out every election and include reviewing the audit trail to identify any deficiencies.

- Local election officials should maintain an inventory of election materials and securely store them until the period of a potential election contest has ended. Following the contest period, items should be stored and destroyed per the jurisdiction's retention policy.[10]

  - Election materials include, but are not limited to, the following:

    - ◊ Voting equipment (including memory cards where applicable)

    - ◊ Ballots (used and unused)

    - ◊ Administrator and ballot activation devices

    - ◊ Seal envelopes

    - ◊ Voter registration (poll) lists

    - ◊ Election result tapes and printouts

    - ◊ Field supervisor and rover reports

    - ◊ Poll worker daily logs

    - ◊ Reconciliation reports

    - ◊ Audit data

    - ◊ Voting Equipment Delivery Sheets

Conclusion

Conducting a security review enables election officials to assess current policies and practices and identify any deficiencies. But election officials cannot rest on having thorough procedures. Election officials must adequately train staff to comply with and document security procedures. Documenting steps taken to ensure the physical security of voting equipment, ballots, and the elections office provides evidence of the integrity of the election process.

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[10] Federal law requires election officials to retain records relating to any "act requisite to voting" in a federal election for 22 months.

Voting System Certification

The Federal Election Commission (FEC) adopted the first formal set of voluntary federal standards for computer-based voting systems in January 1990, but there was no national program or organization to test and certify such systems to these standards. However, in 1994, the National Association of State Election Directors (NASED) stepped up to fill this void. NASED is an independent, nongovernmental organization of state election officials. This organization formed the country's first national program to test and qualify voting systems to the new federal standards. On a strictly voluntary basis, the organization worked for more than a decade to help ensure the reliability, consistency, and accuracy of voting systems fielded in the United States. In late 2002, Congress passed the Help America Vote Act of 2002 (HAVA), which created the U.S. Election Assistance Commission (EAC) and assigned it the responsibility for setting voting system standards and providing for the testing and certification of voting systems. This mandate represented the first time the federal government provided for the voluntary testing, certification, and decertification of voting systems nationwide. In response to this HAVA requirement, the EAC developed the Voting System Testing and Certification Program (the Program).

HAVA requires that the EAC certify and decertify voting systems. Section 231(a)(1) of HAVA specifically requires the EAC to "… provide for the testing, certification, decertification, and recertification of voting system hardware and software by accredited laboratories."[1] The EAC has the sole authority to grant certification or withdraw certification at the Federal level, including the authority to grant, maintain, extend, suspend, and withdraw the right to retain or use any certificates, marks, or other indicators of certification. Since elections are decentralized throughout the country, the Program administers the only uniform federal requirements for voting systems. Therefore, voluntarily participating in the Program is a foundational tool for ensuring that federally certified voting systems are accessible, secure, and reliable across the United States.

Pursuant to the authority granted under HAVA, the EAC has developed and promulgated the EAC Voting System Testing and Certification Program Manual, which provides the procedural requirements of the Program.

Although participation in the program is voluntary, adherence to the program's procedural requirements is mandatory for all participants.

The primary purpose of the EAC Testing and Certification Program Manual is to provide clear procedures to voting system manufacturers for the testing and certification of voting systems to specified federal standards consistent with the requirements of HAVA Section 231(a)(1). The program, however, also serves to do the following:

- Support state certification programs

- Support local election officials with acceptance testing, pre-election system verification, or logic an accuracy testing

- Increase quality control in voting system manufacturing

- Increase voter confidence in the use of voting systems

Voluntary Voting System Guidelines

Voluntary Voting System Guidelines (VVSG) are a set of requirements that voting systems, including voting devices and software, must meet to receive a certification from the EAC.

The VVSG covers pre-voting, voting, and post-voting operations consistent with the definition of a voting system in HAVA Section 301, which defines a voting system as "the total combination of mechanical, electromechanical, or electronic equipment (including the software, firmware, and documentation required to program, control, and support the equipment), that is used to define ballots; to cast and count votes; to report or display election results; and to maintain and produce any audit trail information."[2]

The VVSG includes guidance regarding design, quality, security, transparency, interoperability (VVSG 2.0), accessibility, privacy, usability, auditability, secrecy, access control, physical security, data protection, system integration, detection, and monitoring of voting systems.

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[1] 52 U.S.C. 20971(a)(1).
[2] 52 U.S.C. 21081(b).

Since 2005, the EAC has adopted three versions of VVSG, with the latest iteration VVSG 2.0 adopted by the EAC Commissioners on February 10, 2021. All versions, drafts, and supporting documentation of the VVSG are on the **EAC website**.[3]

The Program has developed a VVSG lifecycle policy that facilitates migration to new VVSG standards by providing guidance on the types of version changes, Voting System Test Laboratory (VSTL) accreditation, deprecation of obsolete major standards, and establishing a periodic review timeline for new standards going forward. The policy defines changes that may be made to systems certified to deprecated standards and describes the process for updating the standards as defined in the Help America Vote Act.

EAC Testing and Certification Program Manual

The **Testing and Certification Program Manual** is a comprehensive set of policies and procedures for the Program. It is intended to establish all the program's administrative requirements.[4]

The contents of the manual serve as an overview of the program itself and contain the following chapters:

- **Manufacturer Registration** - Before a voting system manufacturer can apply to have a voting system certified by the EAC, the manufacturer must be registered. This chapter contains information about the manufacturer registration process, which is essential to participate in the Program.

- **When Voting Systems Must Be Submitted for Testing and Certification** - An EAC certification signifies that a voting system has been successfully tested to the identified voting system standards adopted by the EAC. Only the EAC can issue a federal certification. Systems must be submitted for testing and certification under the Program to receive this certification. Manufacturers usually submit systems when they are new to the marketplace, have not previously been EAC certified, are modified, or the manufacturer wishes to test a

previously certified system to a different (newer) standard. This chapter also discusses the submission of de minimis changes, which may not require additional testing and certification, and provisional, pre-election emergency modifications, which provide for pre-election emergency waivers.

- **Certification Testing and Technical Review** - This chapter discusses the procedural requirements for submitting a voting system to the EAC for testing and review. The testing and review process requires an application, selection of an EAC-accredited testing laboratory, and technical analysis of the laboratory test report by the EAC.

- **Grant of Certification** - The grant of certification is the formal process through which the EAC acknowledges that a voting system has successfully completed conformance testing to an appropriate set of standards or guidelines. This chapter explains the steps required for a manufacturer to receive a grant of certification.

- **Denial of Certification** - If a manufacturer is denied certification, the manufacturer has certain rights and responsibilities. This chapter explains the process a manufacturer can follow to request an opportunity to cure any defects identified or initiate an appeal of the denial.

- **Decertification** - Decertification is the process by which the EAC revokes a certification previously granted to a voting system. It is an important part of the Program because it ensures that the program requirements are followed and that certified voting systems fielded for use in federal elections maintain the same level of quality as those presented for testing. Decertification is a serious matter and significantly affects manufacturers, state and local governments, the public, and the administration of elections. As such, the process for decertification is complex. This chapter details the process when the EAC receives information that a voting system may not be compliant with applicable voting system standards or procedural requirements.

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[3] **https://www.eac.gov/voting-equipment/voluntary-voting-system-guidelines**
[4] **https://www.eac.gov/sites/default/files/eac_assets/1/28/Cert%20Manual%207%208%2015%20FINAL.pdf**

- **Quality Monitoring Program** - The quality of any product, including a voting system, depends on two specific elements: (1) the design of the product or system and (2) the care and consistency of the manufacturing process. After a system is certified, the manufacturer assumes primary responsibility for the compliance of the products produced. This level of compliance is accomplished by the manufacturer's configuration management and quality control processes. This chapter provides information about how the EAC's Certification Quality Monitoring Program enables the EAC to monitor continued compliance of fielded voting systems independently.

- **Requests for Interpretations** - A Request for Interpretation is a means by which a registered manufacturer or Voting System Test Laboratory (VSTL) may seek clarification on a specific EAC voting system standard, requirement, or testing procedure. This chapter outlines the policies, requirements, and procedures for submitting a Request for Interpretation.

- **Release of Program Information** - Manufacturers participating in the Program are required to provide various documents to the EAC. Generally, these documents are released to the public. Moreover, in many cases, the information provided is affirmatively published by the EAC. However, in limited cases, documents may not be released if they include trade secrets, confidential commercial information, or personal information. This chapter discusses EAC's general policy on releasing information and provides manufacturers with standards, procedures, and requirements for identifying documents as trade secrets or confidential commercial information.

Program Methodology

The Program is but one part of the overall conformity assessment process; the Program includes companion efforts at the state and local levels. The process to ensure that voting equipment meets technical requirements is a distributed, cooperative effort by federal, state, and local officials in the United States. Working with voting equipment manufacturers, these officials each have a unique responsibility for ensuring that the equipment a voter uses on Election Day meets specific requirements.

Federal Role

The EAC was primarily tasked with the responsibility to adopt VVSG; however, the **Board of Advisors**, the **Standards Board**, and the **Technical Guidelines Development Committee** (TGDC) are all chartered pursuant to the Federal Advisory Committee Act (FACA) to provide recommendations on voluntary standards and guidelines related to voting equipment and technologies.[5][6][7] HAVA also gave the **National Institute of Standards and Technology** (NIST) a key role in helping to realize nationwide improvements in voting systems.[8] Working together, these federal organizations are responsible for developing and maintaining the process governing the federal certification of voting systems.

State and Local Role

State officials are responsible for testing voting systems to ensure that they meet the specific requirements of each state. States may use EAC VSTLs to perform testing of voting system features that are unique to state requirements while the systems are being tested to federal standards. The EAC will not certify voting systems to state requirements but may assist with testing against state requirements as an extension of the Program if requested to do so by state officials.

State or local officials are responsible for making the final acquisition choice of voting equipment. They are responsible for deciding which system offers the best fit and total value for their specific state or local jurisdiction. State or local officials are also responsible for acceptance testing to ensure that the equipment delivered is identical to the equipment certified at the federal and state levels, is fully operational, and meets the contractual requirements of the purchase. Election officials can find more information on acceptance testing in Chapter 9 – Acceptance Testing.

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5 https://www.eac.gov/about_the_eac/board_of_advisors
6 https://www.eac.gov/about_the_eac/standards_board
7 https://www.eac.gov/about_the_eac/technical_guidelines_development_committee
8 https://www.nist.gov/itl/voting

Conformity Assessment

Conformity assessment is a method used to ensure that a product or service meets the requirements that apply to it. Many conformity assessment programs exist to protect quality and ensure compliance with the requirements of products and services. All conformity assessment programs attempt to answer the following questions:

- What are the requirements of an acceptable system? For voting systems, the EAC VVSG addresses this issue. States and local jurisdictions also have supplementing standards.

- How are systems tested against required specifications? The Program is a central element of the larger conformity assessment program. As set forth in its manuals, the Program provides the testing and certification of voting systems to identified versions of the VVSG. The Program's purpose is to ensure that state and local jurisdictions receive voting systems that meet the requirements of the VVSG.

- Are the testing authorities qualified to make an accurate evaluation? The EAC accredits VSTLs, after the National Institute of Standards and Technology's (NIST) National Voluntary Lab Accreditation Program (NVLAP) has reviewed their technical competence and lab practices to ensure these test authorities are fully qualified. Furthermore, EAC technical experts review all test reports from accredited laboratories to ensure an accurate and complete evaluation. Many states provide similar reviews of laboratory reports.

- Will manufacturers deliver units within manufacturing tolerances to those tested? The VVSG and its program manuals require that manufacturers have appropriate change management and quality control processes to control the quality and configuration of their products. The Program provides mechanisms for the EAC to verify manufacturer quality processes through field system testing and manufacturing site visits. States have implemented policies for the acceptance of delivered units.

Conclusion

Election officials must understand federal and state requirements for their voting systems. When purchasing, or leasing, and accepting a new voting system, election officials must ensure the selected system meets all those requirements. Additionally, election officials must be able to explain testing requirements and procedures to voters. While not all states require voting systems to be federally certified, the VVSG still impacts state standards and the systems offered by voting system manufacturers.

Acceptance Testing

Acceptance testing of voting systems is one of the most important functions that election officials undertake to ensure their voting equipment's accuracy, integrity, and security. Acceptance tests must be conducted under the strict control of the chief election official of the jurisdiction and in accordance with applicable state laws and procedures.

Acceptance testing is the examination of and verification that a voting system, and all its components, meet the requirements set out in the contract between the elections office and the voting system manufacturer. Election officials typically conduct acceptance testing upon the delivery of the voting system equipment to the elections office.

Acceptance testing assures that the voting system is functioning correctly and that the voting system complies with the conditions set out in the contract. Once testing is complete, and any issues have been rectified, test documentation becomes a part of the record for the components of the voting system.

If later, a component of the voting system leaves the election authority's direct control for any reason (i.e., repair, upgrade, etc.), election officials must repeat the initial acceptance to re-establish the chain of custody for the component.

Election officials must also maintain a complete record of every acceptance test conducted on every voting system component. Records often take the form of a checklist and should contain, at a minimum, the following information:

- The component's unique identifier (For example, the serial number or asset number)
- The hardware, software, or firmware version(s)
- Date of test
- Name of tester(s)
- Test results
- Notes (if needed)

If the component passes the test, no further information is necessary. If the component fails the acceptance test, then test documentation should contain a detailed description in the notes section of the reason for the failure. If election officials return a failed component to the manufacturer for repair, they should return a copy of the test documentation.

Maintaining up-to-date documentation on every component of the voting system in a single, easily accessible place can aid management decisions. Ideally, election officials should build a database that can track the components of the voting system throughout their life cycle. The database should store the results from every acceptance test conducted, all election-related performance data, chain-of-custody data, and any other relevant data associated with the voting system. This database becomes a single place to track each voting system component.

Request for Proposal and Contract Considerations

Planning for acceptance testing begins with developing the Request for Proposal (RFP). The RFP should require the manufacturers' bid proposals to include a recommended acceptance test script for each proposed component. There should also be an acceptance script for an end-to-end test of the complete voting system.

The RFP should specify that the proposed scripts must apply equally to all components of a specific type. For example, if the script is for a precinct-based optical scanner, it must apply uniformly to all precinct-based optical scanners. A script that calls for a rigorous test of some subset of the voting system and only a cursory inspection of other parts should be rejected. The manufacturer's proposed acceptance test scripts may not be entirely satisfactory. They may not meet all the applicable laws, regulations, or policies, but they will provide election officials with a solid basis for developing their own scripts.

Contracts for voting systems often include a progressive payment schedule that calls for the contract's total value to be paid in a series of payments based on measurable deliverables, such as hardware delivery, software installation, and successful testing. One of these payments should be based on successful acceptance testing of all components that make up the voting system and a successful acceptance test of the complete system.

Acceptance Tests

There are generally three distinct parts to an acceptance test:

- A test for physical integrity
- A diagnostic test of the various hardware features
- A test for functional characteristics

Acceptance tests must be conducted on every component of a voting system every time that component leaves the elections authority's control. For example, if the authority sends a particular unit of the voting system out for repair, that unit must be acceptance tested upon return. Note that this does not include components that remain under the control of the elections office's staff. If the elections office has a voting system with many devices, this may be a tedious and time-consuming task. Fortunately, acceptance testing usually proceeds more quickly as the testers gain experience with the voting system. In some instances, an experienced tester can perform an acceptance test on an individual device in around fifteen minutes.

During an acceptance test, the tester may experience problems that they can easily correct, such as a poorly calibrated touch screen. This is not a cause for terminating the test. The tester should correct the problem and continue the test in these cases. However, the tester should note the issue in the unit documentation.

Physical Integrity Test: Election officials should perform a physical analysis to ensure the voting unit is not physically damaged and that all physical components are present and are working properly. The specific tests will vary based on the type of component and the voting system; however, some typical items will include:

- Examine the outer shell or case for any sign of damage, such as dents or cracks.

- A check that the top and bottom of the shell mate easily, that all doors open and shut easily, etc.

- An inspection of all latches and hinges. Latches should open and shut without binding. Hinges should operate smoothly, and hinge pins should not be easy to remove.

- All locks should open and close without binding.

- Verify that the hardware model is correct.

- An inspection of electrical wires and connectors for damage or signs of wear.

- A verification that all ancillary components are present, for instance electrical cables, headphones, keys, etc.

- A verification that casters on any ballot boxes move freely and brakes may be applied.

- A verification that any screens are not scratched.

Diagnostic Analysis: Election officials should perform a diagnostic analysis to ensure that all the mechanical and electronic components of the voting unit are operating correctly. Again, the specific tests will vary based on the type of component and the voting system; however, some typical items will include:

- Test all input and output devices, including any voter card readers, printers, memory device slots, etc.

- Test the connections that support any accessibility devices, such as headphone jacks and keypad ports.

- Test all accessibility devices, such as headphones and keypads.

- Verify that the ballot feed path is set correctly and that ballots will feed without binding on ballot scanners.

- Verify that the screen is calibrated correctly on devices with touch screen functionality.

- If there are controls that the voter can use to change contrast or font size, verify that these controls are working properly.

- If the device is a commercial off-the-shelf (COTS) computer, verify that the USB ports, CD/DVD drives, memory card slots, etc., are functioning correctly.

- Verify that the date, time, and time zone are correct. Ensure that AM or PM is correct.

Functional Analysis: Election officials perform functional analysis to ensure that the correct federal and state-certified version(s) of the software and firmware is installed on all system components and will perform correctly during an election. This test consists of loading a mock election onto the device, marking and casting a known pattern of votes, closing the election, printing results on tabulation devices, and comparing the test results with the known vote pattern.

The following sections provide a generic outline for developing an acceptance test for the most common devices found in a voting system. Election officials need to set up a mock election for each test described below. This mock election does not need to be long; however, it should exercise all the tested components' features.

The mock election should also be typical of the jurisdiction. For instance, if straight-party voting is permitted in the jurisdiction, it must be tested. If there are multiple representative districts (i.e., vote for n of m), the mock election should include these contests. The mock election should have a few districts (e.g., congressional, state representative, local) and separate precincts.

Acceptance Test for Optical Scanners

This section describes an acceptance test for standalone ballot scanners--both precinct-based and centrally located. Some jurisdictions may use bulk or high-speed scanners. Election officials should set up the scanner for this test the way it will be set up for use in a voting location or central counting.

Materials Required: In addition to the following, election officials must know the version of the operating system and firmware that was certified for each type of ballot scanner.

- A memory card or other device used to configure the scanner for an election—this device must contain the election definition for the mock election that will be used to test the scanner.

- A memory card or other device to store tabulated results.

- The password or authentication device used to gain supervisory or administrative privilege on the scanner.

- A test deck of pre-marked optical scan ballots for the mock election—this test deck often contains one ballot with a vote for the first candidate in each contest, two ballots with votes for the second candidate, three ballots with votes for the third candidate, and so on. Although most ballot printers can supply election officials with this test deck, these ballots should be hand-marked using the device specified by the system manufacturer in their documentation.

- If the jurisdiction uses a ballot marking device, then ballots marked by this device should also be included to test the ballot scanner.

Physical Analysis: Election officials should conduct the physical analysis with the scanner turned off.

- Examine the case or cover for cracks or dents.
- Inspect latches, hinges, carrying case, wheels, etc.
- Examine the legs or stand. The legs or stand must operate smoothly without binding.
- Inspect the power cord and plug for any frayed insulation or damaged connectors.
- Verify that there is sufficient paper in the printer to complete the test.
- If there is a ballot box, ensure it is empty.

Diagnostic Analysis: Election officials should conduct the diagnostic analysis with the scanner turned on. Some of these tests may require supervisory or administrative privilege.

1. Turn on the ballot scanner and, as it boots up, verify that the correct version of the operating system and software is installed. Jurisdictions may wish to verify the hash values of installation media and oversee software installation.

2. Verify that the date and time set in the scanner are correct and, if not, correct them. Be aware of time changes due to daylight savings time and verify the time zone.

3. Perform a printer test to verify that the printer is operating correctly. If a scanner cannot print a test pattern, the printer can be tested during the Functional Analysis.

4. Verify that the battery is charging when the scanner is plugged in. Some bulk/high-speed scanners do not have batteries and rely on uninterruptible power supplies (UPS).

5. Unplug the ballot scanner and verify that it will operate on a battery. Consider completing the test while on battery power.

6. Test all ports and memory device slots.

Functional Analysis: This analysis should be conducted with the scanner loaded with the mock election and set for election mode. Turn the scanner on, load the mock election, and then set the scanner in election mode.

1. Be sure all vote totals are set to zero and print a report showing zero votes in every contest.

2. Use a pre-marked test deck to tabulate a significant number of ballots (at least 25) on the scanner.

3. End the election on the ballot scanner and print the results report.

4. Verify that the vote counts on the result report match the known results of the test deck.

5. Unload the election from the scanner or set the vote counters back to zero. Remove the test deck from the scanner.

6. Apply tamper-evident security seals to the scanner.

Documentation: If the scanner experiences a failure during any of the above steps that the tester cannot correct, the test should be terminated. The tester should document the scanner's serial number, the persons conducting the tests, the date, and a description of the failure. Election officials should make two copies of this documentation; one copy for their permanent record and another copy that stays with the scanner to assist the persons making any required repairs. All printouts should be attached to the copy retained for the permanent record.

If the scanner passes all the above tests, election officials should prepare documentation for their permanent record that lists the serial number of the scanner, the persons conducting the tests, the date, and the tamper-evident seal number(s). All printouts should be attached to this documentation.

Acceptance Test for Ballot Marking Device (BMD)

This section describes a typical acceptance test for a Ballot Marking Device (BMD). Election officials should set up the BMD for this test the way it will be set up for use in a voting location. If the BMD does not tabulate the ballots, then the test should be performed jointly with an optical scanner to verify ballots marked by the BMD can be accurately read and tabulated.

Material Required: Election officials will need the following materials to conduct an acceptance test. They will also need to know the versions of the operating system, software, and firmware on the BMD.

- A memory device containing the mock election definition to load onto the BMD.

- A card or other device required to activate the BMD for a voter.

- The password or authentication device used to gain supervisory or administrative privilege on the BMD.

- Any accessibility equipment used with the BMD.

- Ballot stock to mark ballots. Ballot stock for BMDs may differ from stock used for hand-marked ballots.

Physical Analysis: Election officials should conduct the physical analysis with the BMD turned off.

1. Examine the case or cover for cracks or dents.

2. Inspect latches, hinges, carrying case, wheels, etc.

3. Examine the legs or stand. The legs or stand must operate smoothly without binding.

4. Inspect the power cord and plug for any frayed insulation or damaged connectors.

5. If there is a printer, verify that there is sufficient paper in the printer to complete the test.

Diagnostic Analysis: Election officials should conduct the diagnostic analysis with the voting machine turned on. Some parts of the test may require manager or administrator privilege.

1. Turn the BMD on. Once it is booted up, verify that the correct version of the operating system, software, and firmware is installed.

2. Verify that the date and time are correct and correct them if necessary. Be careful of AM and PM settings and any daylight savings time settings and verify the time zone.

3. Check the calibration on the screen and re-calibrate the screen if necessary.

4. If there is a printer, run a print test to verify that it is operating correctly.

5. Verify that the battery is charging when the BMD is plugged into the electrical socket.

6. Unplug the BMD and verify that it will operate on a battery. Consider completing the test while on battery power.

7. Test all ports and memory device slots.

Functional Analysis: Election officials should ensure the BMD is on and load the mock election to conduct the functional analysis.

1. Verify that the mock election is correctly loaded, that all ballot styles are present, and contain all contests and candidates.

2. Set the BMD in election mode.

3. If the BMD tabulates ballots, print a report showing zero votes in every contest.

4. Insert a ballot card and verify the correct ballot style is shown on the screen. The tester may need to select the ballot style or precinct.

5. Vote the ballot and print it. Verify contest selections are correct. All ballot styles should have at least one ballot marked and printed.

6. Manually vote audio ballots to test that the audio function and all associated equipment (e.g., headphones, controllers, etc.) is working properly. Test all accessibility functions (e.g., large text, high contrast, hidden screen, etc.)

7. If the BMD tabulates ballots, close the election and prints results. Verify that the printed results match the known number of votes cast for each candidate.

8. Unload the mock election from the BMD.

9. Apply tamper-evident seals to the voting machine.

Documentation: If the BMD experiences a failure that the tester cannot correct during any of the above steps, the test should be terminated. The tester should prepare documentation that lists the serial number of the BMD, the persons conducting the tests, the date, and a description of the failure. Election officials should make two copies of this documentation; one copy for their permanent record and another copy that stays with the BMD to assist those making any required repairs. Any printouts should be attached to the copy retained for the permanent record.

If the BMD passes all the above tests, election officials should prepare documentation for their permanent record that lists the serial number of the voting machine, the persons conducting the tests, the date, and the tamper-evident seal number. All printouts should be attached to this documentation.

Acceptance Test for Direct Record Electronic (DRE) Voting Units

This section describes a typical acceptance test for a DRE voting device. Election officials should set up the DRE for this test the way it will be set up for use in a voting location.

Material Required: Election officials will need the following materials to conduct an acceptance test. They will also need to know the versions of the operating system, software, and firmware on the DRE.

- A memory device containing the mock election definition to load onto the DRE.

- A card or other device required to activate the DRE for a voter.

- The password or authentication device used to gain supervisory or administrative privilege on the DRE.

- All accessibility equipment used with the DRE.

Physical Analysis: Election officials should conduct the physical analysis with the DRE turned off.

1. Examine the case or cover for cracks or dents.

2. Inspect latches, hinges, carrying case, wheels, etc.

3. Examine the legs or stand. The legs or stand must operate smoothly without binding.

4. Inspect the power cord and plug for any frayed insulation or damaged connectors.

5. If there is a printer(s), verify that sufficient paper is in the printer(s) to complete the test.

Diagnostic Analysis: Election officials should conduct the diagnostic analysis with the DRE turned on. Some parts of the test may require supervisory or administrator privileges.

1. Turn the DRE on. Once it is booted up, verify that the correct version of the operating system and firmware is installed.

2. Verify that the date and time are correct and correct them if necessary. Be careful of AM and PM settings, any daylight savings time settings and verify the time zone.

3. Check the calibration on the screen and re-calibrate the screen if necessary.

4. If there is a printer, run a print test to verify that it is operating correctly.

5. Verify that the battery is charging when the DRE is plugged into the electrical socket.

6. Unplug the DRE and verify that it will operate on a battery. Consider completing the test while on battery power.

7. Test all ports and memory device slots.

Functional Analysis: Election officials should ensure the DRE is on and load the mock election to conduct the functional analysis.

1. Verify that the mock election loaded correctly and that all ballot styles are present, containing all contests and candidates.

2. Set the DRE in election mode.

3. Print a report that shows there are zero votes in every contest.

4. Activate a ballot and verify the correct ballot style is shown on the screen. The tester may need to select the ballot style or precinct.

5. Vote the ballot. Verify contest selections are correct. All ballot styles should have at least one ballot voted and verified.

6. Manually vote audio ballots to test that the audio function and all associated equipment (e.g., headphones, controllers, etc.) are working properly. Test all accessibility functions (e.g., large text, high contrast, hidden screen, etc.)

7. Close the election and print results. Verify that the printed results match the known number of votes cast for each candidate.

8. Unload the mock election from the DRE.

9. Apply tamper-evident seals to the voting machine.

Documentation: If the DRE experiences a failure that the tester cannot correct during any of the above steps, the test should be terminated. The tester should prepare documentation that lists the serial number of the DRE, the persons conducting the tests, the date, and a description of the failure. Election officials should make two copies of this documentation; one copy for the permanent record and another copy that stays with the DRE to assist those making any required repairs. Any printouts should be attached to the copy retained for the permanent record.

If the DRE passes all the above tests, election officials should prepare documentation for the permanent record that lists the serial number of the voting machine, the persons conducting the tests, the date, and the tamper-evident seal number. All printouts should be attached to this documentation.

End-to-End Voting System Acceptance Test

The end-to-end test is sometimes referred to as a test of the election management system (EMS). It tests the election management system itself and tests the ability of the EMS to interface with all the types of components. It also verifies that the EMS correctly tabulates votes and prints reports. Election officials should conduct this test on all newly acquired voting systems and after any event that could have altered the voting system, such as a system upgrade or if the EMS hardware leaves the custody and control of the election authority.

Materials Required: Election officials must know the correct versions of the operating systems and EMS software. In addition, the testers will need the following:

- A complete election management system with all required election management system software installed.

- If Ballot Marking Devices are used:

  o At least one BMD,

  o One blank memory device used to load the election definition onto the BMD(s),

  o The password or authentication device used to gain supervisory or administrative privilege on the BMD.

  o A card or other device required to activate the BMD for a voter.

  o Accessible equipment for use with BMD.

- If Optical Scanners are used:

  o At least one ballot scanner. If different types are used (e.g., precinct-based for polling locations and bulk/high-speed for central counting), then at least one of each type will be needed.

  o One blank memory device used to load the election definition onto the ballot scanner(s),

  o A memory device for each scanner to store tabulated results and Cast Vote Records.

  o At least one set of pre-marked optical scan test ballots with known results. This can be the same test deck used to conduct acceptance tests on the ballot scanners.

  o All communications cables and devices necessary to connect ballot scanners to the election management system.

- At least one memory device used by the system to record and store the election results.

- One disk or other memory device containing the mock acceptance test election definition to load onto the EMS.

Prerequisite: The EMS must be set up before beginning this acceptance test.

All ballot scanners and BMDs should have already successfully completed acceptance testing. If not, complete acceptance testing on these units before beginning this test.

Verify Correct Hardware and Election Management Software versions.

1. Turn on the EMS computer(s). The system may consist of more than one computer, and there may be a server and workstations. There may be a specific order in which the computers should be powered on.

2. After the boot-up is complete, verify that the correct operating system and election management system software is installed. Ensure that any third-party software used by the system is also installed. Election officials should compare the hash values of the installed voting system software with the hash values maintained by the EAC, if their voting systems are certified by the EAC.

3. Verify that all ancillary components (e.g., printers, communication devices, etc.) of the election management system are turned on and functioning correctly.

Verify Voting System Functionality

The end-to-end functionality analysis will verify that the complete voting system is functioning correctly. It will verify that the election definition on the EMS will create ballot styles and provide election data for optical scanners, ballot marking devices, and other voting equipment. It will also verify that votes cast and other election data can be uploaded to the election management system and that these votes will be tabulated correctly.

1. Load the mock election database onto the election management system.

2. Verify that the election management system will program the ballot marking device or other accessible components.

   a. Use the election management system to prepare the memory device used to load the mock election into the BMD.

   b. Load the mock election onto the BMD.

   c. Open the election on the device.

   d. Manually vote ballots in a recognizable pattern.

   e. Manually vote audio ballots to test that the audio function and all associated equipment (e.g., headphones, controllers, etc.) are working properly. Test all accessibility functions (e.g., large text, high contrast, hidden screen, etc.)

   f. If the BMD tabulates ballots, close the election and print results. Verify that the printed results match the known number of votes cast for each candidate.

   g. If the BMD tabulates ballots, transfer the results to the election management system according to the system's documentation.

3. Verify that the election management system will program the ballot scanner(s) and tabulate results.

   a. Use the election management system to prepare the memory device used to load the mock election onto the ballot scanner.

   b. Load the mock election into the ballot scanner.

   c. Open the election on the ballot scanner.

   d. Use the pre-marked optical scan test ballots to cast votes on the ballot scanner.

   e. Close the election on the ballot scanner and print results.

   f. According to the system's documentation, transfer the results to the election management system.

4. Verify Printed Outputs.

   a. Load election results onto the election management system.

   b. Print the results and any other reports that contain the vote totals.

   c. Compare the election management system results with those printed on optical scanners and other components that tabulate ballots.

Documentation: If any component of the voting system experiences a failure during any of the above steps that the tester cannot correct, the test should be terminated. The tester should prepare documentation that lists the serial number of the election computer and the serial number or other identifying information for any other component that failed, the persons conducting the tests, the date, and a description of the failure.

Election officials should make two copies of this documentation; one copy for the permanent record and another copy that stays with the failed component of the voting system to assist those making any required repairs. All printouts should be attached to the copy retained for the permanent record.

If the voting system passes all the above tests, election officials should prepare documentation for the permanent record, including the names of those conducting the tests and the date. All printouts should be attached to this documentation.

Conclusion

Acceptance testing on each component delivered to an elections office by a manufacturer is a critical step in ensuring that electronic voting units will function as intended on Election Day. Although each manufacturer has internal quality control procedures, and the contract between the manufacturer and the elections authority should guarantee quality control, election officials need to ensure that the voting system meets their requirements, as stated in the RFP and contract.

Ballot Building

Ballots are the centerpiece of every election. Whether paper or digital, each ballot symbolizes a voter's voice. Building a well-designed and accurate ballot ensures that each voter has an equal opportunity to cast his or her vote. This chapter consists of three pieces of the ballot building process: data, design, and distribution. Ballot data tells voters which contests are part of the election, who is running for each office, and which districts are required on each ballot style.

Ballot design, meanwhile, ensures that voters will understand how to complete their ballots and that any tabulation equipment will count votes accurately. Finally, ballot distribution is the method by which voters receive their ballots.

Ballot building is a complex process that requires keen attention to detail, knowledge of state laws, and an understanding of design best practices. If these requirements are fulfilled, it is possible to create a ballot that allows every voter an opportunity to cast a ballot that is simple to mark and easy to understand.

Ballot Data

Every election contains a unique set of data. Before building the ballot, identify the following:

- **Ballot design requirements**

    State ballot design requirements, ballot instructions, contest order, political party order, candidate name rotation requirements.

- **Contest information**

    The total number of candidates to be elected, the term length for each office, and whether the election is for a full or partial term.

- **District information**

    The total number of contests to be elected and the total number of precincts within each district.

- **Candidate filing information**

    Name, office sought, party affiliation (if applicable), incumbency status (if applicable), and any other candidate information that is legally required to appear on the ballot.

Each piece of data changes from election to election, and virtually no two elections are alike. For example, members of Congress appear on the ballot every two years, but members of the U.S. Senate appear on the ballot every six years. Judges, school board members, and other local officials may appear on the ballot at other intervals. Additionally, district boundaries for many offices change when new Census data is available every ten years.

Election officials may rely on statewide databases, local records, or official election results from past elections to determine which contests should appear on the ballot. Additionally, election officials may use Geographic Information System Mapping (GIS) or other mapping systems to identify how district boundaries overlap with voting precinct boundaries. However, even the most meticulously maintained databases may not be able to account for every variation in a given election. Special elections, vacancies, and other one-time events may affect the number of districts or contests required to appear on the ballot. To account for these variations, be sure to communicate candidate listings and ballot information with any relevant stakeholders to ensure that every required contest is included on the official ballot. Any districts participating in an election should verify:

1. The total number of contests on the ballot;

2. The number of officers to be elected;

3. The term length for each contest; and

4. Any special circumstances, such as an unexpected vacancy, that may result in an additional contest appearing on the ballot.

After gathering all election data, election officials enter it into ballot production software, often referred to as the Election Management System (EMS). Election officials should take great care when entering data. Thoroughly proofreading each ballot style before the ballot is finalized is an essential best practice to help local election officials avoid errors downstream in the election process.

Top Tips for Ballot Proofing

1. Read everything on the ballot backwards.

2. Proof candidate names and personal information directly to the candidate's official filing, not a candidate listing.

3. Ensure that all office titles and district names are spelled correctly.

4. Verify all offices are assigned to the correct districts, precincts, or ballot styles, and they are listed in the proper order.

5. Verify candidate names are rotating properly (when applicable), or that political parties are listed in the correct order.

Remember that the ballot data process starts well before entering any data into the EMS. In some states, candidates may file for office a year or more before the election. Candidate filings should be reviewed for accuracy at the time of filing and reviewed again prior to the candidate filing deadline for that office. This provides an extra verification that the data on the ballot is accurate while also providing additional customer service to candidates who may need to make corrections on their official filings if permitted. Once candidate filings have been submitted and reviewed, they should be filed in an organized way that allows them to be easily retrieved for data entry and ballot proofing.

Ballot Design

Paper Ballot Layout

Election officials should balance state ballot layout requirements with best practices for ballot design. If done correctly, the ballot will be simple to read, and voters will make fewer mistakes when completing their ballots. Additionally, some states utilize features like watermarks and detachable stubs for security.

As a prerequisite to building a ballot, election officials must familiarize themselves with the ballot production software in the EMS. Each system produces ballots differently, with some software platforms allowing more flexibility than others. Before programming an official ballot for the first time, election officials should build a mock election ballot to learn how the ballot design software works. This allows election officials the opportunity to add contests, candidates, ballot headers, section headings, and other text to the ballot to understand how each design element affects the design of the rest of the ballot.

Official ballots will typically include multiple ballot styles. A ballot style is a ballot with a specific set of contests and candidates for a particular precinct. Ballot styles vary based on geographic districts, or in the case of closed primary elections, a voter's political party affiliation. Election officials need to be mindful of where contests fall on the ballot in every ballot style. For example, a contest may fall on the front of the ballot on some ballot styles and the back for others. Additionally, election officials should ensure that all headings and other design elements on the ballot fall in the correct locations. If possible, contest headings, titles, and candidates should not fall in different columns or on different sides of the ballot.

Ballot Instructions

Many states require printing ballot marking instructions on the ballot. These instructions should be stated clearly and use plain language. Some best practices for writing ballot instructions include:

- When an instruction is based on a condition, state the condition first and then the action to be performed. For instance, use "To change your vote, do X," rather than "Do X, in order to change your vote."

- Use familiar, common words and avoid technical or specialized terms that voters are not likely to understand. For instance, "... there are more contests and races on the other side ..." or "... vote both sides of the ballot ..." rather than "...additional contests are presented on the reverse ..."

- Issue instructions on the correct way to perform actions, rather than telling voters what not to do. For example, "Fill in the oval for your write-in vote to count," rather than "If the oval is not marked, your write-in vote cannot be counted."

Address the voter directly rather than use passive voice constructions. For example, "remove and retain this ballot stub" rather than "this ballot stub must be removed and retained by the voter."

Avoid the use of gender-based pronouns. For example, "...write in your choice directly on the ballot..." rather than "...write in his name directly on the ballot..."

Display instructions near where they are needed. For instance, only general instructions should be grouped at the beginning of the ballot; those about specific situations should be presented where and when required.

The EAC has published design recommendations for election administration in the report Effective Designs for the Administration of Federal Elections.1 This report includes best practices and examples of effective designs for ballot instructions.

Ballot Layout

State laws often require contests and candidates to fall on the ballot in a certain order. In some states, candidates for partisan office must be on the ballot in party order. In other states, all candidate names may rotate alphabetically. However, some design elements may not be listed in statute but may be important to include so the ballot is as clear as possible for voters. Some of these design elements include:

- Whenever possible, do not visually present a single contest spread over two pages or two columns. Voters may misread one contest as two or fail to see additional choices. If a contest has a large number of candidates, it may have to fall into multiple columns.

- Clearly indicate the number of candidates to be elected in each contest.

- The name of a candidate and the target area on the ballot used to vote for that candidate should be consistent. For example, the target area must not be located to the left of some candidates' names and the right of others.

- Each choice on the ballot should be presented equitably. Certain differences in presentation may be mandated by state law, including the order in which candidates' names are placed on the ballot. However, comparable

characteristics, such as font size or audio quality, must be the same for all choices.

Additionally, the most important information on the ballot should be bold and easy to read. Ballots should use sans serif fonts, and ballot text should be at least 12-point font. Any ballot text, just like ballot instructions, should be simple to understand.

Several states have incorporated these and other best practices into their ballot design. Two examples can be found below:

- Michigan Ballot Production Standards: **https://www.michigan.gov/documents/sos/ BallotStandards_517320_7.pdf?x=1**

- Virginia Ballot Standards: **https://www.elections.virginia.gov/media/ formswarehouse/election-management/ballots/2019- 07-25-SBE-Ballot-Standards-and-Verification- Procedures.pdf**

Digital Ballot Design

Just like paper ballots, digital ballots should have clear instructions, including those for any assistive technology input and output devices such as 'sip-and-puff,' paddles, etc. Provide voters unambiguous instructions for marking, verifying, and casting the ballot. Ballot contents can use color to distinguish among different elements on the ballot. If a touch screen voting station does not allow the voter to return to the instruction page, these instructions should be printed and posted on the voting station in addition to providing the instructions on the touch screen. If possible, candidates in each contest should be listed in a single column on a single page. Whenever practical, limit each screen to a single contest.

Audio Ballot Considerations

Digital ballots should include an audio version to improve the accessibility of the ballot. As much as possible, audio ballots should be presented in the same voice, and each option on the ballot should be presented at the same speed and volume. Many electronic ballot marking devices allow voters to adjust the speed and volume of the audio ballot in addition to other available accessibility features.

All voting systems certified by the EAC must meet the audio standards included in the Voluntary Voting System Guidelines (VVSG).2 Some voting systems have a provision for using synthesized voices. Select between natural voices and synthesized voices based on the preference of the disabled or language community. Election officials can partner with disability and language minority groups to assess which audio voice would best suit the needs of voters. If officials use natural voices, consider using voice actors, radio announcers, or members of the target community to record the audio version of the ballot.

Partnering with language minority communities can be exceptionally beneficial for providing audio ballots in languages other than English. Election officials who prepare audio ballots in one or more languages other than English must make every effort to use persons for whom the language(s) are their first language. If possible, make the audio dialect neutral; however, if a language has more than one dialect, election officials should work with their local communities to determine the appropriate dialect to use. Additionally, translations from English to another language should maintain the spirit of the original text, particularly when there is no literal translation available.

Ballot Distribution

Paper Ballot Considerations

Selecting a ballot printer is an integral part of the ballot building process. Voting system vendors may certify certain print vendors to produce ballots for their systems. However, election officials often work with their voting system manufacturers to determine specific printing specifications, even if the manufacturer does not have a particular certification system in place. Additionally, before printing the complete set of ballots for an election, it is a best practice to test a sample of printed ballots to make sure they will tabulate properly on the ballot tabulation equipment. Some election officials can produce ballots in their offices that they can use to test the logic and accuracy of their ballot scanners, while others rely on their printers to produce a small set of test ballots for this purpose. See Chapter 11 – Pre-Election Testing for more information on logic and accuracy testing.

To track the total number of ballots delivered to the office, the ballots are often shrink wrapped in quantities small enough to easily verify (100 or fewer per pack is recommended). The ballots in each pack should be reviewed to assess for any printing errors. Election officials should not assume that because one (or several) packet of ballots is correct that all the other packets are correct. When reviewing paper ballots, check for:

- Proper timing mark positions
- Ink bleed through
- Poor print quality
- Ink density
- Smudging
- Correct paper weight
- Paper opaqueness
- Any text, timing marks, or target areas that appear over a fold or crease in the ballot.

Ballot-on-demand systems may have other considerations. All ballots should be tested before the election to ensure they print correctly.

Review All Ballots

Every ballot style should be compared to the official ballot certification documents for ballot proofing. This is also true for each format in which the ballot is available (print, digital, audio, etc.). This final review should be completed before sending the ballots to the ballot printer.

It is a best practice to have a two-person team review the ballot. One person should read the information from the official ballot certification document. The second person should verify that the information is identical on the touch screen, the optical scan ballot, and the audio ballot. When testing the audio ballot, it is recommended that the ballot be played on a speaker so that both reviewers can listen to the audio ballot.

If possible, election officials should partner with their local disability communities and minority language communities to ensure that the accessible versions of the ballot are accurate and easy to use.

Conclusion

Ballots are complex documents that must be accurate yet easy to use. Election officials should take great care when considering ballot data, design, and distribution. Each of these pieces of the ballot building process is essential for making the voting process as simple as possible for voters. Election officials should plan and identify all requirements and resources available to build a well-designed ballot to accomplish this goal. Finally, every ballot element should be designed with the voter in mind to empower every voter to cast their ballot successfully. Before finalizing the ballot, election officials should consult with community partners, including those serving voters with disabilities and language minority communities, to ensure the usability and accuracy of paper, digital, and audio ballots.

Pre-Election Testing

Pre-election testing, also called Logic and Accuracy (L&A) testing, is the act of testing every ballot style and every component of the voting system before use in an election. Election officials test to ensure ballot activation devices generate the correct ballot, touchscreen devices function as expected, optical scanners tabulate ballots as marked, and central count computers count and aggregate totals accurately. If an election official represents a large jurisdiction with thousands of polling locations and ballot styles, this is a daunting task. However, documenting pre-election testing is a critical component of the election's audit trail, ensuring the election was administered in a fair, accurate, and transparent manner. Robust pre-election testing procedures provide the foundation for the integrity of the voting system during the election cycle.

Pre-Test Planning

Ideally, on the election calendar, L&A testing starts after ballots are finalized and concludes before voting begins. Once the testing dates are identified, election officials can finalize the testing plan. Planning should include identifying where the test will take place, who will conduct the test, and how much time is needed. Plans should also cover the layout of the testing facility, whether it is a conference room or a dedicated equipment warehouse. If observers are permitted, designate an area where they can view all aspects of the test but not interfere.

The general steps for pre-election testing include:

- setting up the voting system for each of your precincts and early voting locations,
- loading the election definition,
- casting a known vote pattern on every ballot style,
- printing the vote totals for each voting or tabulation device, and
- comparing the printed vote totals with the known pattern of votes.

In short, you are going to set up and test your entire election.

> **STANDARD OPERATING PROCEDURES**
>
> The testing procedure will typically remain the same from election to election and should be included in the elections office's standard operating procedures. After testing, evaluate the adequacy of the written procedures and make any necessary changes before the next election.

Time constraints and limited staff may require seasonal help or contractors to assist with pre-election testing. Still, a member of the election staff should lead the test and supervise the testing teams. Teams of two should carry out testing of each component—some jurisdictions may require bipartisan teams. Additionally, before beginning the test, staff should instruct testers on testing procedures, including how to complete documentation and what to do if issues arise.

Prepare a list of all equipment to be tested (including backup devices) and list the location or precinct to which it will be deployed. Develop a checklist for each type of equipment included in the test. Depending on the jurisdiction's voting system, the test may include:

- Electronic pollbooks,
- Ballot activation devices,
- Ballot-on-demand printers,
- Ballot marking devices (BMD),
- Direct-recording electronic (DRE) voting machines,
- Precinct scanners, and
- Central count scanners

Each type of equipment has unique features that require testing. Providing a checklist for each type ensures each feature is tested. The checklist should include all steps covered in the test ending with securing the equipment for Election Day or early voting use. For example, a checklist for BMDs may include:

- Inspecting the physical condition of the BMD and all accessibility devices,

- Loading the election definition file and verifying the version,
- Setting date and time (taking Daylight Savings Time into account, as necessary),
- Testing backup battery,
- Verifying functionality of audio ballots and accessible features,
- Voting the test pattern and printing the ballots,
- Scanning the ballots and verifying the results are as expected, and
- Setting for Election Day (or early voting) and securing with tamper-evident seals

Prepare test scripts with the vote pattern for each ballot style. Some states provide the vote pattern, which local election officials must use for L&A testing. However, election officials in states that do not provide the test script must ensure each script includes at least one vote for each candidate on the ballot and one 'yes' and one 'no' vote for each issue or question on the ballot. Additionally, the pattern should vary the number of votes rather than just voting one time for each choice. For example, officials commonly vote a one, two, three pattern, where the first position receives one vote, the second position two, etc. This variation is important to detect programming errors. Jurisdictions utilizing hand-marked paper ballots may order a preprinted test deck; however, election officials should include actual hand-marked ballots with various marks in the test. Test ballots from all potential sources (e.g., vendor printed, printed in-house, on-demand, or from a BMD). Once the pattern is determined, calculate the total number of ballots to be cast for each precinct or location.

Finally, many jurisdictions require election officials to open pre-election testing to the public. Even if not required, it is a good opportunity for election officials to provide insight into a critical election process. Review state and local requirements as they relate to open access to the pre-election tests. Provide notice of testing and invite the public and media to attend.

> The test deck should include ballots with write-ins, overvotes, undervotes, and no selections made. Additionally, use a variety of instruments to mark the hand-marked deck to test the scanner's sensitivity and potential bleed through.

Conducting the Test

Determine which precinct or location to test first and, using the equipment list, gather all required equipment, supplies, and test deck (if applicable). Focus on one polling place at a time. Finish testing on all the selected location's equipment before moving on to another. For any observers or media present, explain the procedure and assign a staff member to answer questions throughout the process.

> **NOTE**
>
> In larger jurisdictions with several testing teams, time constraints may require each team to focus on assigned polling places resulting in multiple locations being tested at once.

Follow the checklist for each piece of equipment. Use a separate copy of the checklist for every piece of equipment, so the testing team can verify every step performed and note any issues. Whether testing DREs, precinct scanners, or central count scanners, testers can quickly verify the correct number of ballots that have been tabulated based on the predetermined ballot count. Jurisdictions using BMDs or DREs will have to manually enter the testing pattern on each machine. If it is not feasible to manually vote the test script on every machine, vote every ballot style on at least one machine and visually inspect every ballot style on all others.

For precinct and central count scanners, run the test deck for every ballot style the scanner could possibly count during the election. If precinct scanners are used in a vote center where voters from any precinct can vote, every ballot style should be run. Similarly, run all ballot styles on the central scanner if the jurisdiction counts all absentee or Election Day ballots centrally. After all ballots are scanned or all DREs have been manually voted, close the session and run the totals tapes. Testers should clear the results, ready the equipment for early voting or Election Day, and secure each machine with tamper-evident seals. Both testers verify completion of all steps on the checklist, record the seal information, and sign the documentation.

Review the Results

After testing is complete for a location, review the results and compare them with the anticipated outcome. Each DRE, precinct scanner, or central scanner should generate a totals tape or report at the close of testing. In addition to reviewing the totals tapes for accuracy, upload the storage media to the voting system. Both the totals tapes and voting system aggregate results should match the predetermined pattern.

> Always review a precinct-level results report when verifying testing results. If the tested location has more than one precinct, an error in one precinct could offset an error in another precinct, and a summary level report would not show it.

If the results are as expected, the equipment is clear for use in the election. After all equipment is tested, remember to zero out the voting system in addition to tabulating equipment.

If results are not as expected, investigate the source of the discrepancy. Looking at totals tapes from each machine may narrow down where the issue occurred. For example, during manual voting on a DRE, it is not uncommon for a tester to mis-vote. If that is the case, document the error. If you cannot guarantee a mis-vote or other human error caused the problem, remove the affected piece of equipment from service and escalate the investigation.

After all testing is complete, consider publishing the results of the test and store the testing materials. Ensure all test deck ballots are clearly labeled and stored separately from actual live ballots.

Conclusion

The best way to detect a potential problem with the voting system before it occurs is with comprehensive L&A testing. Documenting every step of the testing process is tedious but essential. Election officials can open testing to the public and publish the test results to demonstrate the voting equipment works properly before voting even begins.

Absentee Voting and Vote-by-Mail

All states offer some form of absentee voting or vote-by-mail, but they vary significantly in how voters request, receive, and return their mailed ballots. Some states require voters to provide a reason for requesting a mailed ballot, a witness signature, or other documentation before being issued a ballot. Other states require voters to specifically request in writing that a ballot be sent to them, while others automatically mail ballots directly to every registered voter before every election. These latter states, commonly called vote-by-mail states, still typically offer voters an in-person voting option. Nearly all voters in vote-by-mail states vote by returning their mailed ballot through the postal system, via a drop box, or personal delivery to an elections office or voting location, depending on state law. Generally, mail voting breaks down into four categories:

- *Excuse Required Absentee* - requires voters to certify that they meet certain criteria, e.g., absent from the jurisdiction on Election Day, temporarily ill or disabled, etc. Some states require voters to have a witness signature or other documentation.

- *No-Excuse Absentee* - any voter can request an absentee ballot by mail. The request may be valid for one or more years or just one election depending on the state. In some states, voters may sign up for a permanent absentee application list, so they receive an application for every election.

- *Permanent Absentee* - in some states, voters may sign up for the permanent absentee ballot list and automatically receive a ballot in the mail for every election. Some state laws require periodic review of the "permanent" status, specifically if the voter does not cast a ballot after several elections.

- *Vote-by-Mail* - eligible voters are automatically mailed ballots and voter instructions by the local jurisdiction. Depending on state law, voters can return their marked ballots by mail, to a voting location, or in drop boxes.

> Statutory requirements for absentee and vote-by-mail vary significantly across states. Election officials must review state law and regulations before developing internal policies and procedures.

Technology yields several benefits for tracking and processing mailed ballots. Elections offices track the inventory of mailed ballots, including maintaining a record of which voters have been issued a ballot by mail, when election officials received it, and whether it is accepted for counting. Some election officials also offer mailed ballot tracking services online so that voters and officials can track the status of mailed ballots through the U.S. postal system. This chapter will discuss different methods for preparing, mailing, tracking, verifying, and tabulating mailed ballots.

Ballot Preparation and Mailing

One of the first steps in preparing to issue ballots by mail is determining facility, staffing, and supply needs.

Facility Needs

Election officials should review the elections office's facilities before every election to ensure they are secure and there is enough space for packaging outgoing ballot envelopes. This space should have adequate shelving to handle all mailing needs, although the size of this space may change based on the expected quantity of ballots to be processed. Election officials should maintain a log of staff members with access to this facility.

Sorting undeliverable ballots requires additional space since staff must review these ballots immediately. Processing returned voted ballots also requires space for:

- Signature Verification
- Challenged Ballots
- Envelopes
- Separating Ballots from Envelopes
- Duplication, if required

Staffing Needs

If staff performs ballot insertion in-house, assign teams of two (preferably bipartisan) to manage each workflow stage. Set up teams to help control the flow of materials and expedite the overall procedures. Staff must adhere to all security and chain of custody procedures to ensure voters are mailed the correct ballots.

If outgoing mail ballot preparations are to be done off-site at a mailing house, elections office staff supervision or prior facility inspection is recommended.

For returned ballots, election officials should determine whether state law requires a sworn election worker board to oversee the process or whether supervisors can be regular staff, whose only duty is to oversee the process. It is important to plan for peak periods that may require either more personnel, staggered shifts, or overtime.

Equipment and Supplies

Election officials must also evaluate equipment and supply needs related to space needs. These may include:

- Ability to run labels/data exports for mailing companies
- Software that provides CASS certification (postal barcode)
- Insertion, folding, and sealing machines
- Printers
- Postage meter
- Automatic letter openers
- Computers and bar code scanners
- Storage shelves
- Mail trays
- File storage boxes
- Tamper-evident seals

Ballot Preparation and Printing

The first step in preparation for printing and distributing ballots is developing a timeline detailing each step in the process. Examples of dates to be included on a timeline are:

- Filing deadline
- Deadline for public review of ballot design and content
- Developing the ballot order and finalizing contract negotiation with the ballot printer
- Date that ballot file is due at the printer

- Delivery date for printed ballots
- Logic and accuracy testing
- Deadline for mailing of military and overseas ballots
- Date for initial mailing of absentee ballots
- Close of registration
- Last date that absentee ballots can be mailed or received
- Last day for receipt of voted mail ballots

Once election officials develop the timeline, they can incorporate staff assignments and internal deadlines.

Determining the number of ballots to order is often stipulated by state law or administrative policies and procedures. If not, election officials can use a simple spreadsheet to determine the number of ballots needed. In the spreadsheet, multiply the number of voters in each precinct by the percentage of ballots expected to be requested, considering prior like-election turnout by precinct.

It is important to include extra ballots in the ballot order to ensure there are enough for logic and accuracy testing and provisional, spoiled, and replacement ballots.

Before meeting with the ballot printer, election officials should consider the following:

- Quantities and ballot styles
- Weight limitations (printing instructions back-to-back will reduce the amount of paper and overall weight of the mail)
- Colors for different ballot types or districts
- State requirements for ballots (i.e., numbered, detachable stubs on each ballot)
- Required statutory information per ballot type

Number of non-affiliated voters for primary elections (consider buffering ballot quantities to accommodate party changes or parties opening their primary)

Before every election, election officials should also contact the local post office to review all policies and procedures relating to mailing, tracking, and receiving the ballots. If using an outside mail service, election officials should also include a review of elections office internal policies and procedures and contract requirements with their mail service vendor. Listed below are possible items to review and consider:

- Identify timelines and scheduling (allow for possible delays)

- Identify staffing needs at all stages of the process (on-site supervision may be required)

- Identify staging requirements (work areas for barcoding, tray assembly, zipping/sorting, etc.)

- Consider quality control and security issues. Outline ballot transportation security requirements (i.e., from office or vendor to mailing house or mailing house to post office)

- Specify various quality control issues (tracking and audit trails)

- Establish a method for addressing/labeling envelopes

- If inserts are required, check with the vendor on insert capability. Examples of inserts include:

  o Secrecy envelopes

  o Return envelopes

  o Ballot (one or more in jurisdictions with open primaries)

  o Local Voters' Pamphlet, if applicable

  o Drop box locations, if applicable

Review all outgoing and return ballot envelopes before placing new orders. Changes to state law regarding ballot envelope design may require updating the envelope. Election officials should consult with print vendors on the availability of envelopes before making changes to the size, type, or design. Additionally, redesigning ballot envelopes to accommodate new technology and postal policies and procedures can improve the management of packing outgoing envelopes and receiving voted ballots.

The U.S. Postal Service can review or help election officials design outgoing and return envelopes to ensure they meet postal standards for automated handling. A Mailpiece Design Analyst can ensure the proper wording and placement of endorsements.[1] The postal service also provides a camera-ready copy of the front side of both outgoing and return envelopes for the printer, including an 11-digit barcode for the elections office's return address on the return envelope. If election officials are using Postal Service Intelligent Barcode tracking for the first time, they must set up proper accounts and have pre-approval of envelope design before printing ballot envelopes. Additional information on election mail is available at **https://about.usps.com/what/ government-services/election-mail/**.

Election officials should discuss options for the return mailing address for voted ballots with their local post office, such as:

- The election office address and zip plus 4

- Having the post office assign a special "plus 4" for the elections office only

- Establishing a specific post office box for returned ballot envelopes

Additional examples of efficiencies election officials have realized in envelope design include:

- Eliminating labels by printing voter names directly onto the outgoing ballot envelope.

  Note: Printing these envelopes in ballot order instead of alphabetically can improve accuracy and efficiency when pulling and inserting ballots into outgoing envelopes.

- Implementing bar code technology to easily update voter history when elections office staff receive return ballot envelopes for counting.

- Utilizing the official election postal indicia on all outgoing and return ballot envelopes. Local postal authorities should review any envelope design changes. Election officials should retain written records of approval on any changes.

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[1] For more information on mailpiece design review, election officials can contact the Mailing and Shipping Solutions Center (MSSC) via email at **MSSCAdmin@usps.gov**.

Ballot Mailing

Election officials must track both the numbers of envelopes printed and voter records updated as having been sent ballots each day, and the numbers must match. Election officials often print master listings of voters issued absentee ballots as a part of the audit trail for each election. Each day that staff print envelopes, a master listing of voter names should also be printed and balanced to the number of envelopes printed, ballots inserted, and delivered to the post office. This audit trail will also track and verify printed ballot inventory.

Election officials should coordinate the delivery of outgoing ballots with the postal facility handling the mailing. The local post office can schedule a time frame that allows for the most efficient distribution of ballots. Larger post offices sometimes require delivery to a specific dock area. If delivery is by truck, the post office may require weighing the truck before the mailing is loaded and before off-loading the ballots.

Take the return ballot envelope package (containing the return ballot and all inserts) to the post office to confirm the return postage amount. Include this information with the voter's instructions.

Remote Absentee Voting

The Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) guarantees absent uniformed services voters and overseas voters the right to register to vote and to cast absentee ballots for federal offices. Updates to the act require jurisdictions to send ballots to UOCAVA voters at least 45 days before Election Day and allow voters to request and receive their ballot electronically to allow sufficient time to return their voted ballot. Chapter 13 - Uniformed and Overseas Citizens provides more information on serving UOCAVA voters.

As soon as printed ballots are delivered, election officials should conduct routine logic and accuracy testing on all ballot styles. Logic and accuracy tests should be completed before mailing or issuing any ballots to voters. Chapter 11 – Pre-Election Testing provides more information on logic and accuracy testing.

States have implemented different ways to transmit voting materials electronically. Initially, election officials sent and received election materials via fax transmission. Many jurisdictions now use secure online systems to send voting materials and blank ballots. An online system may allow voters to access the ballot online via a secured portal, ensuring the security and confidentiality of the ballot.

Some jurisdictions have extended the ability to receive ballots electronically to voters with disabilities or disaster workers unexpectedly away from home on Election Day. These systems allow voters with disabilities to mark their selections using their own compatible technology to vote independently and privately in the comfort of their own homes. And, for disaster workers, expedites ballot delivery.

Ballot Return

The most common return ballot delivery method is by mail. Election officials can coordinate mail pick up with the local post office. Even if the return address is the elections office, election officials can arrange with the post office to pick up the returned voted ballots each day, allowing for earlier ballot processing. If ballots are returned to a P.O. Box, election officials should consider establishing a written procedure for collecting the ballot envelopes.

Election officials should coordinate with the post office for the latest pick-up time for last-minute returns on Election Night.

There are a significant number of states that authorize the return of mail or electronically transmitted ballots by email, fax, or other electronic means such as an upload to a portal. Security procedures, chain of custody, and ballot duplication procedures in offices are determined by state law and guidance.

Drop Boxes

Election officials should review state law and regulations before using ballot drop boxes. When locating drop boxes, election officials consider population, geographic areas, security, and available funding. Election officials should consider using city and county facilities, public assistance offices, senior and community centers, locations in areas with significant minority or traditionally disenfranchised communities as drop box locations when applicable.

When determining locations and drop box placement, consider the following factors:

- Access for voters with disabilities
- Security
- Voter convenience
- Parking

Election officials should be sure to inform voters of the location and hours of operation for all drop boxes in their jurisdiction. The EAC's **Ballot Drop Boxes Quick Start Guide** provides additional information on locating and securing drop boxes.[2] The Quick Start Guide and the EAC's **Best Practices: Chain of Custody** include guidelines for developing robust chain of custody procedures applicable to emptying drop boxes.[3] Additionally, the **Making Voting Accessible** Quick Start Guide outlines general accessibility considerations for ballot drop boxes.[4]

Ballot drop boxes must be locked and secure at all times. They should be placed in monitored areas or under video surveillance, whether indoor or outdoor. The drop boxes should be accessible only by a unique key, and two staff members (preferably bipartisan) should access the box to collect ballots.

Election officials should establish a predetermined collection schedule. A team of two election workers (preferably bipartisan) should transfer the voted ballots to a locked or sealed ballot box, bag, or pouch and deliver it to the elections office. On Election Day, election workers should monitor the drop box locations until the close of the polls or the deadline for ballot receipt. Two election workers (preferably bipartisan) should be assigned to lock each drop box location, collect all remaining ballots, and ensure the drop box is removed or cannot accept any additional ballots after the deadline.

In-Person Voting Locations

If state law allows the voter to drop off voted absentee ballots at in-person voting locations, election officials must include instructions and procedures for poll workers to use in returning these voted ballots to the central elections office. Depending on the jurisdiction, mail ballots returned to a voting location may either be scanned at the location or centrally scanned at the elections office. Poll workers must understand how to document receipt of mail ballots and track tabulation, if applicable, and return to the elections office.

Returned Ballot Audit Trail

Elections office staff must create an audit trail throughout the ballot reception process. Election officials should maintain logs for processing the ballots through each step. All statistical information must be maintained for each batch of ballots processed, including:

- Number of ballots received
- Number of ballots counted
- Name, team number, or persons involved
- Date and time processed
- Number of challenged ballots
- Number of write-ins and duplicated ballots
- Number of envelopes that do not contain a ballot
- Number of envelopes containing more than one ballot

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2 https://www.eac.gov/sites/default/files/electionofficials/QuickStartGuides/Ballot_Drop_Boxes_EAC_Quick_Start_Guide_508.pdf
3 https://www.eac.gov/sites/default/files/bestpractices/Chain_of_Custody_Best_Practices.pdf
4 https://www.eac.gov/sites/default/files/electionofficials/QuickStartGuides/Making_Voting_Accessible_EAC_Quick_Start_Guide_508.pdf

The audit trail begins when election officials receive the first ballot envelopes from voters. Daily, elections office staff count and log the number of:

- Ballots returned via the post office
- Ballots received over the counter
- Ballots received from drop box locations, if applicable
- Ballots forwarded to other jurisdictions
- Ballots returned undeliverable

Chapter 16 – Developing an Audit Trail provides more information on developing and maintaining audit trails throughout the election cycle.

Initial Envelope Sort

After receipt, staff sorts mailed ballots into categories. Some elections offices with high rates of by-mail voting use ballot sorting machines to aid the verification and sorting processes. The ballot sorter takes a picture of each by-mail ballot return envelope processed through the machine and groups them by ballot style for counting. The returned ballot is either recorded as returned by the voter or flagged for further review if the voter had previously returned a ballot to the elections office. The ballot groupings expedite the counting of the many ballot styles.

> A sample Signature Verification Workflow diagram is included at the end of the chapter. Workflow diagrams can help staff and voters understand the elections office's processes. Election officials should consider including workflow diagrams in their procedures and make them available to the public.

Examples of categories ballots are sorted into include:

- Signature and address match
- Challenged Ballots
  - No signature on ballot envelope
  - Address or name does not match voter record
  - Signature does not match signature on file
  - Voter already returned ballot

Based on state law, elections offices establish internal procedures for managing returned mailed ballots with no signatures or if the signature does not match the signature on file. Many states rely on ballot curing to give voters a chance to fix or cure problems on their ballot envelope before rejecting their ballot. These options may include automatically mailing (if time permits) a notice to the voter notifying them that the ballot cannot be processed unless they correct the error by the statutory deadline. Depending on state law, the voter may have several options, including:

- Requesting a replacement ballot be mailed (if time permits)
- Signing the return identification ballot envelope at the elections office
- Providing a signature in another method authorized by law

Election officials compare digitized records or digital signatures to signatures on mailed ballots to verify the eligibility of absentee voters. Many jurisdictions utilize automated signature matching. This low-tech matching process can create efficiencies and uniformity in the signature verification process. If the elections office manually verifies signatures, election officials need to receive proper signature verification training. Training should include a section on how physical and cognitive impairments may cause signatures not to match. All rejected signatures should be subject to further review. Election officials should consider utilizing the following criteria as an example when comparing to the signature on file:

- Capital letters match
- Letters tail off alike
- Letter spacing is the same
- Space between signature and the line is the same
- Points where the signature begins and ends

> Election officials should review state law and regulations regarding signatures of voters who are, physically or otherwise, unable to sign their name.

- Beginning and ending of signature and the slant are consistent
- Unique letters match
- Overall appearances match

If it is determined that the signature does not match the voter registration card or digitized signature, election officials will notify the voter and take other action as allowable or required by state law.

Data Entry of Returned Mailed Ballots

For all mailed ballots that fall into the "signature and address match" category, the ballot is recorded as "returned" for that voter. Election officials should record the number of mailed ballots in this category on a data entry log daily. This number should equal the number of mailed ballots stored and flagged as "ready to open and process." For auditing purposes, election officials often bundle returned mailed ballots in their return envelopes into batches, number the batches, and label the bundles.

Replacement Ballots (if permitted by state law)

A replacement ballot is issued when a voter indicates that the original ballot was destroyed, spoiled, lost, or not received. Some jurisdictions require voters to complete and sign a replacement ballot request form. Once election officials receive a request for a replacement ballot:

- Verify that the voter has not voted another ballot or spoil the voter's previously submitted ballot if allowed
- Update the voter's record to reflect the issuance of a replacement ballot
- Issue the replacement ballot by mail or other means

Ballot Processing

Based on state law and local policies and procedures, mailed ballots are opened and separated from their envelopes through a series of processes before they can be scanned and tallied. Separate, two-person teams of election workers (preferably bipartisan) typically complete each stage of the process.

- The first stage is counting the ballot envelopes and verifying that the batch contains the number of ballots in their return envelopes, as noted on the data entry log strip. The opening team must ensure ballots remain separated by batch through the opening process.

- The second stage is separating the ballot from the envelope. During this stage, staff pulls the ballots from the envelopes and immediately places the envelopes into storage containers. In jurisdictions that use a secrecy sleeve, the ballot must also be removed from the sleeve.

- The third stage is the review stage (depending upon state law). During the review stage, staff reviews each ballot for possible duplication or adjudication (i.e., damaged ballots, identifying marks, write-ins, overvotes, etc.). The review team should record the number of ballots requiring duplication or adjudication on the log strip for each batch.

- The fourth stage is scanning. The ballots are scanned, often on central count scanners, and staff compares the total number of ballots scanned to the number expected based on the data entry log strip. After scanning, staff keep the ballots in their original batches and store them in secured containers.

- The last stage is tabulation. Election officials upload the scanned batches to the election management system tabulating the results. Election officials verify the results reflect the total number of ballots scanned.

Election officials should completely finish processing opened envelopes each day and securely store them at the end of the day. This ensures no envelopes in a batch are left unopened and forgotten about the next day.

> Election officials should should double-check that all envelopes are empty before storing ballot envelopes.

Ballot Review Process

Ballot review teams determine whether ballots should be counted, rejected, adjudicated, or duplicated. Ballot

review aims to ensure that all ballots are machine-readable, enabling the scanner to record the voter's choices accurately. If the ballot has damage or defects that would cause problems in tallying, election officials may duplicate the ballot if state law permits.

Election officials must follow state law in developing the elections office's process for determining voter intent. The process may occur before or after attempted tabulation, depending on the state. It is common for teams of at least two, often of differing political party affiliation per state law, to work together to determine voter intent.

Election officials should train the ballot review teams to check for questionable marks and write-in votes during the inspection. Questionable marks are:

* Marks that the ballot counting equipment cannot read
* A checkmark or an "X" in the voting area
* Voting area completed too lightly
* Voter's choice not marked in the voting area, such as a write-in with an unmarked arrow or circle
* Marks that could identify the voter
* Marks indicating the voter's change of mind
* Comments marked in the voting area

Determining Voter Intent

If the inspection board agrees on the voter's intent, responsible staff members should adjudicate or duplicate the ballot to reflect the voter's intent and count the ballot. If the inspection board does not agree on the voter's intent, the ballot should be challenged and forwarded to the canvass board.

Common scenarios requiring determination of voter intent include:

* Arrow or oval has been completed for one response, and a dot or partially completed arrow or oval is marked for the other

* Arrow or oval has not been marked, but the response is circled

* Arrow or oval has not been marked, but there is a connective line between the response and the arrow or oval to indicate the vote

* More than one arrow or oval has been completed, but a word or mark is used to indicate the correct vote

* A word has been used to indicate the vote instead of completing the arrow or the oval

Regardless of the vote tally system used, the duplication board will process ballots requiring duplication, making a duplicate ballot that is machine-readable and reflects the voter's intent. Duplicating and proofing must be done by at least two election personnel, often with different party affiliations if required by law. Each worker should initial both ballots and complete a duplicate ballot log indicating the batch number, ballot style, unique duplicate number, reason duplicated, staff initials, and date. Staff assigns a unique duplicate number to each ballot duplicated for tracking and auditing purposes and marks the original ballot with the same number as its duplicate.

Ballot Scanning and Tabulation

When the review teams have verified ballots for scanning, they should complete a batch form for each batch ready to be scanned. The form should include the originally assigned batch number and the number of ballots sent to the scanner, including any exceptions. Types of exceptions include: (1) no ballot in the envelope; (2) more than one ballot in the envelope; (3) ballot from the wrong election in the envelope, etc. By developing and maintaining an audit trail, the audit team can verify that all ballots returned are accounted for—and have been either challenged or scanned.

Staff should handle centrally counted ballots in batches, with each batch validated to the cumulative counter on the scanner. Election officials should maintain a central scanner log detailing the batch numbers and the number of ballots scanned per batch. If the scanner uses a memory card, the memory card should be appropriately labeled and identified on the scanner log sheet.

Managing Absentee Ballots at the Polls on Election Day

Depending upon state law, election officials must establish internal procedures for managing the return of absentee ballots delivered to the polls on Election Day and procedures for poll workers handling the ballots. Poll worker training must incorporate these procedures. Additionally, election officials can prepare flow charts detailing the steps to follow based on the specific voter scenario to assist poll workers on Election Day.

Storage and Security

All ballots and empty ballot envelopes should be boxed and sealed in tamper-evident containers. All other records—ballot return logs, duplicate logs, scanner logs, etc.—are stored according to federal and state retention rules. All challenged and provisional ballots that are not eligible to be counted should be stored separately.

> Consider storing ballots by precinct for auditing and recount purposes.

Election officials should prepare written security plans on the processing of absentee or vote-by-mail ballots. These plans should include the following details:

- Security at the printing facility

- Security for periods of ballot transportation (e.g., from the print shop to location of insertion; from mailing house to Post Office and from Post Office to election office other than regular mail delivery)

- Security for ballots during processing

- Security for ballot drop box locations

- Guidelines for security involving observers

- Security for election office work areas, buildings, and ballot storage (alarms, cameras, unique keys, limited keys)

- Security for vote tally systems, computer access security, and off-site storage for system backups.

At all times, election officials must maintain ballots in a secure location per written security plans and provide adequate supervision during all processing activities. Each elections office should maintain a log of who has access (keys, electronic codes, etc.) to secure areas. Election officials should consider installing secondary locks accessible only to authorized officials on election-specific dates to prevent unauthorized access.

> Motion detectors, video cameras, alarm systems, and other technology can supplement locks, alert election officials to after-hours entry, and can aid in identifying who has accessed the facility.

Voter Education

Election officials must ensure all voters can access absentee and vote-by-mail information. The elections office's website and informational materials should address how mail voting works in the jurisdiction, answer frequently asked questions, and provide contact information for the office. Important information to address includes:

- How to request a mail ballot (if necessary) with a link to the printable or online request form

- Deadlines for requesting, mailing, and returning the ballot

- Locations where voters can return ballots (e.g., drop boxes, elections office, in-person voting locations, etc.)

- How to confirm and update voter registration status and information with a link for online updates (if permitted)

- Elections office procedures for issuing, validating, and counting ballots

- How the elections office reports the results from absentee voting

Information online must also be available in other forms for voters without access to the internet. For jurisdictions covered under Section 203 of the Voting Rights Act, information should be available in all languages required in the jurisdiction. The U.S. Access Board provides resources on developing accessible printed materials and websites.

Election officials can find more information at **https://www.access-board.gov/ict/** or they can contact the Access Board at 800.872.2253 (v), 800.993.2822 (TTY), or 508@access-board.gov. Additionally, the U.S. Department of Justice issued guidance on website accessibility at **http://www.ada.gov/websites2.htm**.

Election officials can share materials with community partners and candidates to promote wider distribution. Candidates should be encouraged to provide information to voters about how to vote absentee by mail. Election officials can provide a scripted handout to all candidates and encourage them to use it for all campaign literature to ensure accuracy. Community partners, local high schools, community colleges, universities, and other governmental agencies can share information with their communities, students, and customers.

When mailing a voter's ballot, election officials should include concise instructions for the voter. Instructions should cover marking the ballot, completing necessary information (signing the return envelope, witness signature, or any other information the voter must provide), and returning the ballot to ensure it is counted. Simple visual aids can demonstrate how to fill in the oval or connect the lines to indicate selections on the ballot. If authorized by state law, the outside of the ballot envelope should contain a quick checklist and instructions to remind voters of common problems encountered (i.e., "Signature is required to count your ballot," postage amount required, etc.).

Conclusion

As voting by mail becomes more common, with more states opting to mail every registered voter a ballot or voters choosing to request a mail ballot, election officials respond with creative and innovative solutions to make the process efficient, accessible, and secure. Every elections office should have a documented procedure for sending, receiving, and counting mail ballots. The written procedure not only ensures uniform handling but can also inform the public of the steps election officials take to verify and secure mail ballots. After each election, election officials should review and update these policies and procedures as necessary.

Sample Signature Verification Workflow Diagram
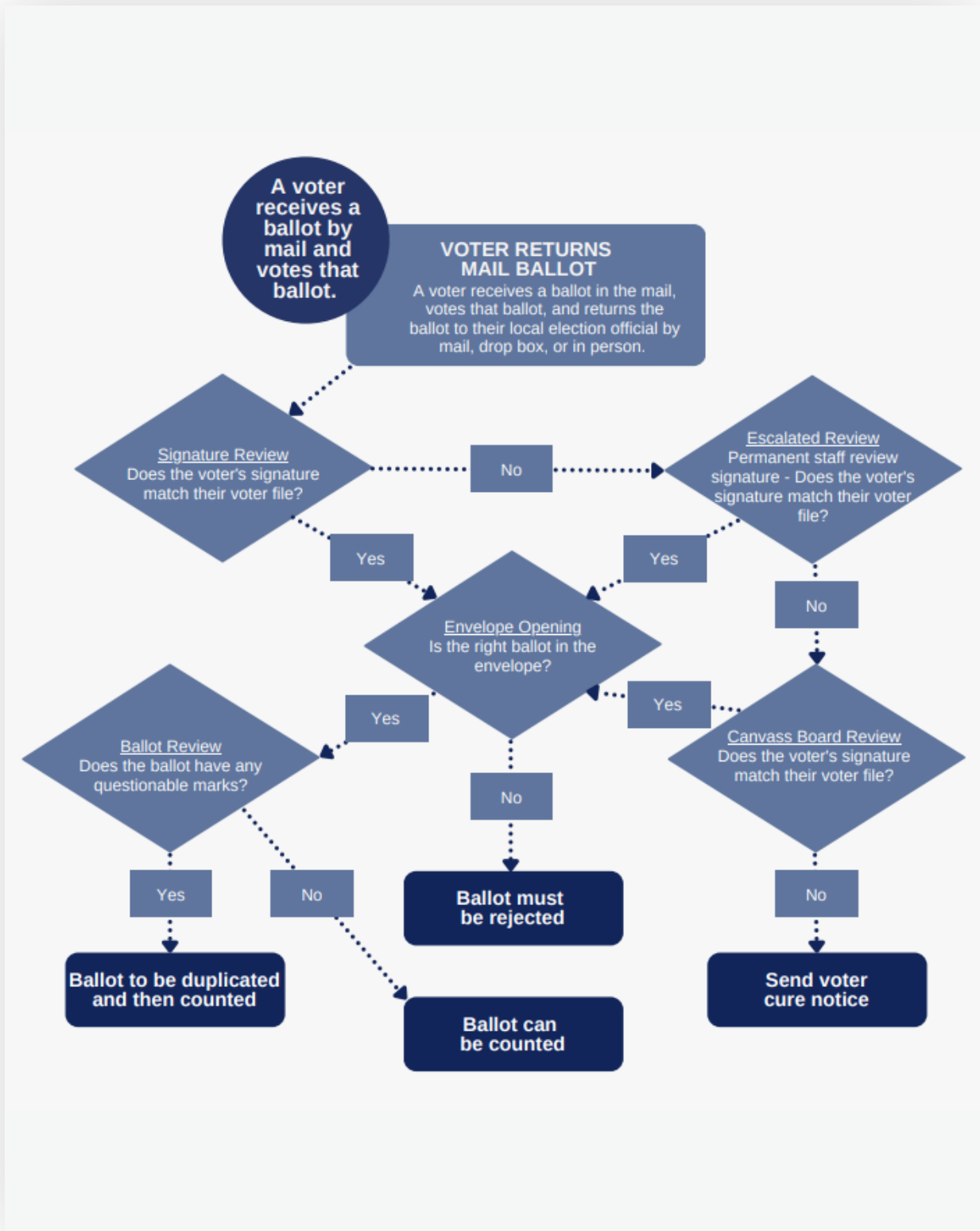
Uniformed and Overseas Citizens

The Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) of 1986 ensures the rights of Uniformed Services members, their families, and overseas citizens to register to vote and cast absentee ballots for federal offices. The Director of the Federal Voting Assistance Program (FVAP) administers UOCAVA on behalf of the Secretary of Defense in providing information on registration and voting resources to service members. FVAP serves approximately 5 million potential UOCAVA voters, including nearly 3 million overseas civilians; 1.4 million military members; 1.3 million military family members; and 100,000 Federal civilian overseas employees.[1] Additionally, FVAP provides state and local election officials with resources to enable them to better serve UOCAVA voters.

Updates to UOCAVA

Since 1986, Congress has passed several amendments to UOCAVA to address common obstacles UOCAVA voters face when applying for, receiving, and returning their ballots. While UOCAVA sought to protect the right to vote in federal elections, state laws and regulations and mailing delays proved challenging for many UOCAVA voters. Amendments to UOCAVA outlined new reporting requirements and rules to ensure UOCAVA voters receive their ballots in a timely manner.

Help America Vote Act (HAVA) of 2002

HAVA amended UOCAVA and requires each state and unit of local government which administered the election to submit a report to the EAC on the combined number of absentee ballots transmitted to UOCAVA voters for the election and the number of such ballots that were returned and counted in the election. States must report the data no later than 90 days after each regularly scheduled general election for federal office. The amendment also prohibits states from refusing to process registration or absentee ballot requests from UOCAVA voters because they submitted the form too early during the election year.

Military and Overseas Voter Empowerment Act (MOVE Act) of 2009

The MOVE Act amended UOCAVA requiring states to:

- Allow UOCAVA voters to request and receive blank absentee ballots by electronic transmission,
- Transmit requested ballots no later than 45 days before an election for federal office (when a valid request has been received by that date),
- Accept the Federal Write-in Absentee Ballot (FWAB) for all elections for federal office (including run-off and special elections),
- Accept registrations, absentee ballot applications, voted ballots, or FWABs that do not otherwise meet state notarization, paper, or envelope requirements, and
- Provide a free access system for UOCAVA voters to track receipt of their voted ballots at the elections office.

Frequently Asked UOCAVA Questions

Who is a Uniformed Services voter? A Uniformed Services voter is:

- A member of the Army, Navy, Air Force, Marine Corps, Space Force, Coast Guard, the commissioned corps of the Public Health Service, and the commissioned corps of the National Oceanic and Atmospheric Administration who, by reason of active duty, is absent from the place of residence where the member is otherwise qualified to vote.[2]
- A member of the Merchant Marine who, by reason of service in the Merchant Marine, is absent from the place of residence where the member is otherwise qualified to vote.
- A spouse or dependent of a Uniformed Services member who, by reason of the active duty or service of the member, is absent from the place of residence where the spouse or dependent is otherwise qualified to vote.

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[1] 2020 Election Administration and Voting Survey Report (EAVS) at p. 172 available at **https://www.eac.gov/sites/default/files/document_library/files/2020_EAVS_Report_Final_508c.pdf**; 2020 Overseas Citizen Population Analysis Report (September 2021) FVAP available at **https://www.fvap.gov/uploads/FVAP/Reports/OCPA-2020-Final-Report.pdf.**
[2]   Additionally, some states and territories extend UOCAVA to Nation Guard members who are activated on state or territorial orders. More information can be found in Chapter 2 of FVAP's Voting Assistance Guide available at **https://www.fvap.gov/uploads/FVAP/States/eVAG.pdf.**

What is the legal state of residence for a Uniformed Services member? The state where the Uniformed Services member has, or has had, physical presence and where there is the intent to remain or return. This is true even if many years have elapsed and the voter maintains no residence in the state or territory. Each state determines eligibility to vote and residency requirements.

Who is an overseas citizen? An overseas citizen is a person who resides outside the United States and, but for such residence, would be qualified to vote in the last place in which the person was domiciled before leaving the United States. Each state determines eligibility to vote and residency requirements.

> As of November 2022, 39 states and the District of Columbia allow eligable U.S. citizens who have never resided in the United States to register and vote where a U.S. citizen parent would be eligible to vote. Find additional information at **https://www.fvap.gov/citizen-voter/reside**.

What is the legal state of residence for an overseas citizen? The state or territory where the voter last resided immediately before departure from the United States, even if many years have elapsed, the voter maintains no residence in the state or territory, and the voter's intent to return to that state or territory may not be certain.

Below are some questions that may help determine a voter's legal state of residence:

- Where was the voter registered to vote?
- What state issued the voter a driver's license?
- Where is the voter's automobile registered?
- Where does the voter's family live?
- Where does the voter own property?

What ballots will UOCAVA voters receive? UOCAVA requires states and territories to allow Uniformed Service members, their families, and overseas citizens to register and vote absentee ballots in elections for federal office. In addition, laws in many states and territories also allow citizens covered by UOCAVA to register and vote absentee ballots in state and local elections.

How can UOCAVA voters register to vote and request an absentee ballot? UOCAVA voters can use the Federal Post Card Application (FPCA). UOCAVA dictates the FPCA is a single postcard that simultaneously serves as both an absentee voter registration application and an absentee ballot request. UOCAVA voters can complete the form in hardcopy or online using state-specific instructions in **FVAP's online assistant**.[3] At a minimum under UOCAVA the FPCA will be valid for all elections for federal office during the calendar year it is submitted.

What is a Federal Write-in Absentee Ballot or FWAB? A FWAB is an emergency or "back-up" ballot available for citizens covered under UOCAVA. It is used to vote in any election for federal offices and as otherwise permitted by state law. UOCAVA requires voters to meet the following criteria to use a FWAB:

- The citizen must be a member of the Uniformed Services or Merchant Marine (or eligible family member), or a United States citizen overseas who is absent from their place of residence where they are otherwise qualified to vote, and

- apply for a regular absentee ballot, using the FPCA, or another form as permitted by the state, early enough so that the local election official receives the request at least 30 days before the election or before the state's ballot request deadline, whichever is later, and

- not have received the requested regular absentee ballot from the state.

UOCAVA stipulates that voters may also return a regular absentee ballot after returning the FWAB, as the state ballot may offer other offices or referenda. Only one ballot is counted for each voter.

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[3] **https://www.fvap.gov/r3/fpca/state**

Communication with UOCAVA Voters

Military and overseas voters face unique challenges in registering to vote, requesting and receiving their blank ballots, and returning their voted ballots. Efficient communication is essential to ensure these voters can

> FVAP offers a communications toolkit for election officials. The toolkit includes graphics, template emails, and suggestions for timing communications. Find the toolkit at **https://www.fvap.gov/eo/overview/communicating-voters**.

participate in the democratic process. The best mode of communications for many UOCAVA voters is via email, which they often provide on the FPCA. Use email to acknowledge receipt and communicate any problems with the voter's ballot application or registration.

If a UOCAVA absentee ballot is returned undeliverable, take every step possible to obtain the correct mailing address for the voter.

- Double-check the mailing address on the return envelope and compare it to the address provided by the voter on the absentee ballot request.

- Contact a local family member of the voter for possible updated information.

- Request an updated address, for active duty service members only, through FVAP's Department of Defense database. Election officials can send an email to vote@fvap.gov with the subject "Address Update" and include the voter's name, date of birth, and if possible, the last four digits of their Social Security Number.

- Utilize telephone, fax, or email contact information provided on the FPCA. FVAP provides a no-cost fax service for election officials to send and receive election materials for voters who can ONLY receive materials by fax. Election officials can email materials to FVAP at fax@fvap.gov, and FVAP will fax the materials to the UOCAVA voter.

Ensure elections office websites are up-to-date with accurate information for UOCAVA voters. Create a page dedicated to UOCAVA voting information and include the following:

- Provide a link to the **Federal Voting Assistance Program**[4] website and direct links to the **FPCA**,[5] the **FWAB**,[6] **postage-paid envelope templates,**[7] and the **cover page**[8] (including secrecy waiver) for voters who choose to submit their FPCA or FWAB electronically.

- Display information on state-specific rules and regulations for UOCAVA voters.

- Provide contact information including email and, if possible, a toll-free phone number.

- Provide an online voter status search tool for UOCAVA voters, allowing them to verify their voter registration status. If ballot tracking for UOCAVA voters is maintained at the state level, include a link so UOCAVA voters can easily track their ballots.

- Provide a link to a list of candidates for the election, particularly as a resource for voters who need to use the FWAB.

Additional Resources for Local Election Officials

The EAC has been involved in developing best practices and reporting information on UOCAVA voting since the passage of HAVA. Every two years, the EAC collects information from all states and territories regarding policies affecting UOCAVA voters in addition to information on how many UOCAVA voters apply for ballots and ultimately have them counted. In response to challenges presented ahead of the

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[4] **https://www.fvap.gov/**
[5]   **https://www.fvap.gov/fpca-privacy-notice**
[6] **https://www.fvap.gov/fwab-privacy-notice**
[7] **https://www.fvap.gov/eo/overview/materials/forms**
[8] **https://www.fvap.gov/uploads/FVAP/Forms/coversheet.pdf**
[9] **https://www.eac.gov/events/2020/08/19/roundtable-discussion-uocava-and-accessibility-issues-during-covid-19-pandemic**

2020 Presidential Election, the **EAC hosted a roundtable** with state and local election officials and federal partners on serving UOCAVA voters and voters with disabilities during the Covid-19 pandemic.[9] FVAP maintains a specific page at **https://www.fvap.gov/covid-19** to provide updates and links to state specific election impacts and up-to-date US Postal Service and US Department of State operations status.

FVAP's **Voting Assistance Guide** is the official and primary source of UOCAVA absentee voting information.[10] The Guide includes state specific instructions and guidelines and provides information about FVAP products and services. While the Guide provides information for Voting Assistance Officers, it can also help local election officials understand the state approved information provided to military and overseas voters.

FVAP offers election officials an online training module on the basics of serving UOCAVA voters. Training is available at **https://www.fvap.gov/eo/training**. FVAP staff can also provide in-person training for local election offices at state-wide trainings, meetings, and conferences. FVAP publishes a periodic newsletter specifically for state and local election officials which can be subscribed to at **https://public. govdelivery.com/accounts/USFVAP/subscribers/new**.

Conclusion

UOCAVA safeguards the right to vote for military members, their families, and overseas citizens through specific requirements for state and local election officials. In addition to adhering to these requirements, election officials can provide clear information and utilize efficient forms of communication to better serve UOCAVA voters. Further, election officials should leverage FVAP resources to increase communication with and reduce barriers for UOCAVA voters.

[10] **https://www.fvap.gov/guide**

Voting Location Management

Depending upon state law, every registered voter can participate in democracy by voting in person before or on Election Day. Election officials are responsible for following state law when determining the number of voting locations, hours of operation, and which precincts to assign to each location. This chapter provides information about in-person voting, including selecting voting locations, evaluating accessibility, and setting up voting locations to best serve voters.

In-Person Voting Locations

On Election Day, most voters must vote at their precinct-based polling place. However, the use of advanced/early voting or Election Day vote centers are on the rise across the country. In November 2020, 21 states used vote centers, four more than in 2018. Image 1 shows which states provide vote centers. Among these states, eight required vote centers in all jurisdictions, and 13 allowed vote centers in certain jurisdictions or allowed jurisdictions to opt into this voting method. The main categories of voting locations include:

- Election Day Precinct-Specific Polling Places – Each voting precinct is assigned to its own polling place.

- Election Day Consolidated Precinct Polling Places – Two or more voting precincts are assigned to the same polling place. Consolidation is often based on several factors, including the number of voters in each precinct, the size and location of the polling place facilities, and the expected voter turnout for each polling place.

- Election Day Voter Center (jurisdiction-wide) – One or more vote centers strategically located throughout the jurisdiction where any voter in the entire jurisdiction can vote on Election Day.

- Early Voting Vote Center (jurisdiction-wide) – One or more early voting vote centers strategically located throughout the jurisdiction where any voter in the entire jurisdiction can vote during the designated early voting period.
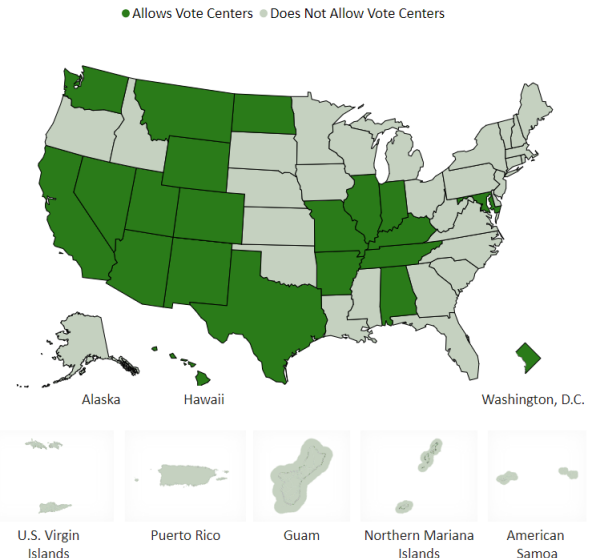

Image 1

Locating Polling Places and Vote Centers

Election officials rely on various resources to select suitable locations as polling places or vote centers. First, election officials should review state law for any legal requirements for voting locations. Some states limit the use of privately owned facilities, allow consolidating multiple precincts into one polling place, or permit jurisdiction-wide vote centers. Additionally, elections officials should consider the following factors when identifying potential voting locations:

- Accessibility requirements
- Expected voter turnout
- Building occupancy limits and parking availability
- Proximity of building location to voters being served
- Proximity to public transportation

Election officials should select voting locations to serve heavily populated urban cities and rural areas within the elections office's jurisdiction. Ideally, voting locations will remain constant from election to election. However, when election officials need to find new locations, they must evaluate several factors. Generally, election officials look for traditional polling places based on the neighborhoods the polling place will serve. Vote centers are typically located near heavy traffic areas, large residential areas, major employers, and public transportation routes in urban areas. In rural areas, vote centers in easily recognized civic centers within the community are ideal.

Types of buildings to consider using as voting locations include:

- Community Centers
- Large meeting rooms, i.e., public library, city/county government buildings, etc.
- Gymnasiums
- Sports stadiums
- Shopping malls
- Auto dealerships
- Grocery stores
- Church activity and community rooms
- School meeting rooms
- VFW, American Legion, and Masonic Lodge activity rooms
- Apartment clubhouses
- Country club meeting rooms
- National Guard and other training centers
- Retirement building meeting rooms
- Area business meeting rooms
- Individual homes—often garages are used

Election officials often rely on community support to provide much-needed space. Officials can establish partnerships within local governments and the community to build a database of all possible voting locations. Resources and potential partners include, but are not limited to:

- City and County Planning and Building Departments—election officials can contact the staff and request to be placed on any email list notifying recipients of any new permits issued for large buildings in their jurisdiction.

- County GIS and Mapping Department—election officials can partner with department staff to build a layer of data, including potential voting locations, parking, ingress and egress, contact information, etc.

- Area Chamber of Commerce—election officials can partner with local Chambers to develop outreach programs to all area businesses. Many businesses have large meeting rooms suitable for hosting voters on Election Day.

- Disability community organizations—can assist election officials in identifying and securing accessible voting locations.

Between elections, officials should continue to build upon the database of possible voting locations. In the event of last-minute emergency location changes, the database can provide alternative locations. **Chapter 4 – Building Community Partnerships provides more information on establishing community partnerships for voting locations.**

Once a potential location is identified, election officials must make initial contact with the property owner to gauge interest in hosting a voting location and request to visit the facility. The first meeting or phone call provides an opportunity for elections office staff to begin to develop a long-term commitment and relationship with each property owner to help ensure that voting locations stay as consistent as possible.

At the initial meeting, election officials should provide detailed information about the extent of the commitment required to host a voting location. Election officials should clearly communicate the number of days the facility will need to commit for each election. For example, most voting locations receive equipment and supplies the day before the election, must be open all day on Election Day, and store equipment and supplies until picked up the day after the election. Officials must ensure facility owners understand the three or more-day commitment. Additionally, election officials should provide:

- Security requirements
- Estimated voter and traffic volume
- Pre- and post-Election Day delivery and pickup procedures
- Election Day hours of operation
- Accessibility needs

All requirements can be summarized in a fact sheet and given to the owner. If the facility owner gives permission to use the location and it fulfills all other requirements, election officials should consult with legal counsel to develop a contract and formalize the commitment.

Special Considerations for Vote Centers

Many of the locations that traditionally make good precinct-based polling places will also work for vote centers; however, there are some additional factors to consider that may influence election officials when selecting vote center locations. Typically, jurisdictions utilizing vote centers offer fewer locations, which means each vote center typically serves more voters than a precinct-based polling place.

- Additional requirements for a vote center model include:
- Secure real-time communication line between the vote center(s) and the elections office's voter registration database
- Ability to display all ballot styles on ballot marking devices and DRE equipment, ability to print all ballot styles on demand, or ability to store and secure large quantities of paper ballots for every ballot style
- A team of skilled, trained, computer savvy poll workers
- Large, centrally located facilities equipped to handle many voters
- Sufficient parking area with easy ingress and egress
- Cooperative agreement with area law enforcement agencies to provide traffic control during peak voting hours

Accessibility Check

Before finalizing any building for use as a voting location, election officials must conduct an accessibility survey and needs assessment. The following information includes typical accessibility challenges for in-person voting locations. The examples can help election officials determine whether a polling place has basic accessible features most voters with disabilities need. Additionally, election officials can use the proposed temporary and permanent solutions to get ideas for improving accessibility at voting locations.

Portions of the following information are excerpts from the Department of Justice's ADA Checklist for Polling Places, dated June 2016. **https://www. ada.gov/votingchecklist.pdf**

Getting Started

An evaluation of voting location accessibility should focus on those areas of a facility that are important to voting. In addition to the voting area, election officials must evaluate parking for voters, drop off or loading areas, the entrance to the polling place, and the pedestrian routes (both exterior and interior) that voters use to get to the voter check-in and voting area.

Image 2: Sample of effective polling place accessibility signage.

Before evaluating a voting location, elections office staff responsible for the evaluation should review instructions for completing the facility checklist and become familiar with its questions. It is also helpful to practice taking measurements and recording information before beginning the evaluation.

Typically, the evaluation begins outside. Staff can assess the parking area, including locating accessible parking (if provided), a curbside voting area or drop box site (if permitted by law), and an accessible route to the entrance. At new voting locations, staff should look for areas that provide the best accessibility, where simple modifications may provide accessibility, or where it may be easiest to improve accessibility with temporary features.

Using the Polling Place Checklist

- A few simple tools are needed to measure the sizes and the slope of specific elements and spaces:
- Tape measure at least 15 feet long
- Level with a bubble measure or a digital measure at least 24 inches long for measuring slope
- One copy of the checklist for each location to be evaluated
- Extra paper for drawing the location layout

> Take photos of the facility and draw a floorplan of the voting area, including any access areas. Election officials can use the photos and floor plan for later review and planning voting location layouts.

One staff member can complete a survey of a voting location, but it is often quicker and easier for two people to work together. One can be responsible for taking the measurements and the other for recording the information and taking any photographs.

Taking Measurements

Sloped Surfaces

One way to measure slope is to use a 24-inch level with leveling bubble and a tape measure. Place the level on the incline in the direction to be measured. Rest one end of the level at the highest point of the sloped surface and lift the other end (as shown in the illustration) until the bubble is in the middle of the tube. This is the "level" position. While in the level position, measure the distance between the end of the level and the sloped surface below. If the distance is 2 inches or less, the slope is 1:12 or less. When the distance is greater than 2 inches, record the distance on the checklist so staff can calculate the exact slope later if needed.

Image 3: Measuring a slope using a 24-inch level and tape measure.

Slopes may also be measured using a digital level. The digital display replaces the bubble and typically gives a reading shown as a digital bubble, degrees, or a percent. Many digital levels require calibration before every use. If the digital display can display percent or degrees, the maximum slope generally allowed is 8.33% or 4.76 degrees (for a 1:12 slope).

Using the Tape Measure

When using the tape measure, ensure it is not sagging or bending, so the measurement is accurate. If the tape is not straight, try to support it in the middle or pull it tight and retake the measurement.

Image 4: Using a tape measure to measure the width of a parking space.

Measuring Door Openings

Measuring the clear opening of an accessible door requires special care. To measure the opening of a standard hinged door, open the door to 90 degrees. Place the end of the tape measure on the side of the door frame next to the clear opening (as shown). Stretch the tape across the door opening to the face of the door. This measurement equals the clear open width of the door, which is typically less than the width of the door.

Image 5: Measuring the clear opening from the face of the doorstop on the frame to the face of the open door.

Completing the Checklist

Many states provide local election officials comprehensive voting location checklists to ensure locations throughout the state comply with federal accessibility requirements. Additionally, officials can refer to the Department of Justice's **ADA Checklist for Polling Places**.[1] Each item on the checklist includes a reference to the technical requirements in the Code of Federal Regulations to assist users in looking up the requirement when necessary. An electronic copy of the Standards is available on the ADA Website at **www.ada.gov**.

Completed voting location checklists provide election officials information needed to determine which locations are accessible and which can be made accessible with permanent or temporary modifications. Checklists where most answers are "yes" will usually indicate an accessible voting location. Others, where some answers are "no," may become accessible if officials utilize permanent or temporary modifications to remove barriers. Voting locations in older buildings may have few accessible features. Still, some of these older facilities may be able to be made accessible with temporary modifications, such as portable ramps at the entrance and accessible parking spaces marked off by traffic cones. Some sites cannot be made accessible, and officials will need to either offer accessible voting in some other way or consider another location.

Typical Accessibility Issues at Voting Locations

The DOJ's accessibility checklist identifies common issues election officials may encounter in evaluating potential voting locations. These common issues are described below with recommendations on temporary solutions.

Getting to the Voting Location

When a voting location provides parking for voters, staff, and volunteers, it must include accessible parking for people with disabilities. Voters with disabilities arriving by car need an accessible parking space close to an accessible entrance. An accessible parking space has an adjacent access aisle that provides needed room for a person to open the car door fully and then stand with the aid of a walker, transfer to a wheelchair, or lower a wheelchair lift. The access aisle connects directly to an accessible route that leads to an accessible building entrance. The access aisle must be relatively level, clear of gravel or mud, and the surface must be in good condition without wide cracks or broken pavement.

> The ADA Compliance Brief: Restriping Parking Spaces provides information about the features of accessible car and van parking places and how many accessible spaces are required when restriping parking facilities. **https://www.ada.gov/restriping_parking/restriping2015.html**

An accessible route must connect the access aisle of each accessible parking space with the accessible entrance to the location. The route must include a curb ramp when the accessible route crosses a curb. A marked crosswalk should be provided on the vehicular route if the accessible route connects the access aisle to the accessible entrance using the parking lot surface.

Image 6: Van-accessible parking spaces serve both cars and vans. A wide access aisle is needed so a wheelchair lift may be lowered from the van onto the level surface.

Image 7: Accessible route from the parking lot to the voting location.

[1] **https://www.ada.gov/votingchecklist.pdf**

Temporary Solutions for Parking

Problem One: Parking is available, but no accessible parking is provided, or there is not enough accessible parking or van-accessible spaces.

Suggestion: Find a relatively level parking area near the accessible entrance and then designate the area for accessible parking spaces and adjacent access aisles. Use three parking spaces to make two accessible parking spaces with an access aisle. Traffic cones or other temporary elements may mark the spaces and access aisles. Provide a sign designating each accessible parking space and make sure the access aisle of each space connects to the accessible route to the accessible entrance.

Problem Two: No sign with the international symbol of accessibility is installed at each accessible parking space.

Suggestion: Provide a temporary sign in front of each accessible parking space.
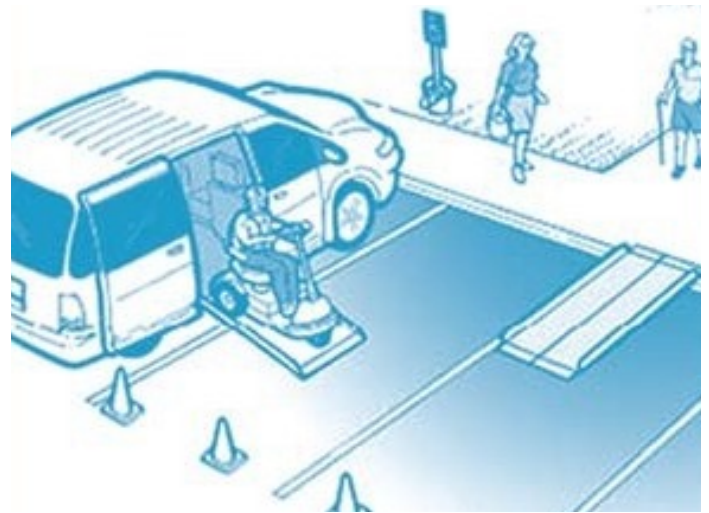

Image 8: Three standard parking spaces are converted into an accessible parking space with an access aisle. Cones mark the access aisle, and a temporary curb ramp with edge protection connects to an accessible route to the voting location.

Problem Three: Accessible parking is provided, but it does not have a marked access aisle next to each accessible space.

Suggestion: Restripe the accessible parking spaces to provide an access aisle. As a temporary solution for Election Day, use traffic cones to mark off the access aisle and curb ramp area. The first accessible parking space should be a van-accessible parking space with an access aisle at least 96 inches wide.

Problem Four: Accessible parking spaces or access aisles are on a sloped surface.

Suggestion: Find a parking area close to the accessible entrance that is more level. Provide accessible parking spaces and access aisles in that area. Ensure the accessible parking spaces connect to an accessible route to the entrance. Provide a sign designating each accessible parking space.

Image 10: By placing an orange cone in the adjacent parking stall, this polling place now meets van accessibility parking requirements.

Temporary Solutions for Passenger Drop-Off Areas

Problem One: A passenger drop-off and loading zone is provided, but there is no curb ramp between the vehicle area and the sidewalk leading to the accessible entrance.

Suggestion: Provide a portable ramp with edge protection in an area where the vehicle area and the sidewalk are relatively level. The curb ramp must connect to an accessible route to the entrance.

If the drop-off and loading zone is not relatively level, consider relocating the accessible drop-off area and using one parking space next to the area where accessible parking is located to provide an accessible drop-off and loading zone. Cones or another temporary barrier may be needed to keep the parking space clear.

Sidewalks and Walkways

There must be at least one exterior accessible route that connects accessible passenger drop-off areas, accessible parking spaces, and other accessible elements, for example, a route from a bus stop to an accessible building entrance. The accessible route is essential for people who have difficulty walking or use wheelchairs or other mobility aids to get to the voting location's accessible entrance.

An accessible route is at least 36 inches wide and may narrow briefly to 32 inches wide where there are utility poles, post-mounted signs, furniture, and doorways along an accessible route. Abrupt level changes, steps, or steeply sloped sidewalks cannot be part of an accessible route. If the route includes a ramp, it cannot be steeper than 1:12. Ramps with a vertical rise of more than six inches must have handrails on both sides. Ramps must also have edge protection to stop wheelchairs from falling off the sides and level landings at the top and bottom of each segment and where a ramp changes direction.

Temporary Solutions for Sidewalks and Walkways

Image 11: An accessible entrance to a voting location with accessible parking and an accessible drop-off area. 1 – Accessible route. 2 – Accessible drop-off area. 3 – Accessible parking with van-accessible parking space. 4 – Accessible entrance to the voting location.

Problem One: The sidewalk connecting parking to the polling place entrance is too steep to be accessible.

Suggestion: Check if another sidewalk provides an accessible route to the accessible entrance. Sometimes, a less direct route can serve as the accessible route.

Problem Two: The accessible route crosses a curb, and there is no curb ramp.

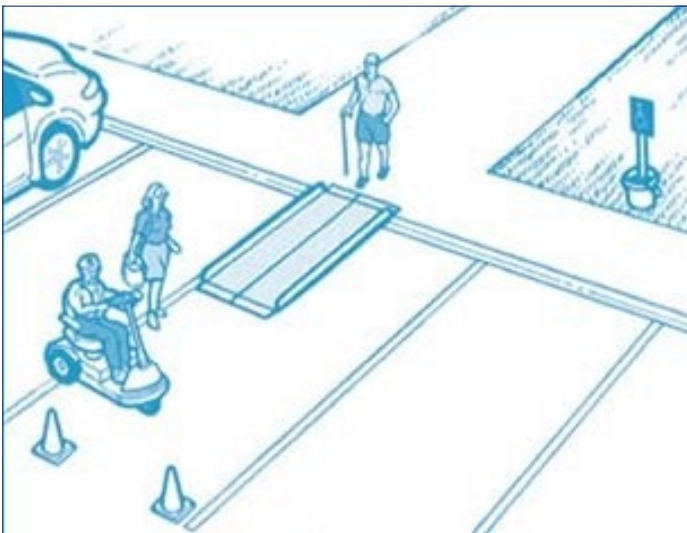**Suggestion:** Install a portable ramp with edge protection.

Image 12: A portable ramp with edge protection is installed over a curb to provide an accessible route.

Building Entrances

An accessible voting location must have at least one accessible entrance. An accessible route must connect the accessible entrance to the voting area. An accessible entrance must provide at least one accessible door with maneuvering space, accessible door hardware, and enough clear width to allow people who use crutches, a cane, walker, scooter, or wheelchair to use it.

If the accessible entrance is not the main entrance to the voting location, signs must be located at inaccessible entrances to direct voters to the accessible entrance. The accessible entrance must remain open when the voting location is open.

Image 13: Example of a voting location.

Temporary Solutions for Accessible Entrances

Problem One: One or two steps at the entrance prevent access.

Suggestion: If another entrance is accessible and on an accessible route from accessible parking, designate it as the accessible entrance and install a directional sign at the main entrance directing voters to the accessible entrance. Keep the accessible entrance unlocked during voting hours.

If another accessible entrance is not available, install a temporary ramp with edge protection and handrails.

Image 14: EAC sample of effective voting location entrance signage.

Problem Two: There is a small step at the entrance.

Suggestion: Install a short temporary ramp to provide a smooth transition.

Image 15: Example of a voting location entryway made accessible by placing a wooden ramp over the entry threshold.

Problem Three: Entrance door threshold has an abrupt change in level of more than 1/4 inch and no beveled sides.

Suggestion: If the threshold is not more than 3/4 inches high, add beveled surfaces to both sides of the threshold or replace it with a new threshold that is no more than 1/2 inch high and has beveled sides.
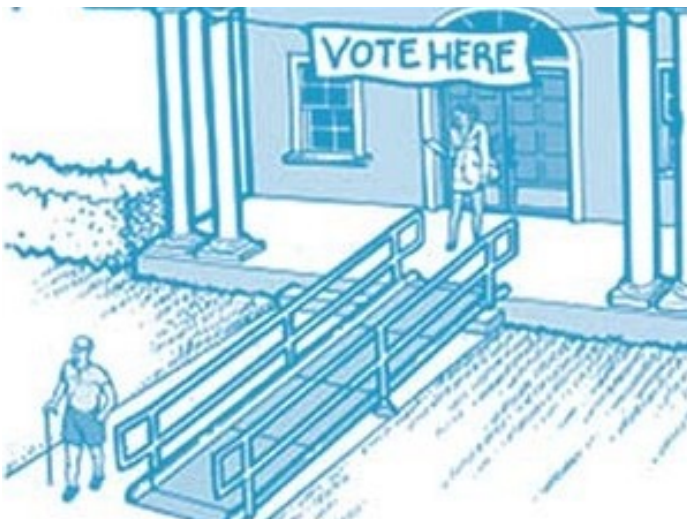

Image 16: A portable ramp with handrails and edge protection is installed over a step(s) at the entrance of a voting location.

Problem Four: Entrance door to the building is heavy and difficult to open.

Suggestion: Keep the door propped open or station volunteers near the door to open it for voters.

Image 17: Include a doorstop inside the poll worker ADA supply kits to prop open the doorway to the voting location

Problem Five: Door handle or latch at the entry door is not accessible.

Suggestion: These are three typical solutions: add an accessible pull or handle to the outside of the door and leave the door unlatched, install an accessible door handle and hardware, or leave the door propped in an open position.
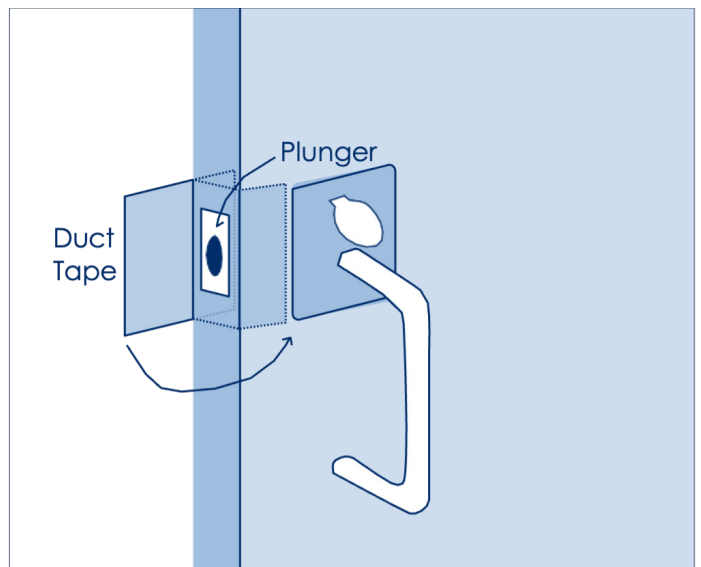

Image 18: Include duct tape in the poll worker ADA supply kit. Instruct poll workers to use the tape on the door plunger on the outside door.

Voting Area

The accessible voting area must be on an accessible route, have an accessible entrance, and have adequate circulation and maneuvering space for voters who use wheelchairs or scooters or walk with mobility aids.

Image 19: Example of the accessible interior voting area.

An accessible route must connect the accessible building entrance to the accessible voting area, including voter check-in, the location of the accessible voting machines, and an accessible exit. The survey should also identify any protruding objects (wall-mounted or overhead) along the circulation route to voter check-in and the voting area.
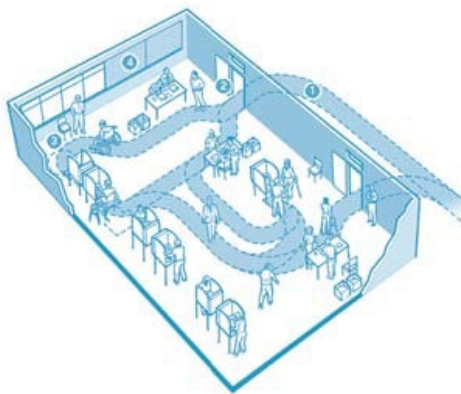

Image 20: Voting area accessibility. 1 – Accessible route connects the building entrance with the voting area, including voter check-in and accessible voting machines. 2 – Accessible door or doorway to the voting area. 3 – Turning space at the accessible voting machine. 4 – Blinds closed behind check-in so voters who read lips can communicate with the voting staff.

GIS and Voting Locations

GIS is a software system for capturing, storing, and displaying data in interactive maps. In simple terms, GIS can combine different datasets such as addresses, streets, buildings, aerial photos, voting precincts, and district boundaries into a single digital map. GIS can yield great benefits by applying data visualization to assist with selecting voting and drop box locations, creating voter-specific look-up tools, displaying detailed election results and, more. GIS can also be used to increase the accuracy of voter registration systems.

Geocoding

For accuracy, election officials can overlay several GIS datasets to examine addresses, precincts, and districts boundaries. A process known as geocoding will assign a point on the map for every address in a street file. Election officials can compare the points to other information, including precinct and district boundaries, in the GIS workspace to identify discrepancies. The comparison can be a useful tool to validate changes made to precinct and district boundaries in election management systems. See the EAC's **Local Election Officials' Guide to Redistricting** for additional information.[2]

Selecting Polling and Drop Box Locations

GIS databases are a great tool to create efficiencies when managing voting locations. Election officials can use GIS data such as population demographics and public transportation routes to strategically locate voting locations and drop boxes in areas that are accessible to voters. Potential voting locations can also be pre-assessed by examining aerial photos of parking lots and accessible paths of travel before traveling to locations to confirm they meet accessibility requirements.

Voting Location Look-up Tools

Helping people find their voting location is an essential part of election administration. Election officials can use GIS to create address-specific look-up tools like other familiar map applications. The look-up tool's configuration can include

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location-finding features, such as displaying how far the voting location is from a current location and guidance on reaching the voting location on foot, by vehicle, or with public transportation.

> Election officials should take steps to protect all personal identifying voter information when creating a public GIS database. For example, the only fields necessary for voting location and drop box look-up tools are residential addresses and associated location information.

Voting Location Management

Voting location management incorporates all facets of operating a business that provides a service to the general public. As in every business operation, success depends upon:

- Having the right location
- Easy and accessible entrance and exit to the building and parking area
- Signage that is easy to read and identifies the building as a voting location
- Plenty of nearby parking
- Friendly, courteous, and well-trained poll workers and support staff
- Easy to follow voter instructions
- Sufficient supplies (i.e., ballots, pens, envelopes, etc.)
- Line management techniques
- Easy access to information
- Appreciation for participating in the voting process
- Opportunities to provide feedback and recommendations to improve the process

Election Day voting location management is a unique business because locations are spread throughout the jurisdiction and are open for a 12 to 13-hour period. On all other days of the year, the buildings serve other purposes. Voters (customers) can choose to vote at any time during the 12–13 hour period.

However, there is typically a peak voter turnout period in the early morning and again in the early evening hours—before and after work in most jurisdictions.

Jurisdiction-wide vote center management incorporates all the techniques used to manage Election Day polling places and more. Locations where any voter in the jurisdiction can vote at any time require proper planning to ensure that voters do not encounter traffic congestion, lack of parking, and long wait times. Vote centers require an electronic connection with the voter registration database so voters' check-ins are automatically updated in real-time, ensuring that no voter can vote twice in an election.

Voting Location Setup

The internal layout of the voting area is critical to the success of the voting location. It is important to consider several factors when developing the layout of each vote location:

- Number and size of rooms to be used
- Accessibility
- Electrical outlet availability and capacity
- Cellular phone connectivity
- Computer network capacity (for vote centers)
- Number of staging areas required for voter processing (e.g., areas for completion of forms, computer check-in, ballot distribution, voting area, and exit area)
- Security measures
- Voter privacy

Some elections offices provide interior layout diagrams for each voting location. The diagrams help poll workers set up the location as officials have planned. Election Day technicians or rovers can also verify that all voting locations are open to the public and set up according to elections office policies and procedures. Election officials can provide a checklist for each location and ask the rover to complete the checklist and return it to the elections office. The checklists become a part of the official election audit trail.

Election officials should develop checklists for opening and closing the polls. Train poll workers to always work in teams of two (preferably bipartisan) to complete the opening and closing procedures and when managing the voting equipment and distributing ballots throughout Election Day. Poll workers need to understand the importance of each policy and procedure election officials need them to implement. During training sessions, election officials should explain why each procedure is in place. For example, if voters cannot return absentee ballots to the voting location on Election Day, be sure the poll workers understand that this is a state law and how they should advise voters to return their absentee ballots.

Programmatic Accommodations and Acoustics

> Flow charts can help poll workers when processing voters. Consider providing flow charts with information on how to process all types of voters poll workers may assist on Election Day.

In addition to the built environment's accessibility, programmatic accommodations can make the voting experience easier for voters with disabilities. Election officials can seek inexpensive, tangible solutions, such as providing chairs for individuals who have difficulty standing in a line at the voting location. Similarly, election officials can place a chair near the accessible voting system. Poll workers can post voting instructions in large print and other languages. Intangible accommodations might include assisting a voter at a voting station if requested.

Loud environments can increase the stress level for everyone, but it is especially stressful to voters who are hard of hearing. Individuals who depend on hearing an audible ballot may need the accessible voting system placed in a quiet area. Election officials can use inexpensive, portable assistive listening devices. These devices may help voters and poll workers with hearing loss understand speech in noisy situations.

> Simple solutions can reduce echo and audio reflection, such as cloth table covers, framing and draperies, rugs on the floor, etc.

Exterior and Interior Signage

All voting locations must be visible and easily identifiable from the street. The EAC has compiled types and examples for effective sign design at **https://www.eac.gov/election-officials/designing-polling-place-materials**. Examples of exterior and interior signage include:

Image 21: EAC's sample of exterior signage.

Image 22: EAC's sample interior signage.

Managing Parking and Traffic Control

Vote center locations are selected based on easy access and sufficient parking. Developing a contingency plan for managing peak voter turnout days and times is essential. For example, the days preceding a Presidential election are peak voting days at vote center locations. Management of voter traffic and parking and internal line management are all factors leading to a successful election.

A contingency plan for managing these peak turnout days would include:

- Additional staff or poll workers;
- Parking attendants; and
- Traffic control officers.

Image 23: Adequate interior signage and ballot box security are required.

GIS on Election Day

Some jurisdictions track the opening and closing of the polls through GIS on Election Day. For example, election officials can task each precinct lead poll worker with updating the elections office after the polling place has opened on Election Day. At the central elections office, election officials can use this information to track if polls are having difficulties allowing them to take remedial action to fix the problem as soon as possible.

Additionally, election officials can use GIS to track how long it takes to vote at each location and use the information for resource allocation decisions. Poll workers must collect data and upload the information into a centralized database. Election officials can share the data with voters in real-time on web apps accessible during voting hours or store and analyze the data after the election to inform resource allocation or site selections in future elections.

Preparation and Distribution of Supplies and Equipment

Equipment and supply delivery is handled in various ways, depending upon state law and local practices and procedures. Elections office staff, a delivery company, or poll workers may deliver voting supplies and equipment to Election Day voting locations Chapter 16 – Developing an Audit Trail provides more information on distributing and tracking voting supplies and equipment.

Polling place supplies include everything from the precinct registration list to pencils, pens, ballot boxes, portable booths, outdoor and indoor signage, and "I Voted" stickers. Election officials should equip every location with supplies to assist voters with disabilities, which commonly include:

- Voting supplies – Election officials should provide pen and pencil attachments to make the writing utensils easier to grasp. Print all voting instructions in large type. Provide magnifying glasses for voters with visual impairments, and modify at least one voting booth for voters who use wheelchairs or prefer to sit while voting.

- Facility Modification Supplies – Election officials should provide temporary equipment and materials (e.g., threshold ramp, curb ramp, etc.) to make entrances accessible as needed.

- Signage – Election officials should provide "Accessible Parking" signs to voting locations to reserve parking for disabled voters, as needed. Poll workers should strategically place directional signs to indicate the location of these parking spaces for maximum visibility. Voting location setup instructions should direct poll workers to post "Accessible Entrance" signs to direct voters to an alternate entrance when the main entrance is not accessible.

- Accessible parking – If needed, provide large orange cones to designate a van-accessible parking spot. Instruct poll workers to identify the closest parking to the voting location entrance on an accessible route of travel and block off the space to the right with cones to create an access aisle and place a sign in front of the parking, designating it as "Accessible Parking."

- Accessible path of travel – If needed, rubber mats should be provided to cover gratings along the path of travel that may be hazardous to voters with disabilities.

- Accessible entrances – If needed, doorstops should be provided to hold the doors open and mitigate potential barriers. Include instructions on temporarily resolving inaccessible door hardware such as round knobs or thumb latches.

Election officials may distribute some supplies to poll workers in the days leading up to Election Day. In contrast, other generic supplies are often delivered to the voting location with the voting equipment. Poll worker training should incorporate specific guidelines on confirming receipt of correct supplies and what to do if something is missing.

Methods used for packaging the supplies can impact the successful setup of a voting location. For example, some jurisdictions package the supplies based on the area to be set up:

- Supplies for the registration check-in table are packaged in one container
- Supplies for the provisional ballot table are packaged together
- Indoor and outdoor signage is packaged separately, etc.

Packing by area allows the poll workers to separate supplies and set up the location efficiently before polls open. Color coding helps poll workers quickly identify which supplies need to be delivered back to election headquarters on election night. Laminated reminders packaged within the supplies also serve as visual aids for poll workers. Officials should consider strategically placing these reminders in areas of critical importance.

Tracking Equipment

Many jurisdictions use vendors or other governmental agencies to deploy and retrieve voting equipment during early voting and on Election Day. Election officials typically use checklists to track outgoing and incoming voting equipment. However, even with checklists tracking voting equipment can be a daunting task. Some election officials use Radio Frequency Identification (RFID) or Bluetooth tracking technology instead of equipment checklists. Election officials who use RFID tracking install readers through which all equipment passes and embed a unique RFID chip in each piece of equipment. The RFID readers recognize the chip in the equipment and electronically record outgoing and incoming information. This technology makes it easier for election officials to know which polling places have not returned their materials and address the problem.

The security of the voting technology is of great concern, and election officials take significant steps to secure all equipment. When deployed, the Global Positioning System (GPS) technology allows election officials to track and maintain the chain of custody of the voting systems. GPS technology can also track drivers as they deliver equipment and supplies. Like RFID chips, GPS tracking information allows election officials to document the time at which voting equipment left the elections office, when it arrived at the voting location, and when it was returned. Drivers follow specific routes and, using GPS technology, any deviation from the predetermined path alerts the elections office. All chain of custody information can be recorded and maintained as part of the election audit trail. Strong chain of custody documentation can prove particularly important in the event of a contested election.

Command Center Staffing, Training, and Support

In addition to hiring hundreds or thousands of poll workers to run Election Day voting locations, election officials must provide adequate support staff to troubleshoot issues that arise throughout Election Day and respond to voter calls. Elections offices become formal or informal command centers supporting voting locations. Support for Election Day activities begins in the early morning hours before polls open. It continues until polls close, poll workers shut down the voting locations, and they return election materials to the elections office. Rovers provide a link between the command center and voting locations—traveling between locations to deliver needed equipment or supplies and fix problems.

Rovers and command center staff both require extensive training in their roles. Training must include troubleshooting common issues with voting equipment, facilities, and opening and closing procedures for rovers. Typically, rovers cover multiple voting locations in a geographical area. Election officials should prepare contact information for each rover, including phone numbers for the facilities and the lead poll worker at each location in their area. Command center staff require training on the phone system, any software used to track inquiries and dispatch rovers, and how to answer frequent poll worker and voter questions. Election officials can use software to categorize and track issues and their resolution, providing important data for post-election review.

The elections office may employ a dedicated phone line for poll workers and a separate line for the public. Election officials should review the capacity of the phone system before each election. Providing voter look-up tools on the elections office's website may relieve the number of calls from voters. The website should address frequently asked questions and allow voters to check their registration status, find their voting location, and review their sample ballot.

Conclusion

Whether using precinct-based polling places or jurisdiction-wide vote centers, selecting voting locations is critical to the election. Most election officials prefer to use the same locations from election to election. However, if it is necessary to change or add a new location, election officials have many resources to assess the desirability of any given facility. Providing a positive in-person voting experience goes beyond choosing ideal physical spaces. Additionally, election officials must ensure voting locations are adequately supplied and staffed with competent poll workers.

Provisional Ballots

The Help America Vote Act (HAVA) of 2002 established the federal requirement for providing provisional ballots in federal elections.[1] Provisional ballots are ballots cast by voters whose eligibility cannot be determined at the time of voting. Before HAVA, 17 states and the District of Columbia provided provisional ballots. After HAVA, 49 states, territories, and the District of Columbia allow voters to cast provisional ballots.[2]

Voters cast provisional ballots for a variety of reasons, and many states have created various additional applications for fail-safe ballots. For federal elections, however, HAVA outlines the two circumstances under which states must provide provisional ballots: (1) if the voter's name does not appear on the list of eligible voters or an election official asserts the voter is not eligible and (2) if a judge extends polling place hours, all voters casting ballots during the extension must cast provisional ballots. Election officials must plan to facilitate provisional voting, including training poll workers, staff, and canvassing boards; allocating provisional ballots and supplies to polling places; and securing the ballots for the post-election canvass.

HAVA and State Requirements

First, states must make provisional ballots available to voters if "the name of the individual does not appear on the official list of eligible voters for the polling place or an election official asserts that the individual is not eligible to vote…"[3] As long as the voter signs an affirmation that they are registered in the jurisdiction and eligible to vote, they can cast a provisional ballot.

Although HAVA requires that voters attest to their eligibility to vote within a jurisdiction, it is left to the states to outline the meaning of "jurisdiction." In some states, a voter may cast a provisional ballot in any precinct in the state, regardless of the locality in which the individual is registered, and have that provisional ballot counted, assuming the voter meets all other eligibility requirements.

These states authorize local election officials to count the votes on the portion of the ballot that the provisional voter would have been eligible to vote had they cast a ballot in their home precinct. In other states, a voter must cast the provisional ballot in the precinct in which they are eligible to vote for the provisional ballot to count.

Second, HAVA requires that provisional ballots be available when, during a federal election, a federal or state judge extends polling place hours.[4] All voters who cast ballots during the extended hours must cast provisional ballots, and poll workers must keep them separate from provisional ballots cast during regular voting hours. This requirement allows a judge to determine, after Election Day, the validity of the order to extend polling place hours and allows election officials to easily identify the cast ballots as part of the order.

HAVA mandates that voters can check the status of their provisional ballot after it is cast. State or local election officials must establish a free access system through which a voter "will be able to ascertain…whether the vote was counted, and, if the vote was not counted, the reason that the vote was not counted,"[5] if the provisional ballot was cast pursuant to HAVA. Federal law also requires that voters be provided written information regarding this free access system when they cast their provisional ballot, provided the provisional ballot was cast for one of the two federally mandated reasons.

States use provisional ballots in additional instances as provided by state law. The following examples illustrate some state-mandated reasons for using a provisional ballot:

- A voter's name does not appear on the official list of eligible voters at the polling place on Election Day during a non-federal election

- A voter changes his or her name or moves within the jurisdiction and fails to update his or her registration before the election

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[1] See 52 U.S.C. § 20901 et seq.
[2] 2020 Election Administration and Voting Survey (EAVS) at p. 16 available at **https://www.eac.gov/sites/default/files/document_library/files/2020_EAVS_Report_Final_508c.pdf**. Idaho, Minnesota, New Hampshire, North Dakota, Vermont, and Puerto Rico do not offer provisional ballots.
[3] 52 U.S.C. § 21082(a).
[4] 52 U.S.C. § 21082(c).
[5] 52 U.S.C. § 21082(a)(5)(B).

- Another person challenges a voter's qualifications, and the poll worker cannot resolve the challenge

- A voter does not have proper identification

- A voter was issued an absentee ballot, chooses to vote on Election Day instead, and does not have the ballot to surrender to poll workers

- A voter is not a resident of the precinct in which he or she is attempting to vote

- A voter has been convicted of a felony, and the jurisdiction has no record of the restoration of voting rights

- A same day registration voter

Additionally, some states allow unregistered voters to cast provisional ballots. The wide variation in uses for provisional ballots leads to wide variations in the number of provisional ballots issued, and ultimately counted, in each state during an election cycle.

Procedures and Training

Federal and state requirements inform the procedures election officials develop to guide supplying, issuing, tracking, and canvassing provisional ballots. The elections office's standard operating procedures (SOPs) should address the handling of provisional ballots from plans to supply the ballots through retaining provisional ballots and envelopes after certification. Many states provide the form for provisional envelopes and affidavits and set requirements for the number of provisional ballots to send to Election Day polling places. Local election officials may have internal policies to round up the supplies and ballots sent out on Election Day. Additionally, election officials can use the information gathered to estimate ballot and supply quantities to determine staffing needs. Elections that tend to produce more provisional ballots will also require more poll workers and office staff to handle Election Day and post-election administration. SOPs should reflect the policies the elections office follows in allocating ballots, supplies, and staffing.

SOPs can further include guidelines for issuing and counting provisional ballots. Issuing provisional ballots can create confusion and delays, especially on Election Day. Election officials can develop clear guidelines and use them for training poll workers and office staff who will process provisional ballots after Election Day. The SOPs should include samples of the instructions that poll workers will use.

Finally, include procedures for the post-election review and canvass of provisional ballots. Procedures for curing, reviewing, and counting provisional ballots vary significantly across states. SOPs should include the jurisdiction's processes for researching the eligibility of every provisional ballot cast. Often this research is completed by teams (preferably bipartisan) of office staff who then make recommendations for counting or rejecting the ballots to a canvass board.

Many states have developed statewide standards and rules for processing provisional ballots to ensure local election officials or canvass boards count provisional ballots in a uniform manner. Local election officials must incorporate state-issued guidelines into internal office policies and procedures for administering provisional ballots. An example of the Kansas Secretary of State's guidance to local election officials on determining whether to count provisional ballots is included at the end of the chapter.

Poll Worker Training

Election officials must train poll workers to identify provisional voters, provide the correct ballot style, assist with completing necessary forms or affidavits, and maintain the chain of custody of provisional ballots. In addition to providing step-by-step instructions on Election Day, election officials should review the process with poll workers during training. Training should cover:

- Posting required information on the right to vote a provisional ballot for federal contests[6] and a polling place map at the entrance to all locations

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[6] 52 U.S.C. § 21082(b).

- Checking in provisional voters, identifying their precinct, and providing the correct ballot style

- Finding the correct polling place for voters who appear at the wrong location

- Completing voter registration forms or affidavits as required in the jurisdiction

- Providing information to the provisional voter on the jurisdiction's free access system

- Tracking and securing voted and unused provisional ballots

In jurisdictions that use traditional precinct polling places, poll workers should be trained to determine whether the voter is in the correct polling place and, if not, to direct the voter to the correct location. Poll workers should make every effort to direct a voter to the correct polling place, especially in jurisdictions that count only those provisional ballots cast in the proper precinct. Election officials can require poll workers to post a map of all polling places in the jurisdiction at each polling place entrance. For jurisdictions that provide information in multiple languages, the map should be available in the alternative languages. In addition, election officials may require Election Day greeters to explain the map to voters as they enter the polling place. This proactive approach may help voters determine if they are in the correct polling place.

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> Consider posting a jurisdiction-wide map of all polling places with a shaded portion indicating which voters are eligible to vote in the polling place. Include the tagline, "If you live in this area, you VOTE HERE."

Election officials provide different methods for poll workers to find a voter's correct polling place. In jurisdictions using electronic pollbooks, poll workers can often look up any address in the jurisdiction and find the correct precinct and polling place. Others may provide a laptop or countywide paper street indexes with the same information. Election officials should include training on how to look up polling

places. If poll workers cannot identify the proper location, election officials should encourage poll workers to call the elections office or Election Day command center for additional assistance.

Voters can cast provisional votes on hand-marked paper ballots, ballot marking devices (BMD), or on direct recording electronic (DRE) voting machines as allowed by law. Election officials train poll workers on the process to cast a provisional ballot, as applicable. If the jurisdiction is using paper provisional ballots or BMDs, poll workers should instruct voters to seal their provisional ballots into the completed ballot envelopes. Voters cast the ballots by placing them into a secured ballot box. If the provisional ballots are being cast due to a court-ordered extension of polling place hours, train poll workers to keep these provisional ballots separate from the provisional ballots cast for other reasons.

Voters can also cast provisional ballots on DREs. In jurisdictions using DREs, election officials should train poll workers on how to operate the DRE for provisional balloting and record the provisional ballot number on the electronic voting machine screen. Poll workers can instruct provisional voters using electronic voting machines to complete all necessary paperwork and return it to the poll worker before casting their provisional ballots.

Poll workers need to understand the forms provisional voters must complete. Failure to complete a provisional affidavit may result in the rejection of the provisional ballot. At training, election officials should review the necessary forms and information the provisional voter must complete and provide poll workers samples of properly completed forms on Election Day. Encourage poll workers to look over provisional voters' forms to ensure completeness.

Throughout Election Day and after polls close, poll workers must secure all provisional ballots cast and account for their chain of custody. When training poll workers on provisional ballot procedures, election officials must emphasize the methods of securing and returning provisional ballots to the elections office. Training should include actual forms election officials expect poll workers to complete on Election Day, including forms reconciling the number of provisional

ballots cast with the provisional voters checked in. Some jurisdictions will use a separate provisional ballot envelope to separate from regular ballots and maintain custody of provisional ballots with a provisional ballot log.

Finally, election officials need to train poll workers on how to discuss provisional voting with voters. Most provisional ballots cast are counted in official results, but many voters believe voting provisionally means their ballots will not count. Election officials should educate poll workers on the provisional process, so they can respond to provisional voters' concerns with accurate information. Poll workers can provide information on the post-election provisional canvassing process and how to check the status of provisional ballots using the free access system.

Early Voting and Election Day Administration

Providing a dedicated check-in station for provisional voters decreases wait times and ensures consistency and efficiency in administering provisional voting at every polling place. If early voting staff or Election Day poll workers cannot locate a voter's registration or other conditions for provisional voting are met, they direct the voter to a separate check-in table where staff or poll workers facilitate the provisional voting process. Because provisional voters tend to take longer to check-in, a separate table allows the regular check-in line to flow normally for voters while ensuring that provisional voters are processed efficiently.

Jurisdictions that typically offer hand-marked paper ballots for provisional voters should also prepare to use the accessible ballot marking device for provisional voting. Additionally, election officials need to consider the accessibility of provisional voting envelopes and affidavits. Write instructions in plain language and, if possible, provide large font and braille versions of any forms the voter needs to complete or review.

Tracking Provisional Ballots

Election officials need to know how many provisional ballots have been cast throughout an election cycle and provide for their secure storage. In jurisdictions that allow in-person early voters to cast provisional ballots, election officials must track the number of provisional ballots cast each day of early voting and secure them in a limited-access location for post-election review. Similarly, after the polls close on Election Day, poll workers must reconcile the number of provisional ballots cast and secure the ballots or memory devices for their return to the elections office.

The tabulation of provisional ballots will not occur on Election Day and, thus, will not show up in the unofficial results released to the public on election night. However, many states require elections offices to publicize the number of provisional ballots cast. This information is especially important in close races when the number of uncounted provisional ballots exceeds the margin of victory reflected in the unofficial results.

Election officials account for provisional ballots separately from regular ballots since their validity needs to be confirmed by verifying the voter's eligibility before being counted. During early voting, staff should complete a transmittal sheet at the end of each day with the number of provisional ballots cast and provisional voters signed in. Poll workers should follow the same process at each polling place on Election Day. Detailed audit trails are critical. Election officials must ensure the documented chain of custody reflects that (1) poll workers returned all provisional ballots and (2) elections office staff stored them in a secure environment.

Canvassing Provisional Ballots

After Election Day, election officials must review every provisional ballot cast to determine whether it will count in the official results. Election officials should be transparent with all aspects of provisional ballot verification and counting. Transparency includes proactive information sharing with the public about the administrative complaint procedures available to those voters who believe that election officials wrongly rejected their provisional ballots. Election officials should inform the public of the timelines for counting provisional ballots, including any period during which provisional voters can present additional identification to validate their ballots.

Election officials typically take the following steps in reviewing provisional ballots: (1) determine voter eligibility, (2) document reasons for rejections, and (3) aggregate eligible votes.[7] In jurisdictions that use electronic voting machines for provisional voting and counting, the aggregation of valid provisional votes requires reviewing the report produced by the voting machine. In paper provisional ballot jurisdictions, election officials can count paper provisional ballots using the same policies and procedures for centrally counting paper ballots.

Elections office staff often conducts a preliminary review of each provisional ballot. The review includes determining the accuracy and completeness of necessary forms or affidavits and reviewing circumstances unique to each provisional ballot. For example, if a jurisdiction permits voters who moved within a county to vote provisionally, elections office staff may need to verify the voter did not cast a ballot in their prior precinct before counting the provisional ballot. Reviewing provisional ballots requires teams of elections office staff and is a time-consuming post-election process.

As noted above, many states' laws or regulations outline how to determine whether to count a provisional ballot. Election officials or the provisional ballot canvass board should refer to state rules in examining each provisional ballot. With any

additional information gathered by elections office staff, election officials or the canvass board can apply the rules to each provisional ballot and determine how many ballots are eligible to count.

Finally, election officials should perform a precinct-by-precinct accounting of the provisional ballots cast. The number of provisional ballots accepted for counting plus the number rejected must equal the number of provisional voters checked in in each precinct. Each provisional ballot envelope should include identifying information about the polling place and precinct in which it was cast.

The official election results must include all eligible provisional ballots. Before the results are certified, election officials should ensure the number of provisional ballots tallied matches the number accepted for counting. After the election is certified, provisional ballots and related materials should be securely stored during the retention period.[8]

Communications and Statistics

For many voters, the idea of casting a provisional ballot is a negative. There is an assumption that provisional ballots do not count or only count if a race is close. However, this is untrue. Provisional ballots allow voters who are eligible, but for whatever reason unable to cast a regular ballot, to vote. After the 2020 presidential election, states reported that 78.3% of provisional ballots cast counted in full or part.[9] In addition to providing a free access system to allow voters to check their provisional ballots' status, election officials should educate voters on provisional voting in their jurisdictions. Election officials should share with voters the efforts to review and approve provisional ballots post-election and the acceptance rate of provisional ballots.

After certification, election officials should publish statistics on provisional voting with the final election results. The number of provisional ballots counted and rejected is an important part of the story of the election. The statistics can also inform voter education topics. For example, if an

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7 Note – for provisional ballots cast during court-ordered extended voting hours, election officials must wait for the final disposition of court proceedings to determine whether the provisional ballots will count.
8 Federal election materials must be retained for 22 months. 52 U.S.C. § 20701. State and local laws or regulations may address retention for non-federal elections.
9 EAVS at p. 17.

elections office sees an influx of provisional ballots cast by voters in the wrong precinct, it may indicate voters were confused about where to vote. Election officials can then focus efforts toward educating voters on how to find their polling place.

Election officials should also review any issues with provisional voting administration. Review the completeness of the chain of custody and reconciliation documents. If election officials find any gaps, they can revise procedures or poll worker training as necessary.

The U.S. Election Assistance Commission (EAC) also compiles provisional voting data in its biennial Election Administration and Voting Survey (EAVS).[10] While provisional ballot usage varies widely across the country, election officials at the local, state, and federal levels can use the results of this survey to identify successes, potential improvements in election administration, and to learn from other states' best practices.

Conclusion

Provisional ballots protect eligible voters' right to vote. Before every election where provisional ballots are offered, election officials must adequately prepare their staff and poll workers to administer provisional voting. Officials can also educate the public about the most common reasons voters must vote provisionally to reduce the number of provisional ballots cast. However, it is important to remember that every provisional ballot counted represents a voter who may have been turned away before the implementation of HAVA's provisional ballot requirements.

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[10] To read details about election data, see the Election Administration and Voting Survey (EAVS) on the EAC Web site at **https://www.eac.gov/research-and-data/studies-and-reports**.

2019 Kansas Election Standards

COUNTING PROVISIONAL BALLOTS

#	SITUATION	SHOULD BALLOT COUNT?	LEGAL AUTHORITY	COMMENTS
A	**VOTER REGISTRATION**			
1	Voter registered in office before books closed and advance voted during the next few days before the CEO processed the registration application.	**YES**	Kan. Stat. Ann. § 25-1122 Kan. Stat. Ann. § 25-2311	If voter's notice of disposition was not returned by mail before canvass day.
2	Voter registered at CEO office after books closed or at the polling place on election day and voted at the same time.	**NO**	Kan. Stat. Ann. § 25-2311 (a)(6) Kan. Stat. Ann. § 25-2311 (c)	Law requires that a voter must register by the 21st day before election.
3	Registered voter had different name than on poll book due to marriage, divorce or legal proceeding and completed a new voter registration application.	**YES**	Kan. Stat. Ann. § 25-409 Kan. Stat. Ann. § 25-2316c(a)	Name changes and address changes are the two major reasons for provisional ballots as outlined in federal law (NVRA). Such ballots count unless invalid for another reason.
4	Registered voter had different name than on poll book and did not complete a new voter registration application.	**NO**	Kan. Stat. Ann. § 25-409 Kan. Stat. Ann. § 25-2316c(a)	The law requires a provisional voter to complete a voter registration application in order to receive a provisional ballot. This process updates the voter's registration information and eliminates the need for provisional ballots in future elections.
5	Voter was registered but voted in wrong precinct, but within the county, due to CEO error, board worker error, voter error, or insistence by voter.	**YES (PARTIAL BALLOT)**	Kan. Stat. Ann. § 25-3002(b)(3)	Law requires counting of partial provisional ballots—count races and questions that are identical when comparing provisional ballot to correct ballot for voter's precinct.
6	Voter was not registered.	**NO**	Kan. Stat. Ann. § 25-215 Kan. Stat. Ann. § 25-2302	Kansas laws require registration before voting.
7	Voter claimed to have registered at DMV, post office, state fair or NVRA registration outpost and CEO had no registration.	**NO**	Kan. Stat. Ann. § 25-215 Kan. Stat. Ann. § 25-2302 Kan. Stat. Ann. § 25-2421a	Unless CEO verifies DMV or CEO error.

#	SITUATION	SHOULD BALLOT COUNT?	LEGAL AUTHORITY	COMMENTS
B	**VOTER MOVES**			
	MOVES WITHIN COUNTY			
1	Registered voter moved within county within 30 days of election. Voted at former precinct.	**YES**	KS Const. Art. 5 Sec. 1; Kan. Stat. Ann. § 25-3702	KS Constitution allows this so ballot not required to be provisional. Voter must complete Form FP1 before voting.
2	Registered voter moved within county within 30 days of election. Voted at either new precinct or central location.	**YES**	Kan. Stat. Ann. § 25-2353 Kan. Stat. Ann. § 25-409	Must complete new registration card before voting provisional ballot.
3	Registered voter moved anywhere in county and voted at new precinct.	**YES**	Kan. Stat. Ann. § 25-2316c(b)	Voter must complete a new voter registration application.
4	Registered voter moved within county at any time before election. Voted at either new precinct or central location.	**YES**	Kan. Stat. Ann. § 25-2353 Kan. Stat. Ann. § 25-409	Must complete new registration card before voting provisional ballot. No time limit on date of move.
5	Registered voter moved within the county at any time and completed a new voter registration card.	**YES**	Kan. Stat. Ann. § 25-2353	If voted at new precinct or central location.
6	Registered voter moved within county within 30 days before election. Voted ballot at wrong precinct.	**YES (PARTIAL BALLOT)**	Kan. Stat. Ann. § 25-3702 Kan. Stat. Ann. § 25-3002 (b)(3)	Entire ballot valid if voted at former precinct. Partial ballot valid if voted ballot at precinct where not registered.
7	Registered voter moved within county more than 30 days before election. Voted at former precinct.	**YES (PARTIAL BALLOT)**	Kan. Stat. Ann. § 25-3702 Kan. Stat. Ann. § 25-3002 (b)(3)	Partial ballot valid if voted ballot at precinct where not currently registered.
8	Registered voter moved within the county but refused to fill out a new voter registration card before voting.	**YES (PARTIAL BALLOT)**	Kan. Stat. Ann. § 25-409(a) Kan. Stat. Ann. § 25-3002 (b)(3)	Law requires counting of partial provisional ballot—count races and questions that are identical when comparing provisional ballot to correct ballot for voter's precinct.

#	SITUATION	SHOULD BALLOT COUNT?	LEGAL AUTHORITY	COMMENTS
	MOVES OUT OF COUNTY, WITHIN STATE			
9	Registered voter moved anywhere in state within 30 days of election. Voted at former precinct.	**YES**	Kan. Const. Art. 5 Sec. 1, Kan. Stat. Ann. § 25-3702	KS Constitution allows this, so ballot not required to be provisional. Voter must complete Form FP1 before voting.
10	Registered voter moved out of county but within state within 30 days before election. Voted in new precinct without re-registering.	**NO**	Kan. Const. Art. 5 Sec. 1, Kan. Stat. Ann. § 25-3702 Kan. Stat. Ann. § 25-2316c(b)	Fail safe (provisional) voting only covers in-county moves. Former precinct voting only allows voting in precinct of former residence.
11	Registered voter moved out of county but within state more than 30 days before election.	**NO**	Kan. Stat. Ann. § 25-3702	Not protected by law. Needed to re-register at new address.
C	**ADVANCE VOTING**			
1	Registered voter requested advance ballot, did not receive ballot and voted at polls.	**YES**	Kan. Stat. Ann. § 25-2908c	If CEO verifies that voter did not cast multiple ballots.
2	Registered voter voted in advance, then voted at the polling place.	**NO**	Kan. Stat. Ann. § 25-2416(b)	Election crime.
3	Registered voter returned advance ballot in unsigned envelope.	**NO, UNLESS VOTER CALLS**	Kan. Stat. Ann. § 25-1124(b)	CEO must attempt to contact voter to sign envelope. If voter signs envelope, count ballot. If voter does not sign envelope, do not count ballot.
4	Voter signed another voter's envelope.	**NO**	Kan. Stat. Ann. § 25-1120 Kan. Stat. Ann. § 25-1124	Law requires voter to sign statement on voter's own envelope unless another person signs for voter at voter's direction due to disability.
5	Two voters voted in advance. Ballot envelopes switched, signed by the wrong voter in same household. Both are eligible voters and signatures match.	**NO**	Kan. Stat. Ann. § 25-110	Law requires voter to sign declaration on envelope containing the voter's own ballot.

#	SITUATION	SHOULD BALLOT COUNT?	LEGAL AUTHORITY	COMMENTS
6	Voter signed envelope but did not fill in address line.	YES	AG Op. 2012-26	Technical error that, by itself, does not invalidate ballot.
7	Voter submitted an advance voting ballot with ballot envelope not sealed.	YES		Technical irregularity unless CDO finds evidence of tampering.
8	Voter applied for an advance voting ballot after deadline for application.	NO	Kan. Stat. Ann. § 25-1122(f)	Kansas law set application deadlines to allow time for transmission of ballots and conclusion of advance voting before election.
9	Voter used power of attorney to obtain advance voting ballot and used attorney to vote.	NO	AG letter to SOS, Sept. 16, 1997	Power of attorney has no effect in voting. Laws provide for assisted voting if affidavit of assistance is filed.
10	Voter casts advance ballot, then dies before election day. Election board makes ballot provisional pursuant to KSA 25-1136(c).	NO	Kan. Stat. Ann. § 25-1136(c) AG Opinion 2002-15	"Persons who are deceased on election day are not qualified electors and do not enjoy a constitutional right to vote."
D	OTHER			
1	Registered voter's name was found by CEO elsewhere in poll book.	YES	Kan. Stat. Ann. § 25-2908(c)	NVRA fail safe voting.
2	Voter needed assistance – should not have been challenged.	YES	Kan. Stat. Ann. § 25-2909	No voter error.
3	Voter voted provisional ballot, only one board worker signed envelope.	YES	Kan. Stat. Ann. § 25-3002(b)(1) Kan. Stat. Ann. § 25-702(b) Kan. Stat. Ann. § 25-716(a)	Technical irregularity. No voter error.
4	In primary election, registered voter requested and received a different party's ballot than the one registered for.	NO	Kan. Stat. Ann. § 25-3301(c) Kan. Stat. Ann. § 25-3304(b)	If voter received ballot of party other than party of affiliation, ballot does not count. Unaffiliated voter may affiliate with a party and vote.
5	Registered voter dies after casting ballot and ballot was not provisional.	YES	AG Opinion 2002-15	Non-provisional ballots are commingled with others are thus irretrievable and impossible to not count.

#	SITUATION	SHOULD BALLOT COUNT?	LEGAL AUTHORITY	COMMENTS
6	Registered voter returned a ballot after polls closed.	NO	Kan. Stat. Ann. § 25-106 Kan. Stat. Ann. § 25-1132 (advanced)	Unless advance mail ballot returned postmarked on or before Election Day and received by the Friday after the election. Ballot then is eligible for counting.
7	Voter accidentally presses "Submit vote" on DRE before he/she is finished. Voter completes provisional ballot.	NO	Kan. Stat. Ann. § 25-2908(c)(5)	Voter cannot vote twice. If ballot cast on DRE cannot be retrieved, it has been cast and included with the other votes, regardless of how many races voter had completed.
E	**FEDERAL SERVICES VOTING**			
1	Federal services voter who was absent applied for ballot by noon the day before election day by completing a standard FPCA (Form 76).	YES	Kan. Stat. Ann. § 25-1215 Kan. Stat. Ann. § 25-1216(b)	May vote by fax or email. Not required to be registered.
2	Registered voter (nonmilitary) moved out of state but in the U.S. at any time before election (See Presidential Situations for exception.)	NO		Not protected by law. Voter should check with new state for laws.
3	U.S. citizen eligible to vote in the election district moved out of U.S. and applied by noon the day before election day by completing a standard FPCA (Form 76).	YES	Kan. Stat. Ann. § 25-2314 Kan. Stat. Ann. § 25-1216(b)	May vote by fax or email. Not required to be registered.

#	SITUATION	SHOULD BALLOT COUNT?	LEGAL AUTHORITY	COMMENTS
F	**PRESIDENTIAL SITUATIONS**			
1	New voter moved to KS within 45 days before election. Filed form PN by noon the day before election.	YES	Kan. Stat. Ann. § 25-1801(b)(1) Kan. Stat. Ann. § 25-1802(a)	New resident may vote only on U.S. president race.
2	Registered voter moved out of KS within 45 days before election. Filed form PF in county of former residence in KS by noon the day before election.	YES	Kan. Stat. Ann. § 25-1801(b)(2) Kan. Stat. Ann. § 25-1802(b)	Former resident may vote only on U.S. president race.
3	Registered voter moved anywhere within KS not more than 20 days before election. Filed Form PR in county of new residence by noon the day before election.	YES	Kan. Stat. Ann. § 25-1801(b)(3) Kan. Stat. Ann. § 25-1802(c)	Relocated resident may vote only on U.S. president race.
G	**VOTER IDENTIFICATION**			
1	Voter in the county fails to provide valid identification, votes provisional ballot.	NO	Kan. Stat. Ann. § 25-2908(c) Kan. Stat. Ann. § 25-3002(b)(8)	The law requires voter to provide ID in order to have ballot counted. However, if voter provides valid identification to CEO after voting provisional ballot and before county canvass, ballot counts.

Documentation and Audit Trail

Ensuring elections are fair, accurate, transparent, and efficient requires documenting each step of the elections process. These steps include all pre-election, Election Day, and post-election activities; examples include, but are not limited to, candidate filings, voter registration rosters, voting system testing, poll worker training, etc. Documentation of these processes may prove the accuracy of an election in court and resolve questions regarding the integrity of the election.

Furthermore, developing an audit trail is an essential tool for election officials to evaluate the strengths and weaknesses of the processes utilized to conduct an election. Therefore, it is important to establish procedures for documenting and reviewing an election's audit trail. This chapter focuses on developing documentation of elections processes at all stages of the election cycle. See Chapter 17 – Post-Election Audits for more information on post-election tabulation audits.

EXAMPLE

Each voter record has its own unique audit trail. Election officials create a record when citizens register to vote for the first time. Think of each voter's record as a legal file folder containing their history—when they registered to vote, changed their address, or updated their party affiliation (if applicable); whether they voted and by what method in a given election; if they voted a provisional ballot, whether that ballot counted; whether they have run for office; whether they have served as a poll worker and if so, at which polling place and in what position. Each voter's record contains all of this information and more. Therefore, the voter record audit trail is essential for determining a voter's eligibility and provides documentation for processing and qualifying provisional ballots.

In the business of election administration, there is no such thing as too much documentation. From written standard operating procedures to workflow diagrams and supply and equipment checklists, the documentation supporting an election's conduct can resolve questions regarding separation of duties, two-person integrity, and chain of custody. Election officials can review the audit trail to improve the election processes and inspire confidence in election results.

Types of Documentation

While elections offices generate documents to form an audit trail, they also receive forms, applications, and other filings from outside sources (e.g., Secretary of State's office, county and municipal agencies, vendors, candidates, voters, etc.). Election officials must review all the paperwork received and determine its significance. Documentation and records (audit trails) can be categorized as follows:

- Nonessential/inactive records—are routine and discarded within a designated period or when no longer of administrative use. Examples include routine correspondence and memorandums, etc.

- Active records—those mandated by federal or state law to be retained for a specific period. Examples include signed contracts, voted ballots, candidate filing forms, etc.

- Archival records—are stored on a permanent basis. Examples include voting district maps, election results, etc.

Federal, state, and local records retention laws regulate each of the above categories. While state and local laws may vary across the country, all elections offices must retain federal election records for 22 months.[1] Election officials should verify these retention requirements before developing retention policies and procedures. For more information on records retention, see Chapter 1 – Elections Office Administration.

1   52 U.S.C. § 20701.

This documentation, i.e., records/audit trail, represents the records of the business of elections. Whether each record or document is of short-term, long-term, or archival value, it contains useful and sometimes essential information. Think of each document managed in an elections office as the office's official documentation—it can contain legally binding decisions, ranging from contracts and purchase agreements to voted paper ballots. Election officials also must consider storage requirements for documents in retention. Storage space may be a factor in whether the documentation is stored electronically or on paper.

These records also provide historical data for the elections office—how many voters were registered ten years ago compared to today; what type of voting system was used then and now; what was the cost of managing elections then compared to now? Further, records in an elections office document one of a citizen's most important rights—their right to vote.

Election officials also have a responsibility to comply with open records laws and regulations. Documents involved in election administration may be subject to state and local Open Records Request or Freedom of Information laws. Through the availability of information, the general public can understand the administration of elections and perhaps become more involved in the democratic process.

Examples of types of documentation maintained to document each election include, but are not limited to:

- Candidate filing forms
- Ballot proposal language and petitions
- District and precinct boundary maps
- Voter registration applications
- Absentee ballot applications
- Publications and legal notices
- Equipment inventory and acceptance testing forms
- Ballots (in-person, absentee, provisional, spoiled, unused, etc.)
- Logic and accuracy testing documentation
- Equipment and supply checklists
- Poll worker training materials

- Poll worker assignment forms and oath of office
- Employee timesheets and payroll documentation
- Election Day opening and closing certifications
- Rosters used for voter check-in
- Tabulation logs
- All chain of custody documentation
- Election results reports and tapes from voting equipment
- Post-election reconciliation forms
- Post-election audit procedures and forms

Before the Election

The start of a new election cycle provides an opportunity to catalog the documents generated from beginning to end. Elections office staff can develop a master list of documents received, collected, and created during the election cycle. The list should include whether the documents are nonessential, active, or archival. If such a list already exists, continue evaluating its items and adding new documents as needed. Staff members completing the master list will better understand election management. The list will allow staff to quickly categorize and store the documents in future elections. Should the need arise, an elections office will be ready to provide the documents in response to a records request or legal action.

Election Management and Voting Systems

Most election management and voter registration software systems include internal audit logs automatically generated when a record is changed. To maintain a proper audit trail within electronic systems, assign unique log-in credentials to track who has updated records within the software. Database administrators should only grant system administrator access to the parts of a system users need to perform their roles effectively. Examples of questions that inform what level of access rights to grant users should include:

- What are the essential job duties of the user?

- What user roles does an employee need to work within the system?

- Are there areas of the system where employee access should be restricted?

Election management and voting systems should also use multi-factor authentication to verify users' identities. **Chapter 6 – System Security** provides more information on password management and voting system access.

Election Set-up

One of the first documented processes of an election is candidate and issue filing. The filing forms represent some of the first documents the elections office receives in the election cycle. The candidate filing forms for each race must meet state or local requirements to qualify for placement on the ballot. Therefore, each form becomes a part of the records for each election.

The candidate filing forms and any questions certified for the ballot are the official documents used to set up the election and proof ballots. Make a listing of all documents that rely on the original candidate and question filing forms. This listing may include:

- Election set up/ballot generation software candidate report
- Legal candidate publications
- Candidate listing for public distribution
- All official correspondence with candidates

A minimum of two staff members (preferably bipartisan)— who were not responsible for data entry—should proof each document against the original filing forms. The staff members should sign off on the proofing documentation. Once the staff has processed all filing forms and associated documentation and proofed the data entry, the next step is to verify the correct races, candidates, and issues appear on each ballot style. Again, staff should document this check once complete. Chapter 10 – Ballot Building provides more information on ballot building and proofing.

Election officials should maintain ballot proofing documentation with the election file. Additionally, for pre-printed paper ballots, staff should verify and document the number of each ballot style received from the printer along with any blank ballot stock. All of the ballot building, proofing, and quantity documentation becomes a part of the audit trail and is essential to account for the distribution of ballots.

Pre-Election Logic and Accuracy Testing

Election officials or vendors may program voting tabulation software depending on the voting system used. No matter who programs the software, logic and accuracy (L&A) testing is performed before every election to confirm the accuracy of the election set-up and the tabulation equipment. All checklists and printouts relating to the L&A testing are key components of the election audit trail. Examples of L&A documentation include:

- Opening L&A reports (voting machine printouts showing no votes cast) from all voting equipment and optical scanners
- L&A marked ballot test decks and associated documentation
- Checklists generated for each piece of equipment tested
- Closing L&A tapes and printouts from all equipment and optical scanners
- Final L&A results report

> **IMPORTANT**
>
> Ballot generation and voter registration software must be backed up and stored off-site at each point of the proofing and archiving of the pre-election audit trail. Each of these steps marks a "lockdown" point in preparing for an election.

All of the above documentation should be signed by at least two people (or as state law requires) and stored as part of the election documentation.

Absentee and Early Voting

Elections offices in jurisdictions with early voting must be ready to process voters before Election Day based on state law. In some instances, voters can vote either in person or by mail. In other jurisdictions, voters are only allowed to vote early based on special requirements or circumstances

(e.g., voters with disabilities or out of the jurisdiction on Election Day). No matter the form of early voting available, its documentation becomes another component of the audit trail for each election.

Early voting or absentee voting by mail usually begins with an application form completed by the voter. Upon receipt, staff should date stamp each form. Staff should follow the elections office's procedures for verifying, documenting, and validating the voter's right to receive a ballot. Typically, election officials utilize voter registration software or election management software to manage this process and track the issuing of absentee ballots to ensure voters only vote once. The application forms and voter registration software, in turn, become a part of the official audit trail for each election.

Election officials must plan how to track replacement ballots. When writing procedures for issuing replacement ballots, officials should consider:

- How does the voter registration software control issuance of replacement ballots?

- What to do if both the original and replacement ballots are returned—which is counted?

- How are user rights restricted for issuing absentee ballots?

- If a user has a data entry error, how is the error corrected and tracked?

Typically, staff balances the number of applications processed with the number of ballots sent. Staff must know how many sent ballots are replacements as they could lead to more ballots being sent than applications processed. The daily logs and documentation of ballots issued become another key component of the election's audit trail.

TIP

Retain an alphabetical list of all applications processed for each election.

Applications Processed = Ballots Issued = Envelopes/Labels Printed = Envelopes Stuffed and Sealed = Total Envelopes Delivered to the Post Office Each Day.

Elections office staff should manage the returned ballot logs and documentation the same way as the outgoing ballot audit trail. Election officials track returned ballots in the voter registration or election management software. Once staff updates the voter's record with the returned ballot, that voter cannot vote again in that election. It is critical to understand user rights to the software and confirm the voter history data fields cannot be changed unless authorized. Election officials must document any need to correct a user's mistake in recording voter history.

All ballot envelopes returned must be stored in a secure, controlled environment with restricted access. Log sheets—used to track batches of returned ballot envelopes—should be updated daily. This process assures that all ballots are accounted for and processed throughout the election.

The final audit trail for absentee and early voting should support and validate that:

- Total number of ballot envelopes returned = the total voters with voter history recorded

- Total ballot envelopes returned MINUS ballots challenged = ballot envelopes authorized to be opened

- Total ballot envelopes authorized to be opened = total ballots scanned for unofficial results

Two staff members (preferably bipartisan) should record, balance, and initial each step of the outgoing and incoming absentee/early voting process.

Polling Place Supplies and Equipment

Election Day voting requires election officials to prepare, distribute, and track supplies and equipment at numerous polling places or vote centers. Preparing for voting on Election Day at locations spread throughout a jurisdiction requires paperwork to support and verify that the proper supplies and equipment have been prepared and distributed to the correct location.

Election officials prepare and deliver supplies in various ways throughout the country. Before Election Day, elections office staff may deliver all supplies and equipment to polling places, or a supervisory poll worker may pick up all or part of their polling place's supplies and equipment. Regardless of the distribution method, packaging the right supplies and equipment is critical. Elections office staff should pack each polling place supply kit according to a supply checklist. At least two staff members (preferably bipartisan) should verify the contents and sign off on the checklist. Senior staff should verify mission-critical supplies, such as paper ballots and voter registration lists. Each of these supply bag checklists becomes part of the election audit trail.

Similarly, the elections office should use an equipment checklist with serial numbers, protective count numbers, and tamper-evident seal numbers to deliver each piece. The checklist should be verified and signed by elections office staff who complete the information, delivery drivers, and poll workers on election morning. Additionally, if the equipment prints a report showing the number of votes tabulated, two poll workers (preferably bipartisan) should print and sign the report before voting begins. These documents build the audit trail for each polling place on Election Day.

Throughout Election Day, poll workers can confirm the number of voters checked in equals the number of ballots scanned or recorded on public counters on all voting equipment. When the polls close, poll workers complete closing verification forms. Documentation may include the protective and public counter numbers on touchscreen voting equipment and tamper-evident seals securing the equipment and memory devices. Two poll workers (preferably bipartisan) can generate and sign end-of-day result tapes from tabulators. The total number of ballots cast should balance with the number of total voters processed at each polling place. No less than two people should document all supplies and equipment upon handoff to delivery drivers and return to the elections office.

Canvass and Post-Election Review of Supplies

Before certifying election results, election officials will aggregate vote totals and confirm the results include every valid ballot cast, including absentee, early voting, Election Day, provisional, challenged, and uniformed and overseas citizen. This process is referred to as the canvass. Election officials must document every step in this process. See Chapter 18 - Canvassing and Certifying an Election for more information on the canvass and certification process.

> **NOTE**
>
> A post-election audit can be accomplished in many different ways and is often required based on state law. Chapter 17 – Post-election Audits describes common procedures to audit election results. This Chapter will address the auditing of supplies, documents, and procedures..

In addition to verifying vote totals, elections office staff should examine all supplies and documentation from each polling place. The purpose of conducting a post-election review of supplies is twofold:

- First, to ensure that all supplies have been accounted for and returned from each polling place.

- Second, to review the paperwork completed by the poll workers to verify they completed it correctly.

Assign staff to work in teams of two (preferably bipartisan), with each team assigned a separate work area and table. Staff should use the checklist completed to prepare supply bags to account for each polling place's returned supplies. The teams should ensure poll workers returned all supplies and properly completed all paperwork. When the teams account for all forms and supplies, finalize the post-election review by organizing and filing all documents in the same order for each polling place. As the law requires, election officials should retain the forms with the election documentation.

Conclusion

A robust audit trail is essential to evidence-based elections. Election officials take numerous steps to ensure the accuracy of elections, and the audit trail is documentary proof that elections office staff and poll workers followed these steps. Whether in a court of law or public opinion, election officials can bolster confidence in the elections process by clearly outlining procedures and documenting adherence to them. The end of each election cycle presents the opportunity to review and evaluate the documentation for any gaps or other shortcomings.

Post-Election Audits
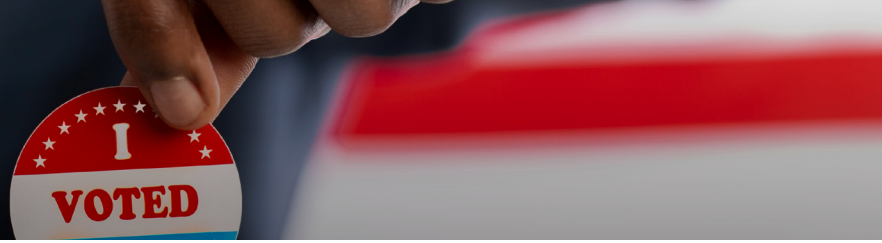
Post-election audits ensure voting systems operated accurately, that election officials complied with regulations or internal procedures, and identify and resolve discrepancies to promote voter confidence in the election administration process. There is no national auditing standard, and methods can vary from procedural, traditional, risk-limiting, or any combination thereof. A post-election tabulation audit usually involves manually recounting a randomly selected portion of ballots, although some states allow for an automated process. A procedural audit determines if elections office staff and poll workers followed election procedures. State law or policy often sets post-election audits' time, manner, and place.

Post-election audits are an essential component of the elections process. The ultimate goal of verifying the accuracy and integrity of elections is the same in all jurisdictions, regardless of the type of post-election audit utilized. This chapter will give a basic overview of items election officials need to consider when planning and conducting post-election audits. For more comprehensive information about election audits, see the EAC's report **Election Audits Across the United States**.[1]

Types of Post-Election Audits

Typically, state law creates the framework for post-election audits, including when they must occur and the method to use. Still, the state's chief election official likely will create and administer rules for the audits. Generally, states require local election officials, state personnel, or independent auditors to conduct the audit. Election audits often require a bipartisan board or team to transport and count the ballots, and election officials must maintain strict chain of custody protocols at all times. For best practices on maintaining a secure chain of custody, see the EAC's **Best Practices: Chain of Custody**.[2]

Traditional Post-Election Audits

Traditional audits look at a predetermined number of ballots, voting precincts, or devices and compare reported results from the voting system to the paper ballot records.

States use various methods to determine the sample size for traditional audits. State law or the chief election official may set a percentage of ballots or precincts to audit. Local election officials then randomly select precincts, devices, or batches of ballots to audit.

Once officials identify the specific ballots, elections office staff or an audit board tabulates the selected ballots, comparing the results to the reports issued by the voting system. If there is a discrepancy between the two, a state may require local officials to audit additional ballots. The audit is complete if there are minimal or no discrepancies, and election officials are satisfied that voting systems accurately tabulated ballots.

Traditional post-election audits are usually conducted by hand tallying a sample of paper records and comparing the results to electronic reports produced by voting systems. However, hand counting can be expensive, time-consuming, error-prone, and labor-intensive. Some states allow the audit to be conducted electronically by rescanning ballots or reuploading memory devices to create efficiencies in the process.

The contests included in traditional post-election audits vary widely. Most states require election officials to audit some statewide contests and at least one other type of contest, such as a local office or ballot measure. Other states require election officials to audit every contest on the ballots selected for the audit.

Risk-Limiting Audits

Recently, states have started instituting risk-limiting audits (RLA). A risk-limiting tabulation audit uses a statistically significant sample of ballots to determine that the reported outcome of the election is correct within a predetermined risk limit. There are two primary methods of conducting a risk-limiting audit:

- Ballot Comparison – Ballot comparison audits review physical paper ballots and compares those ballots to the votes recorded by the vote tabulation system – known as the cast vote record. This method provides accuracy

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[1] https://www.eac.gov/election-officials/election-audits-across-united-states
[2] https://www.eac.gov/sites/default/files/bestpractices/Chain_of_Custody_Best_Practices.pdf

because the ballot is compared directly to how the voting system counted that particular ballot. However, this method requires voting equipment and procedures that can match ballots with their corresponding electronic cast vote record.

- Ballot Polling – Ballot polling audits review a scientific sample of the ballots in each precinct and compare those "polled" ballots to the overall reported outcome of the election. The method cannot verify the system correctly tabulated an individual ballot. Like water quality testing, it provides a scientific approach to understanding the composition of the voted ballots in an election. Officials can compare the sample to the reported outcome of the election.

Additional information about Risk Limiting Audits can be found on the EAC's website: **Risk-Limiting Audits – Practical Application**.[3]

Procedural Audits

Election officials conduct procedural audits (also known as performance, process, or compliance audits) to determine if elections office staff and poll workers followed election procedures. These audits include ensuring that staff and poll workers completed required documentation, vote tabulation equipment was tested, ballot materials were securely sealed, and the custody of critical election materials was documented. Some jurisdictions reconcile voter registration records and associated voting credit with the number of ballots cast as a part of their procedural audit.

Timelines

Elections offices should develop an elections calendar with all the important dates and deadlines for each election cycle. This comprehensive timeline should include post-election audit activities, certification dates, and when newly elected candidates get sworn into office. When considering the post-Election Day timeline, election officials should include enough time to conduct a post-election audit and certification of results before candidates take office. Most states have laws governing when post-election audits can begin and end.

Training

Election officials should conduct training sessions for all audit staff. Training is often done in the short time available after Election Day and before the beginning of the audit. The training session should be comprehensive regarding audit policies and procedures and provide information about the rules for observers, media, and candidates.

Election officials can start the training session by explaining the strict requirements for every step in the process, including the chain of custody of ballots and materials. If required by law, election officials should administer the oath of office and go over security procedures in detail. For example, items like cellphones and recording devices may be prohibited (by law in some jurisdictions) from the site to ensure the integrity of the process. Election officials should make training materials available before the audit and upon public request.

Supplies and Templates

Election officials should ensure they have proper supplies and materials for post-election audits. Traditional audits will typically need adequate space, extra container seals, and tally sheets at a minimum. Risk limiting audits may need additional supplies such as ten-sided dice, sticky notes, and an overhead projector. Election officials may also need to set up partitions in the counting room to separate counting teams.

Election officials can prepare templates long before the post-election audit. Because the timeframe to conduct audits can be relatively short, election officials can prepare press releases and legal notices ahead of time. In addition, officials can ensure that the various tally sheets—by batch, by precinct, by ballot type (absentee, early voting, Election Day, provisional)—are ready well before the audit is scheduled to begin.

Finally, election officials should consider the security of materials throughout the audit process and have security staff on-site, if needed.

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[3] https://www.eac.gov/sites/default/files/eac_assets/1/6/Risk-Limiting_Audits_-_Practical_Application_Jerome_Lovato.pdf

Cost

The jurisdiction responsible for certifying the election results typically pays for the post-election audit and factors the cost into the overall election budget. Some costs election officials should consider when budgeting for post-election audits include:

- Full-time staff salaries and benefits and overtime hours
- Part-time staff salaries
- Location rental (if the jurisdiction does not have room in the elections office)
- Tables and chairs rental (if necessary)
- Legal expenses
- Vendor support
- Risk-Limiting Audit software (if necessary)
- Security
- Additional security seals and other supplies

Election officials should understand their jurisdiction's policies and procedures regarding tracking costs for justification with the local budget department.

Transparency

Transparency is key to building confidence in election outcomes. A lack of confidence in election outcomes creates significant tangible and intangible costs. Audits provide an opportunity for transparency and to increase confidence. Many states allow the public, third parties, or candidate representatives to observe the audit. On the first day of the audit, election officials should provide an overview of how the audit will be conducted and discuss the rules for observers. Election officials should explain the method of selecting ballots to be audited and the process for validating election results. The explanation should include what happens if the audit reveals discrepancies. Election officials may also distribute election results reports and other materials to allow observers to independently verify audit results.

Election officials may require all elections office staff and temporary employees to sign in and wear nametags. After the audit teams sign in, staff can direct observers to the areas where they can observe the process.

The elections office's website should include a "Frequently Asked Questions" with answers to questions such as the following:

- Are audits mandatory?
- How is the audit conducted (e.g., traditional, automated, procedural, risk-limiting, etc.)?
- How is the sample of ballots selected to be audited?
- What are the chain of custody procedures for the audit?
- Can the public view the audit?
- What happens if there is a discrepancy between the original election results and the audit results?

Finalizing Post-Election Audits

Election officials should collect and organize all audit documentation—tally sheets, batch sheets, and ballots—including detailed documentation of each decision made and action taken during the audit process. After elections results are certified, election officials should repackage and seal the audit documentation for archival storage. Officials can then itemize these documents by type and location in preparation for future requests for public records or potential lawsuits. Under federal law, election officials must retain all federal election materials for 22 months.[4]

After the audit, elections office staff should prepare a summary report analyzing the process. The summary report can serve as a guide for improving the policies and procedures during future audits and should include the final outcomes and any discrepancies discovered during the audit. Election officials can distribute the report to the media and make it available on the elections office's website.

Conclusion

Election officials take several steps to ensure voting equipment accurately counts votes on Election Day. Post-election audits are an essential process to verify the accuracy of the election results and promote confidence in an election's outcome. Additionally, election officials can use procedural audits to evaluate performance, demonstrate chain of custody procedures, and mitigate any identified weaknesses in procedures. If law permits, opening the audit process to the public and publicizing results can foster a better understanding of the elections process.

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4 52 U.S.C. § 20701.

Canvassing and Certifying an Election

Many voters believe the election results they see on television on election night are the final results. In fact, the election outcome is not official until the completion of the canvass[1] of votes and certification of results, which may not be available until several weeks after Election Day.

The purpose of the canvass is to account for every ballot cast and ensure that the official results include each valid vote. For election officials, the canvass means aggregating or confirming every valid ballot cast and counted—absentee, early voting, Election Day, provisional, challenged, and uniformed and overseas citizen. The canvass enables election officials to resolve discrepancies, correct errors, and take any remedial actions necessary to ensure completeness and accuracy before certifying the election.

Laws and regulations for conducting the canvass vary by state and, at times, by local jurisdiction. These laws and regulations cover all aspects of the canvass, including the following:

- Who is responsible for the canvass
- Who may participate in the canvass
- When the canvass can start
- When the canvass must be completed
- What information must be contained in the canvass
- Which portions of the canvass process are open to the public

Election officials create internal elections office procedures for conducting a successful canvass of votes and an accurate certification of results. The EAC's **Election Results, Canvass, and Certification** resource includes best practices, practical guidance, and a video summary on displaying unofficial election results and the canvass and certification processes.[2]

Policies and Procedures

Election officials plan for the canvass of votes and certification of results from the very beginning of the election cycle. State law or regulation often dictates when the canvass must begin and end. Election officials should include canvass deadlines on the election calendar,[3] which consists of all start and end dates for various tasks for the election cycle. Then, election officials can assign the tasks outlined on the calendar to appropriate staff members— working ahead lightens election officials' load during the busy election period.

Because all aspects of election administration affect the accurate counting of ballots, election officials should ensure all necessary policies and procedures for canvassing and certifying an election are in place and documented in the office's standard operating procedures (SOPs) before voting begins.[4] The first step in developing canvass procedures is to review state and local laws related to canvassing votes and certifying results. Along with relevant regulations or guidance, these laws provide the legal and procedural framework for conducting the canvass. Generally, the procedures should include:

- Description of the canvass board and any sub-canvass boards, including rules regarding how members are selected, actions they can and must take, and procedures they must follow
- Voter intent guidelines
- Write-in vote guidelines
- Ballot duplication procedures
- Procedures for resolving exceptions and issues

Election officials can use the procedures to train staff and any canvass board members, as well as educate observers and the public on the canvass process.

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[1] https://www.eac.gov/election-officials/election-audits-across-united-states
[2] https://www.eac.gov/sites/default/files/bestpractices/Chain_of_Custody_Best_Practices.pdf
[3] https://www.eac.gov/sites/default/files/eac_assets/1/6/Risk-Limiting_Audits_-_Practical_Application_Jerome_Lovato.pdf
[4] See Chapter 1 and Quick Start Guide: Standard Operating Procedures for more information on developing SOPs.

Types of Canvass Boards

A canvass board will likely conduct the canvass of votes after an election, but election officials may have some discretion to convene ballot-specific sub-canvass boards. Each jurisdiction's laws dictate who can serve on a canvass board—often, the boards must be bipartisan. Additional sub-canvass boards may include:

- Write-in ballot board
- Provisional and challenged ballot board
- Ballot duplication board
- Exceptions and issues board

The sub-canvass boards review all ballots falling into their respective categories and make recommendations or decisions on ballots as permitted by law. The overall canvass board often reviews the various ballot-specific boards' recommendations or decisions and approves the final certification of the results.

In almost every election, canvass boards must resolve exceptions and issues that arise during voting. An "exceptions and issues board" can be used to examine and answer questions about these ballots. The board should review any ballots falling into the categories described below following the pre-defined procedures:

- Exceptions include signature mismatches on absentee ballot envelopes or poll books, damaged ballots, overvoted ballots, and voter intent issues. With each exception, the board should physically review the ballot and decide how the ballot should be processed.

- Issues include ballots counted incorrectly, counted in error, or not counted at all. Examples may be ballots cast in the wrong precinct, missing ballots, misplaced ballots or other materials, items left at the polling place, memory cards not reading correctly, and other discrepancies.

As soon as election officials define the canvass board and any ballot-specific boards, they can recruit members to fill the positions. The composition of the boards and the rules for participating on the boards vary by jurisdiction. If new legislation or regulations affect canvass board composition or procedures, communicate the changes to stakeholders and the public. If state law permits, election officials can assign a member from the elections office staff to each canvass board to work as a liaison.

Observers

In many cases, observers with a stake in the election outcome want to be present for the canvass of votes. Election officials should provide written rules of conduct for observers. The rules should clearly identify the observer's rights as prescribed by state and local laws and regulations. Even if staff briefs observers before the canvass, election officials should still make the rules of conduct visible and available at entrance points to the observation room. Election officials may also post the rules on the jurisdiction's website.

Observer rules of conduct typically specify where observers are allowed to be during the canvass. In some states, observers must stay within predetermined "observer sites." Some jurisdictions physically separate the observers from the canvass board and elections staff by having the observers a certain distance away but still in the canvass room. Still, other jurisdictions use webcams to livestream the canvass of votes.

The rules of conduct also outline how an observer can interact with the canvass boards. In some states, the public cannot talk to the canvass board members while they are working and must direct all inquiries to the individual in charge—sometimes called the election superintendent. Other jurisdictions provide observers with a form to use if they want to challenge or discuss an issue they witnessed during the canvass of votes. This form helps election officials manage the canvass of votes and provides documentation of the issue raised.

In some jurisdictions, election officials have the right to eject from the canvass room any disruptive observers. Election officials can craft a detailed security protocol, including hiring of security guards, if necessary, to ensure that observers do not interfere with the canvass process. A sample 'Election Observers Rules of Conduct' is provided at the end of the chapter.

Preparing for the Canvass of Votes

Setting up the room where the canvass will take place is an essential task for election officials. The room must accommodate the canvass board, any sub-canvass boards, and observers. Arrange the room so that the observer sites are situated close enough to the processing areas to see the canvassing activities but not so close that the observers can touch or interfere with the election materials or the canvass board members. Ensure the canvass location is accessible and the layout of any tables or equipment is in line with accessibility standards.

To complete its tasks, the canvass board will need various materials from the elections office. The materials required may include, but are not limited to, the following:

- Rosters, signature cards, etc., from all precincts, vote centers, and early voting locations
- Electronic media and printouts (paper rolls) from all voting equipment used in the election
- Early voting ballots
- Absentee ballots
- Provisional ballots
- Challenged ballots
- Overseas and military ballots
- Spoiled ballots
- Results of any post-election audits, if applicable

Remember to ensure the chain of custody for all materials involved in the canvass. Train ballot boards and staff on the canvass procedures and include information on how the chain of custody will be verified and preserved.

In some jurisdictions, the law may require election officials to provide public notice of the dates for canvass activities. Additionally, election officials can provide notice of the canvass to key stakeholders, including the local media, political parties, civic organizations, and advocacy groups. If possible, election officials can livestream the canvass to increase transparency and allow the public to view the process.

Conducting the Canvass of Votes

At the start of the canvass, election officials should provide a brief overview of the process. Introduce the canvass board or boards, elections office staff, and registered observers, and remind the public about the observer rules of conduct. Assign staff members from the elections office staff to assist each canvass board and liaise with any observers.

Election officials should have all observers and canvass board members sign into the canvassing room. The sign-in form documents their presence at the canvass of votes, which state or local law may require. Because documenting the process at all stages is essential to the canvass process, election officials may assign an elections office staff member to record every action that the canvass board takes, including any votes by board members.

Canvassing means different things in different jurisdictions. In some states, the activities outlined in the following paragraphs will occur as part of the canvass of votes. In other jurisdictions, the tasks are completed before the official start of the canvass. And still, in other jurisdictions, the tasks are not completed as individual steps and are accomplished in some other manner or order. The Election Assistance Commission (EAC) does not endorse one method over another. The following paragraphs present election officials with potential ways of accounting for votes following an election. As always, election officials should be sure to review state and local laws and regulations before adopting any practice.

Inspecting Returns—In some jurisdictions, the accounting of votes begins with an inspection of the returns from voting sites—early voting sites, polling places, vote centers, or any combination thereof. The election official or canvass board compares the number of ballots tallied with the number of voters who cast ballots at one of the locations mentioned above. If the election official or the board finds discrepancies in the number of ballots cast and the number of voters who officially signed in, state and local law dictates how to remedy the problem, sometimes through an "exceptions and issues" sub-canvass board.

Many jurisdictions have a procedure by which the chief poll worker in a polling place can record any problems on Election Day. This documentation might include signature mismatches, overvotes, damaged ballots, and other errors. The canvass board usually resolves these discrepancies and others not enumerated here by the end of the canvass.

Duplicating Ballots—Duplication is necessary if a paper ballot is damaged, so it cannot be counted in the usual manner via an electronic ballot counter. For example, the canvass board or a dedicated ballot duplication sub-canvass board might review all ballots that must be duplicated before processing. For duplicated ballots, both the "original" and the "duplicate" must be marked with the same unique identifier so election officials can verify the duplicated ballot if a recount becomes necessary.

Reviewing Rejected Ballots—The canvass board may review rejected ballots. It is a best practice to have at least two board members (preferably bipartisan) assigned to examine each rejected ballot and confirm the rejection.

Reconciling Ballots Cast Outside the Polling Place—By the end of the canvass of votes, the canvass board will have reconciled all ballots cast outside the polling place and precinct. These ballots include regular absentee ballots and ballots issued under the Uniformed and Overseas Citizen Absentee Voting Act (UOCAVA). When allowed by state law, election officials notify voters when their absentee ballots require curing throughout the election cycle. Election officials often make extra effort to notify voters when their ballots are rejected, although the actual accounting of the ballots will not change during the canvass. The canvass board may also account for any Federal Write-In Absentee Ballots[5] received and document whether it counts the FWAB or the original ballot.

Processing Provisional and Challenged Ballots—The canvass board processes the provisional and challenged ballots in some jurisdictions. The number of accepted and rejected provisional ballots, when added up, should be equal to the total number of provisional ballots cast. The number of accepted and rejected challenged ballots, when totaled, must be equal to the total number of challenged ballots cast. If these counts do not balance, the chief poll workers from the various polling places often provide a report explaining the discrepancies.

The Help America Vote Act requires election officials to (1) establish a free access system through which provisional voters can check the status of their ballots and (2) notify voters about the existence of such a system at the time they cast a provisional ballot.[6]

If required under state or local law, election officials may need to send a written notification to voters whose provisional or challenged ballots are rejected and provide the reason for the rejection. If the canvass board rejects a provisional ballot because the voter was not registered, election officials should send the voter a registration form with the written notification. Similarly, a registration form could be made available through the federally mandated free access system. In some jurisdictions, the provisional ballot affidavit also serves as a registration form for future elections, eliminating the need to mail any forms to the voter after the election.

Documenting the Canvass

Thoroughly documenting the canvass allows election officials to explain any exceptions and issues that occurred during the election and any remedial action taken to correct the problems. The final report of the canvass board often consists of at least three parts: returns, informational statistics, and a narrative.

Returns—Returns are the tally of all valid ballots cast in the election. The canvass board presents the results from the election management system (EMS) with no explanation or analysis. The EMS typically provides (1) a summary results report showing each contest and the number of votes for each candidate or issue and (2) a precinct-level report showing the vote totals for each contest and issue by precinct.

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5   A FWAB is a backup ballot that can be cast by UOCAVA voters who make a timely request for, but do not receive, a UOCAVA absentee ballot.
6   52 U.S.C. § 21082.

Informational Statistics—The informational statistics are the election data: the number of ballots cast by category (e.g., in-person, absentee, provisional, challenged), the number of ballots counted, the number of ballots rejected, the number of absentee ballots sent out, the number of absentee ballots returned, and the number of absentee ballots counted. With this data, election officials provide an election overview and information about the administration of a specific election to the media and the public. Local election officials may also report this data to the EAC through the Election Administration and Voting Survey (EAVS). EAVS data going back to 2012, including county-level statistics, can be found on the EAC's website.[7]

Narrative—The narrative details the issues encountered during the canvass process. The canvass board or election official adds context to the raw data and describes any procedural audits performed in the narrative. It might also include a discussion and rationale of any corrective actions taken to remedy issues during the canvass. In general, the narrative tells the story of the election to instill confidence in the accuracy of the election results.

Certifying the Results of an Election

The canvass board may be responsible for releasing the certification of election results after reconciling the results from precincts, early voting sites, absentee voting, provisional and challenged ballots, and uniformed and overseas citizen ballots. In some jurisdictions, the report that the canvass board releases is the official certification of the election.

The certification of results often includes information about the following:

- Reconciled precinct totals, including provisional and challenged ballots

- Reconciled vote center totals, including provisional and challenged ballots

- Reconciled write-in totals, including provisional and challenged ballots

- Reconciled UOCAVA ballot totals

- All duplicated ballots

- All replacement ballots issued at the polling place after a ballot was spoiled

- All rejected ballots

- Documentation of the canvass board's activities

The certification of results might occur during the final meeting of the canvass board or separately, as specified in state and local law. Just as election officials do with other parts of the canvassing and certification processes, they should reach out to the public and key stakeholders, especially the media, encouraging them to attend the certification meeting. At the meeting, election officials can publicly review all the documentation from the canvassing process, including the certified returns, statistics, and narrative.

In some jurisdictions, the certification meeting is an open meeting with specific requirements for public notice and recording minutes. Even if not required, election officials should prepare detailed minutes of the certification meeting, to include a record of the meeting in a documentation package.

If required by state or local law, election officials may need to provide their state's chief election official, each candidate, and each political subdivision with an issue on the ballot with a notice of the certification of the election. Post all documentation of the canvass and certification of results to the jurisdiction's website for public review.

Conclusion

The canvass and certification processes are essential to the integrity of every election. Election officials can share their procedures and invite the public to view the canvass process to promote trust in the election results. The EAC's **Communicating Election and Post-Election Processes** Toolkit is available for all election officials to customize and use to explain their post-election procedures.[8] Additionally, election officials can use the data and documentation compiled during the canvass to tell the story of their elections. Laws and regulations vary across the country, but all election officials should have the canvass in mind from the outset of the election cycle.

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[7]   https://www.eac.gov/research-and-data/datasets-codebooks-and-surveys
[8]   https://www.eac.gov/election-officials/communicating-election-and-post-election-processes-toolkit

OFFICIAL CANVASS
ELECTION OBSERVER RULES OF CONDUCT (SAMPLE[9])

Observers have the right to view all canvass operations.

1. All observers must report and sign in daily at the check-in desk.

2. Observers will be issued a badge, which must be worn at all times. The observer's name and who they are representing (candidate/organization/campaign) will be written on the badge.

3. A staff member will escort observers to the viewing area. Observers are not permitted to enter any area except the viewing area.

4. When leaving for the day, observers must return the badge to the check-in desk.

5. Observers are not allowed smoking, food, or beverages in the viewing area. Observers are not permitted in the canvass work areas, except when permitted and escorted by staff.

6. Observers must set cell phones to vibrate or "all sound off" mode while observing the canvass. They must make all telephone calls outside the canvassing room.

7. The observer's function is to observe procedures. Observers cannot assist in operations. They cannot touch or handle any ballots or other election-related materials.

8. Observers will address all questions concerning a procedure to the staff supervisor and may not direct questions to the canvass board members conducting the canvass.

9. No more than one (1) observer per candidate/organization/campaign is allowed to observe the canvass board work.

10. Observers must avoid physical contact with canvass board members.

11. Observers will hold discussions and conversations outside the designated viewing area.

12. Observers will be allowed into the viewing area only when canvass board members are performing canvass operations. Observers and canvass board members must leave the work and viewing areas during breaks and lunch periods so that the areas remain secure.

13. Operations will continue as scheduled whether an observer is present.

14. BALLOT SECURITY IS A PRIMARY CONCERN. Violation of security by an observer will result in expulsion from the canvass location.

[9]   Jurisdictions should review State and local laws and regulations when creating their own election observers' rules for conduct and behavior.

Recounts

Especially in local contests, it is common for a handful of votes to determine the outcome of the election. In close elections, a recount is an additional count of the votes cast to ensure that ballots cast were counted accurately and that the correct candidates or ballot issues won. Depending on local laws and procedures, this process may be conducted using ballot tabulation equipment or by hand.

The Help America Vote Act (HAVA) requires that voting systems "produce a permanent paper record with a manual audit capacity ... [which] shall be available as an official record for any recount conducted with respect to any election."[1] Additionally, each state has specific laws for conducting recounts, including when they occur, methodology, and scope.

Recounts are generally initiated automatically or by an individual, such as a candidate in the contest to be recounted. Some states require an automatic recount when the margin of victory between candidates falls within a predetermined percentage, such as 0.5 or 1 percent. As allowed by state law, voters or groups of individuals with standing may also initiate a recount. These recounts usually require the initiator to pay the recount cost whereas the state or locality typically covers the cost of an automatic recount.

Election officials should implement these voluntary practices only after reviewing state and local laws and regulations.

Policies and Procedures

As with every aspect of election administration, election officials begin planning for possible recounts long before Election Day. The policies and procedures for conducting recounts and election contests are tied closely to the specific ballot media and design. As jurisdictions can use hand-marked paper ballots, ballot marking devices, or DRE voting machines created by different companies, it can be difficult to determine one standard best practice for all recounts and election contests across the country. Election officials develop and maintain comprehensive internal policies and procedures consistent with state laws, so no confusion arises about completing tasks after an election.

Election officials consider timelines, staff, training, supplies and templates, locations, and cost when planning ahead.

Timelines

Although no federal requirements exist for recounts, election officials need to be aware of statutory deadlines for candidates taking office. For example, in Presidential elections, Congress created the safe-harbor deadline for resolving all election disputes over Presidential votes before the meeting of the Electoral College. If a state has not certified election results and concluded all recounts by that point, they risk having Electoral College votes decided by Congress.

For non-Presidential contests, state statutes impose timeframes on local election officials to certify results and conduct recounts. Any internal office timelines must fit into the statutory window.

> ★ **TIP**
>
> Develop internal office timelines as a checklist. Update the checklist after every election and adjust as needed to refine the process.

Election officials plan for potential recounts from the beginning of the election cycle. State law or regulation often dictates when the recount must begin and end. Election officials should include recount deadlines on the election calendar,[2] which consists of all start and end dates for various tasks for the election cycle. When considering the post-Election Day timeline, election officials should include enough time to conduct a recount after the certification of results and before candidates are sworn into office. If a recount is initiated, election officials can assign the tasks already outlined on the calendar to appropriate staff members—working ahead lightens election officials' load.

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[1] 52 U.S.C. § 21081(a)(2)(B).
[2] See Chapter [x] Elections Office Administration and Quick Start Guide: Elections Calendar for more information on creating an Elections Calendar.

Staff

The recount method affects the type and number of staff election officials need to recruit and train to conduct a recount. Recounts of paper ballots, for example, can sometimes be conducted by retabulating ballots through electronic scanners. However, more staff will be necessary if the jurisdiction conducts a hand recount. Adjudication, or determining voter intent, requires additional training to ensure uniformity of decisions when manually tallying votes during the recount.

Elections office staff usually manage the recount process, often with the help of a recount board or temporary election workers. Usually, the first step is to determine the roles, responsibilities, and availability of elections office staff who will help with the recount process. It is important to have contact information for information technology support, legal counsel, and vendor support to assist if needed. In addition, because the security of the ballots is essential, election officials must follow strict physical and cyber-security protocols.

Some jurisdictions require recounts to be conducted only with full-time elections office staff. Other states require bipartisan recount boards or allow temporary election workers to participate in the process. Whether using staff or temporary workers, bipartisan teams are preferable. Policy and procedure manuals should include a staffing plan with detailed job descriptions. Although jurisdictions may use different terminology, election officials may need to fill jobs equivalent to many of the ones in the following list:

- **Facilities Coordinator** to supervise the recount area.

- **Ballot Sorting Coordinator** to distribute all ballots or electronic memory cards with votes to be recounted.

- **Poll Ballot Sorting Teams** to bundle and prepare all the ballots cast on paper or electronically at polling places, including provisional ballots, for recounting.

- **Absentee Ballot and Early Voting Sorting Teams** to bundle and prepare all absentee ballots cast in person on paper or electronically and by mail.

- **Tally Boards**, which usually are bipartisan, to conduct the actual counting.

- **Team Leaders** to monitor the recount boards.

- **Runners** to bring ballots to the recount boards.

- **Data Entry Personnel** to collect the tally sheets from the recount boards and input data for final totals.

- **Observer Coordinator** to oversee members of the public who view the recount process.

- **Security Personnel** to maintain the orderly conduct of recount activities.

The number of individuals needed for conducting a recount depends on a few factors, including the number of ballots, the type of voting system, the timeframe, the recount method, and the budget. If election officials hire temporary election workers to assist, they might consider recruiting stand-by staff in the event of cancellations during the recount process.

Training

A recount procedure is not always a normal part of the pre-election training process. Thus, election officials will likely need to conduct a special training session for all recount board staff. Training must take place in the short time available after election results are certified and before the beginning of the recount. The training sessions should be comprehensive regarding the policies and procedures for conducting the recount and provide information about the rules for observers, media, and candidates.

Election officials can start the training session by explaining the strict requirements for every step in the process, including the chain of custody of ballots and materials. Election officials should administer the oath of office that each person must take, if required by law, and review security procedures in detail. For example, taking photos or video may be prohibited (by law in some jurisdictions) from a recount site to ensure the integrity of the process. All training materials should be made available in advance of the recount and be available to the public upon request.

Election officials should also ensure that recount staff knows their jobs' administrative aspects, such as how to complete their timesheets and when to expect to be paid for their services. Election officials should explain the procedures for taking breaks during the workday. For example, there could be requirements for a certain number of recount staff members to be present during all aspects of the process. In some jurisdictions, staff members cannot leave the room without authorization from the recount coordinator. By limiting the number of people entering and exiting the room during the recount and having all participants take breaks simultaneously, the facilities coordinator can ensure that the room remains secure throughout the process.

Supplies and Templates

Election officials should have access to certain supplies and materials in the event of a recount. Depending on the number of ballots to be re-tabulated, election officials may need to adjust quantities of supplies, including security seals, chain of custody logs, tally sheets, envelopes, paper, and pens. In addition, adjustments to the location may need to be made, such as setting up partitions in the counting room to separate the recount teams or to mark off areas for observers. Some jurisdictions may need parking permits for the recount board members and any additional staff.

Election officials can also prepare templates for potential recounts long before Election Day. Because the timeframe in which to conduct recounts can be relatively short, election officials can add details to press release templates and legal notices that may be required. In addition, election officials can ensure that the various tally sheets—by batch, by precinct, by ballot type (absentee, early voting, Election Day, provisional)—are prepared for easy printing before a recount.

Location

Many jurisdictions can conduct a recount from within the elections office. However, state laws or regulations may require an election official to make specific accommodations to allow for additional transparency of the recount process. In some states, election officials will record or live stream the proceedings of the recount process. If many observers are expected to attend, election officials may need to move the recount to a larger space. Wherever the recount is held, election officials must secure the recount room and all materials throughout the recount process and have security staff on-site, if needed.

Cost

In states with automatic recounts, the state or locality typically covers the cost of an automatic recount. However, recounts initiated by request are often billed to the initiator or requestor of the recount. Depending on state law, the requestor may not be billed or may be reimbursed if the recount changes the result of the election. Recount costs are not usually included in pre-budget planning because it can be difficult to estimate the exact cost of a potential recount without knowing the scope or likelihood of occurrence. Consider the following costs when developing a budget:

- Full-time staff salaries and benefits, with overtime hours
- Part-time staff salaries
- Location rental (if the jurisdiction does not have room in the elections office)
- Tables and chairs rental (if necessary)
- Legal expenses
- Vendor support
- Security
- Additional printing, storage boxes, security seals, and other supplies used in the jurisdiction for the recount.

Election officials should understand their jurisdiction's policies and procedures for collecting funds when a recount is requested. Election officials may need to request initial funding from the local budget department for the recount, pending reimbursement from the candidates or other parties, if provided by law. In other jurisdictions, election officials must notify recount-requesters about the need to post a bond before commencing the recount. In the event of an automatic recount, state law should outline how the process will be funded.

Materials for the Public

Election officials' standard operating procedures (SOPs) are mainly for the actual administration of the elections process. However, the candidates, media, and public may also use the SOPs to understand the recount process. Election officials should develop materials describing their procedures in plain language to benefit individuals who are less familiar with election procedures.

Election officials can tailor materials for the public for each election. However, a few overall items will help the public observe a recount in progress. Election officials should make the public aware of the timeline, methodology, scope, and effect on final outcomes of election results if the recount reveals discrepancies between original and recounted election results.

Election officials should prepare recount materials that address the 'who, what, and when' of the recount process. The materials should include information for individuals and groups that intend to initiate a recount. Include the deadlines for requesting a recount, where to acquire the form needed to file for a recount, and information on costs or deposits, if applicable. Some recount requests must be filed with the state elections office and others with the local elections office. The timeframe and scope vary widely by state and local elections offices, which can be confusing if the recount covers multiple jurisdictions. When a recount spans multiple jurisdictions, it is sometimes necessary to file a unique recount request form in each jurisdiction. While preparing materials for the public, be aware of any specific rules or state laws requiring written notice of the recount's dates, times, and location.

Election officials can include a "Frequently Asked Questions" page on the elections office's website with questions such as:

- Are recounts mandatory?
- Who can call for a recount?
- Will the recount establish a definite winner?
- How long does the recount last?
- How much does a recount cost?
- Who pays for a recount?
- Who can handle the ballots or electronic memory cards?
- Who can transport the ballots or electronic memory cards?
- How are the ballots or electronic memory cards secured?
- Can the public view a recount?
- Under what conditions can the results of a recount be challenged?

Election officials may want to include the recount policies and procedures manual in media and candidate packets as a routine procedure. In addition to the FAQs, the elections office's website can also provide the SOPs in an easy-to-use and accessible format.

Conducting the Recount

Election officials will likely have a short window to complete a recount. After a recount is formally requested or automatically initiated, election officials can distribute the recount policies and procedures manual to all parties involved to help them understand the process. They might also consider including inserts about the contests to be recounted and the number of ballots/precincts/counties included in the recount.

TIP

If the jurisdiction is operating in an extremely short timeframe, election officials could implement a staggered work schedule so that counting can continue for longer periods in the same location.

Transparency is key to building confidence in election outcomes. On the first day of the recount, election officials may conduct an informational briefing and orientation session. The briefing provides election officials an excellent opportunity to review the policies and procedures they will use to conduct the recount. They can also use this time to discuss the rules for observers and explain when the public can expect periodic updates.

During the briefing, election officials often explain the security of the physical location and the chain of custody procedures, which is especially important if the recount is conducted away from the elections office. In this discussion, election officials could review when breaks will be allowed and list any prohibited materials. Election officials can conclude the briefing with a tour of the location, allowing everyone to walk through and ask final questions about the process.

Election officials may require all elections office staff and temporary employees to sign in and wear a nametag. After the recount teams sign in, election officials can direct the public to the areas where they can observe the process.

State and local law will determine if items such as cell phones, electronic devices, writing utensils, food, or beverages will be allowed in the recount area. Election officials can then remind the recount team to refrain from extended discussions with any observers who may be in the room. As observers arrive, election officials (or designated personnel) should direct them to the observer coordinator, who will ask them to adhere to observers' rules of conduct and behavior.

Election officials should be mindful of the tedious and monotonous nature of the recount team's work, regardless of the recount method that the team uses. Because the workers may not be regular elections office employees, consider reminding the facilities coordinator to review and monitor the temporary employees' working hours and allow for a lunch break and other frequently scheduled breaks.

Election officials should be aware of possible disruptions to the workflow by legal challenges posed by candidates, parties, or other organizations. Although election officials hope for a smooth recount, they should be prepared to secure the ballots throughout any legal challenges surrounding the conduct of the recount.

TIP

If time, budget, and staffing resources allow, consider limiting each recount member to no more than six working hours per day to ensure accuracy.

As the recount nears completion, election officials should consider contacting the candidates, media, and other interested parties to notify them of the date, time, and location for the issuance of the recount announcement.

Example: Hand-Recounting Ballots

The following paragraph describes how to conduct a recount when hand-recounting paper ballots. It serves only as an example; election officials follow the laws and regulations of their jurisdictions when conducting a recount.

During the recount, three or four-person teams receive ballots. For each ballot, one team member reads aloud the candidate's name receiving the vote. Another team member records the vote on a tally sheet. The third and fourth members (if applicable) verify both of the other team members' work. When the team finishes recounting an entire bundle of ballots, the totals from the tally sheet are recorded on a batch sheet and attached to the bundle of voted ballots. To ensure accuracy, election officials can require team members to switch roles and count each bundle of ballots twice before attaching the batch sheet to the ballots.

Example: Electronically Recounting Ballots

Although the above example relates to the hand-recounting of paper ballots, many recounts are conducted electronically by rescanning optical scan ballots through a ballot tabulator, reloading cartridges on digital recording electronic (DRE) voting machines, or some blend of these methods. When reviewing the ballots electronically, it is possible that new logic and accuracy testing may need to be performed on the recount machines to ensure their integrity for use in the recount.

Base the workflow for counting on the criteria for balancing election returns. For example, to recount ballots cast at polling places, team members will recount the ballots to balance to the precinct optical scanner or DRE memory cards at the end-of-day tally report from each corresponding scanner and polling place. For ballots counted at a central count location, team members will recount the batches corresponding to the reported election returns for those particular batches.

These balancing criteria enable election officials to construct the recount totals in the same way the votes were originally collected and counted. After the teams recount each batch or precinct, they aggregate the totals to determine the total for the recount. Depending on the recounted contest, the teams will continue to aggregate the results until they have reanalyzed all ballots cast for the contest.

The recount teams use the same processes previously described to recount absentee, early voting, provisional, and all other categories of valid ballots. After the teams recount all ballots, they add together the tally sheets. The results from the totaled tally sheets become the recounted totals for the contest.

Finalizing the Recount

Election officials should collect and organize all recount documentation—tally sheets, batch sheets, and ballots. The recount results can be challenged in court; therefore, election officials should keep detailed records of each decision made and action taken during the recount process.

After elections results are certified and all legal challenges are resolved, election officials should repackage and seal the documentation for archival storage. Election officials can itemize all balloting and recounting materials by type and location in preparation for future requests for public records or potential lawsuits. Under federal law, all election materials must be stored for 22 months after a federal election.[3]

After the recount, elections office staff should prepare a summary report analyzing the recount process. The summary report can serve as a guide for improving the policies and procedures for future recounts. This summary can include the number of staff, ballots recounted, and hours dedicated to the process. The summary should also include the final outcomes and any discrepancies discovered between the original results tallies and recount tallies. If a specific aspect of the process did not work well, election officials should assess the reasons for the failure and then suggest changes to the recount policies and procedures manuals. In addition, elections office staff and temporary recount board members who completed the recount may have valuable suggestions for improving the recount process, and election officials should solicit their input.

If the jurisdiction pays for the recount cost, election officials will distribute this information to the jurisdiction's budget department. Alternatively, election officials may need to prepare an invoice to send to the party, candidate, or voter responsible for the cost of the recount.

Conclusion

Recounts must be completed in tight timeframes, so election officials must be prepared to conduct one well before the final results are tallied. Election officials must ensure they are prepared to recruit and train recount board members quickly. Even though not every election requires a recount, procedures must be up to date and ready to distribute to interested parties. Setting realistic timeframes and providing regular updates to the public can preempt questions and enhance engagement in the process.

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[3] 52 U.S.C. § 20701.

Sample Tally Sheet

State of Iowa
Manual Recount Tally Sheet

County:_____ Election Name and Date: _____ Precinct:_____

Recount of Votes Cast for: ☐ Office: _____

OR ☐ Public Measure: _____

Instructions:
Use one tally sheet for each candidate or yes/no votes for a public measure. Make a hash mark for each vote cast. Use one box for each set of ten hash marks.

Candidate's Name: _____

OR Votes Cast for Public Measure: ☐ Yes **OR** ☐ No

10	20	30	40	50	60	70	80	90	100	
										100
										200
										300
										400
										500
										600
										700
										800
										900
										1000
										1100
										1200
										1300
										1400
										1500
										1600
										1700
										1800
										1900
										2000

Total Votes Cast: _____

Print Name of Tally Keeper: _____

Signature of Tally Keeper: _____ Date: _____

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