



Secure Elections Toolkit

Helping America Vote

EAC Toolkits

To assist election officials in developing materials about a wide variety of topics that affect their operations, education, and outreach, the U.S. Election Assistance Commission (EAC) aims to provide toolkits that can be used by elections offices. Many of the resources in the toolkit below are customizable to various degrees, depending on what the elections office needs.

Using the Secure Elections Toolkit

The security of voting systems is essential to a trustworthy election. This topic has always been a key priority for election officials, but the public may not be aware of the many steps election officials take to safeguard the voting process. While no two jurisdictions' approaches to election security are exactly the same, each jurisdiction's approach is designed to ensure information security, physical security, cybersecurity, and continuity of operations in the event of a disaster.

The Secure Elections Toolkit, and its accompanying materials, are intended to assist election officials when informing candidates, policy makers, media, stakeholders, and the public of the multi-layered approach used to secure elections. The toolkit has two sections.

Section 1 – Toolkit for election officials to share information about election security in their jurisdictions:

- Frequently Asked Questions: Election Security
- Example Content for Communications
- Example Talking Points
- Case Study: Washoe County, Nevada

Section 2 – Toolkit for election officials to share information about components of the EAC Testing and Certification program:

- Frequently Asked Questions: EAC Testing and Certification Program
- Frequently Asked Questions: Voluntary Voting System Guidelines (VVSG) Deprecation
- EAC Social Media Graphics
- EAC Resources

The EAC Social Media Graphics in this document are for reference. Full-size image files are available on the [EAC website](#). Each image includes information about components of the EAC Testing and Certification program, as well as sample social media text and alt text for each image.

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Section 1

Toolkit for election officials to share information about election security in their jurisdictions.

Frequently Asked Questions: Election Security

The Frequently Asked Questions (FAQs) outlined below can be used in an FAQ website, be added to existing communication plans or formatted for printing. Before using the FAQs, review and edit the language in the template to match your jurisdiction's election procedures. Review and edit all the **blue highlighted sections**, which indicate procedures that vary by jurisdiction.

Q: Are election and voting systems secure?

The security of voting systems is essential to a trustworthy election. Every state and local jurisdiction utilizes common-sense procedures and tools to safeguard the voting process. Some examples of the security measures we use in **[Election Jurisdiction]** include using locks, tamper-evident seals, security cameras, system testing before and after elections, **audits**, and physical and cybersecurity access controls.

At the federal level, the U.S. Election Assistance Commission (EAC) assists states and local election officials by developing and maintaining the Voluntary Voting Standard Guidelines (VVSG) used to test and certify voting equipment. The purpose of the EAC's national voluntary voting system testing and certification program is to independently verify that voting systems comply with the functional capabilities, accessibility, and security requirements necessary to ensure their integrity and reliability for use in elections. Industry experts, election officials, and federal agencies collaborate to develop certification standards in a transparent process. For more information about the EAC's testing and certification process, see <https://www.eac.gov/voting-equipment/testing-and-certification-program>.

Every state enacts laws, regulations, and security policies to further protect the integrity of elections. Each state also has a Chief Election Official who has oversight responsibility to ensure their laws and procedures are strictly and uniformly followed. **[Election Jurisdiction]** is required to use EAC-certified voting systems or systems tested and certified by the state. To find information about the testing and certification in **[State]**, visit: **[Link to State certification page]**

Q: Can voting equipment used to count ballots be trusted?

In addition to using certified voting systems, **[Election Jurisdiction]** uses additional procedures to ensure the accuracy of the election. These procedures include:

- Purchasing voting systems that have been tested and certified by the EAC.
- Programming all devices according to local laws and regulations.
- Testing voting equipment for accuracy prior to elections and allowing the public to attend. (Pre-Election Logic & Accuracy Testing)

- Conducting elections with bipartisan poll workers and observers.
- Verifying that the total number of ballots matches the total number of voters.
- Auditing the ballots or verifiable paper trail to ensure that the voting equipment counted votes accurately. (Risk limiting audit/Post Election Logic & Accuracy Testing)
- Maintaining a strict chain of custody, verified by at least two witnesses (often from opposing parties).
- Maintaining physical security access controls.

In [Election Jurisdiction] most of these processes are open to the public. For more information about being an election observer, contact [Election Jurisdiction contact information].

At [Election Jurisdiction] we are committed to making the voting process fair, accurate, and secure.

Q: How do election workers ensure the security of elections?

There are many processes and procedures in place to assure the public that the outcome of elections can be trusted. Election officials receive state training and professional instruction in election administration. Almost every part of the election process requires the participation of two or more trained officials who've sworn an oath to uphold all election laws and protect the security of the election. Election observers, sometimes called "poll watchers," may also be present to monitor or observe the election.

Q: How do I know election security procedures are being followed?

Transparency is a critical part of election security. Almost all processes and procedures require two or more trained personnel be involved, and these election workers have taken an oath to uphold state election laws and protect election security. Representatives of political parties or candidates, and sometimes even members of the general public, are also allowed to observe and monitor activities throughout the election processes.

Chain of Custody refers to the processes, or paper trail, that documents the transfer of materials from one person (or place) to the next. Every state and local jurisdiction has its own controls for ensuring the chain of custody of election materials is properly maintained. The controls in [Election Jurisdiction] include locks, seals, audit logs, witness signatures, or other security measures.

Q: Why do election results change after election night? When are election results final?

Election officials count as many ballots as possible on election night and during the pre-election canvass period, if permitted by law. However, election night results are unofficial and never final until certified. Each state has different rules for when mail, provisional, and military and overseas ballots can be counted. For example, some states require all mail ballots to be received by Election Day. Others allow mail ballots to be counted if they are postmarked by Election Day and received by a certain date.

Once all the ballots have been received, the canvass begins. This process usually involves analyzing vote totals to identify and resolve any discrepancies between the number of voters and the number of ballots cast. Most states also conduct audits to further verify the vote totals are accurate.

Once the canvass (and in many states, audits) has been completed, the election results are certified as final.

Some races or contests may be recounted after the certification process because the contest was close or a candidate or interest group requests it. Recounts differ from audits in that every ballot in a contest or a subset of contests in the election is recounted, and the official results of the election may change as a result.

Example Content for Communications

The example content below can be incorporated into e-newsletters, websites, or modified and formatted for other communications. Before using this example content, review and edit the language to match your jurisdiction's election procedures.

- The security of voting systems is essential to a trustworthy election. Every state and local jurisdiction utilizes common-sense procedures and tools to safeguard the voting process. Common best practices include using locks, tamper-evident seals, security cameras, system testing before and after elections, audits, and physical and cybersecurity access controls.
- Administering an election begins months in advance with budgeting, planning, procurement, and securing of voting system components and other election technology.
- Election administration requires careful attention to security to maintain the integrity of the entire voting process. Election officials develop and follow procedures to ensure the security of all components of the election process—from voter registration through final results certification.
- Election technology is a broad term encompassing the databases, systems, and devices that support the ongoing operations of an elections office. This includes supportive technology, such as voter registration databases, e-poll books, and results reporting tools used to display unofficial results on elections websites. Election technology also encompasses voting systems, although voting systems themselves are more narrowly defined.
- Voting systems are more than voting machines. A system is a collection of unified components, that consist of subsystems, such as scanners, databases, and equipment necessary to count votes and produce election results. Voting systems may also import or export data from external systems using secured removable media. Most states require voting systems to be certified. The EAC is responsible for testing and certifying voting systems at the federal level, while many states implement their own additional processes for certification. HAVA mandates that the EAC accredit voting system test laboratories and certify voting equipment. State participation in the EAC's certification program is voluntary.



- The physical security of elections relies on people, processes, and procedures to protect election and voting systems, 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, during voting, and through the post-election canvass and certification process. This includes maintaining strong chain of custody procedures and documentation, utilizing tamper-evident security seals, and limiting physical access.
- Election officials implement practical policies like two-person accountability, video monitoring, and access logging to promote the system's security. Logging of actions taken during the election process, from ballot proofing to post-election audits, is the foundation for security in elections. Election office staff and poll workers document actions taken throughout the election cycle to form an audit trail for each election. This audit trail serves as evidence that proper procedures were followed and provides important supporting evidence of the integrity of the election.
- Election administration relies on complex manual processing of highly technical procedures, often with the assistance of temporary or voluntary poll workers. As complexity increases, so do the opportunities for administrative errors or mistakes throughout the voting process. Election officials put safeguards and procedures in place to prevent common errors, but occasionally mistakes will happen. When mistakes occur, election officials work to quickly remedy the situation, learn from the experience, and adjust procedures to prevent the same mistakes from occurring again in the future.

Example Talking Points

Voter Registration

- Voter registration ensures only those meeting state eligibility requirements can vote and helps keep track of who has cast a ballot.
- Only authorized personnel have access to the voter registration database.
- Voter registration systems are protected using security measures such as access control, intrusion detection systems, encryption and firewalls.

Mail Ballots

- Vote by mail ballots are protected by state rules and procedures that determine how they must be handled.
- Election officials take your privacy seriously, and multiple steps are taken to ensure that your votes remain private. Election officials keep a record of whether you cast a ballot, but they are never able to tell how you voted.

- Election officials verify each mail ballot by first, verifying the ballot was received from a voter who was properly issued a ballot, and secondly, making sure that the signature and/or other identifying information on the ballot envelope matches the voter's information on file.
- Every ballot is subject to a strict chain of custody process, whether that ballot is issued to a voter in person or by mail.

Election Equipment

- Each piece of voting equipment is thoroughly tested in a public manner prior to every election to make sure ballots will be counted correctly.
- Most jurisdictions have adopted policies that forbid voting machines from connecting to the internet.
- Physical security safeguards are required for voting systems while in storage, in transit, in the polling place, during voting and through the post-election canvass and certification. This includes maintaining strong chain of custody procedures and documentation, utilizing tamper-evident seals, and limiting physical access. While election materials are in use, they are closely watched by election workers trained to notice and respond to any suspicious behavior.
- Each time election materials and equipment switch hands, it has to be documented to form an audit trail. The audit trail serves as evidence that proper procedures were followed and provides important supporting evidence of the integrity of the election.
- When it isn't being used, voting equipment is securely stored in a facility accessible only to trained election personnel.

Election Workers

- Almost all processes and procedures require that two or more trained personnel be involved (often bipartisan).
- Typically, poll workers are trained by local election officials in different aspects of polling place responsibilities and work in teams (often bipartisan).
- These officials have taken an oath to uphold state election laws and protect the security of the election.
- Representatives of political parties or candidates, and sometimes members of the public, are allowed to observe and monitor election activities.

Election Night Reporting

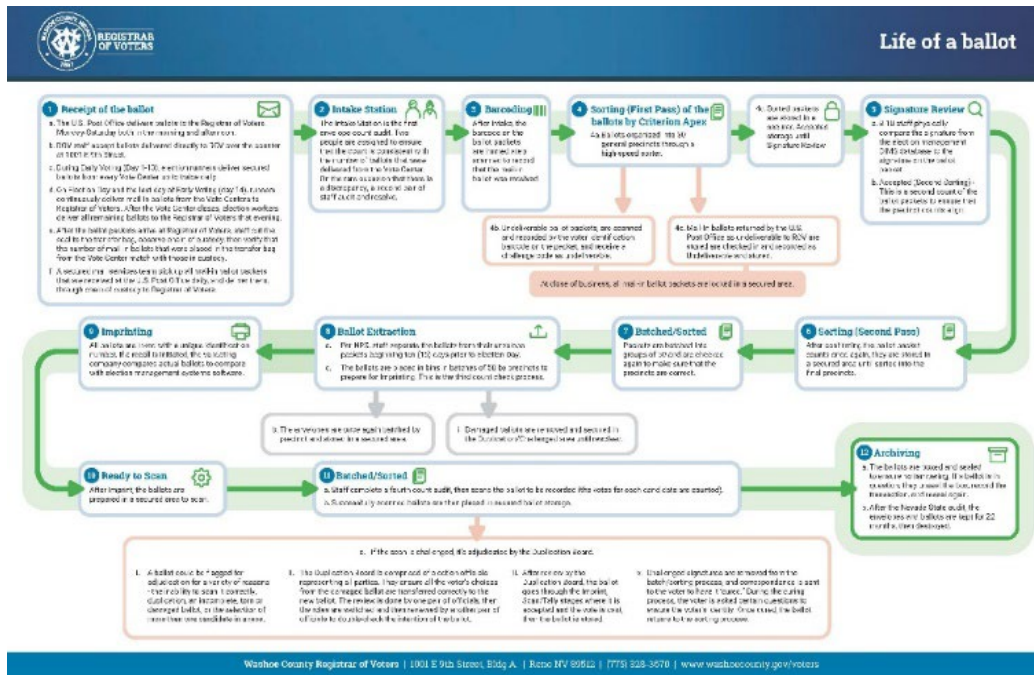
- When the polls close on election night, election personnel collect ballots and election materials are then securely transported back to election headquarters.
- Although we may know who won an election within a few hours or days, results are not official until the vote is certified. The media calling the winner of the race is unofficial until all the votes are counted and certified by officials.

- Unofficial election results are shared on election night from a secure location that limits public access, while allowing people to observe the counting process.
- Computer networks are monitored looking for signs of irregularities to prevent tampering with election results reporting websites.
- Many jurisdictions conduct post-election audits to further verify results.

Case Study: Washoe County, Nevada

Voters consume information from a variety of sources. Election officials can use websites, blogs, e-newsletters and other longer form mediums to explain the many ways they safeguard the integrity and security of elections. Providing accurate and reliable information can answer voters' top questions and may reduce the chances of inaccurate or unconfirmed information being distributed. Washoe County Nevada has an entire section of their website dedicated to election integrity and security, including:

- [Voting System Security](#)
- [Election Infrastructure Security](#)
- [Ballot Drop Box Security](#)
- [Election Equipment Requirements](#)
- [Testing and Certifications](#)



Life of a Ballot Infographic. See the full-size image on the Washoe County, NV website.

Learn more: <https://www.washoecounty.gov/voters/election-info-voting-options/election-process/election-integrity/index.php>

Section 2

Toolkit for election officials to share information about the EAC's Election Security and Certification program. The following section contains information about the EAC's Testing and Certification Program and the EAC's Voluntary Voting Systems Guidelines (VVSG). The information below should not be modified.

Frequently Asked Questions: EAC Testing and Certification Program

Q: What does an EAC certification mean?

An EAC certified voting system has been tested by a federally accredited test laboratory and has successfully met the requirements of the VVSG and any other claims made by the voting system manufacturer.

Q: What are the voluntary voting system guidelines (VVSG)?

The voluntary voting system guidelines are a set of specifications that voting systems, voting devices, and software must meet to receive a certification from the U.S. Election Assistance Commission (EAC). EAC-accredited laboratories test voting systems, voting devices, and software against these guidelines.

Q: How are the laboratories that test voting systems accredited?

HAVA states that the National Institute of Standards and Technology (NIST) assists the EAC through its National Voluntary Laboratory Accreditation Program (NVLAP), which assesses and provides recommendations to the EAC regarding laboratory accreditation. After the EAC receives the recommendations from NVLAP, EAC conducts further assessment of the recommended laboratories. After the EAC review, the Commission votes regarding full accreditation. Once the Commission votes to accredit a laboratory it is referred to as a voting system test laboratory (VSTL).

Q: Did the accreditation of the Voting System Testing Laboratories (VSTLs) expire?

The accreditation of the EAC's VSTLs has not expired. Despite claims made to the contrary during the 2022 midterm elections and periodically going back to the 2020 election, both VSTLs have been in good standing with the EAC. Both VSTLs have been assessed and accredited twice since 2020.

Frequently Asked Questions: Voluntary Voting System Guidelines (VMSG) Deprecation

The VMSG are a set of voluntary federal specifications and requirements against which voting systems can be tested. Federal law mandates that the United States Election Assistance Commission (EAC) develop and maintain these requirements. Over time, changes to the VMSG are necessary. Old versions of the standard need to be discontinued and new versions need to take their place.

The new VMSG 2.0 standard was fully implemented on November 15, 2022. On November 16, 2023, VMSG versions 1.0 and 1.1 will be deprecated. This document provides background and clarifying information around the meaning and implications regarding the deprecation of VMSG standards.

Q: What Does VMSG Deprecation Mean?

Deprecation of a VMSG standard means testing new voting systems to the standard (e.g. VMSG 1.0) will be discontinued, while also limiting modifications to existing systems certified under a previous standard to the areas of security and maintenance.

Q: Will Voting Systems Be Decertified?

No voting system will be decertified by the EAC as part of VMSG deprecation.

Q: What Does This Mean for EAC Certified Voting Systems?

VMSG deprecation does not affect the status of any previously EAC certified system. Systems certified under a previous standard are still certified and may still be acquired and used.

Q: What Does This Mean for Jurisdictions?

Jurisdictions are not required to replace or update any system with a VMSG 2.0 certified version. Jurisdictions may continue to acquire and use systems certified to deprecated standards.

Q: Will Current Voting Systems Still Receive Updates?

Yes. Limited maintenance modifications will be allowed for systems certified to deprecated standards. This includes security patches, bug fixes, end-of-life component updates, and functionality required by jurisdictional rule changes.

Q: What Initiates VMSG Deprecation?

The EAC's VMSG Lifecycle Policy outlines the process for standard deprecation when a new VMSG version has been approved by the EAC's Commissioners.



Social Media Graphics

Help spread the word about VVSG 2.0 and the EAC Testing and Certification Program. When sharing use @EACgov to tag EAC on Twitter, @EACgov1 to tag EAC on Facebook. The Social Media Graphics in this document are for reference. Full-size image files are available on the [EAC website](https://www.eac.gov).

1. **Text:** The VVSG 2.0 builds on prior versions and defines standards that will be the cornerstone of the next generation of voting systems. With its adoption, voting machines certified to the new standards will have enhanced cybersecurity, accuracy, accessibility, and usability. Learn more at <https://www.eac.gov/>

Voluntary Voting System Guidelines 2.0
What does this mean for EAC Certified Voting Systems?

- VVSG 2.0 standards were fully implemented on November 15, 2022
- On November 16, 2023, testing to VVSG versions 1.0 and 1.1 will be discontinued.
- Voting systems that have been certified to VVSG 1.0 and 1.1 will remain certified, even after November 16, 2023.
- Jurisdictions may continue to purchase and use systems certified to 1.0 and 1.1 standards.
- Limited modifications will be allowed for systems certified to 1.0 and 1.1 standards.

To learn more, visit [eac.gov](https://www.eac.gov)

Alt text for image: Red header and footer on a blue background. EAC Logo. Voluntary Voting System Guidelines 2.0. What does this mean for EAC Certified Voting Systems?

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- Limited modifications will be allowed for systems certified to 1.0 and 1.1 standards.

To learn more, visit [eac.gov](https://www.eac.gov)

2. **Text:** EAC certified voting systems comply with the functional capabilities, accessibility, and security requirements necessary to ensure their integrity and reliability for use in elections. View EAC FAQs for more info: <https://www.eac.gov/voting-equipment/frequently-asked-questions>

What does EAC certification mean?

An EAC certified voting system has been tested by a federally accredited test laboratory and has successfully met the requirements of the VVSG and any other claims made by the voting system manufacturer.

View the **EAC's Voting Equipment FAQs** for more information

Alt text for image: Red header and footer on a blue background. EAC Logo. What does EAC Certification mean? An EAC certified voting system has been tested by a federally accredited test laboratory and has successfully met the requirements of the VVSG and any other claims made by the voting system manufacturer. Image: Official seal that reads "Certified." View the EAC's Voting Equipment FAQs for more information.

3. **Text:** Manufacturers will be held accountable through EAC's Quality Monitoring Program. Learn more: <https://www.eac.gov/voting-equipment/frequently-asked-questions>

EAC Quality Monitoring Program

The EAC's certification program establishes accountability through its Quality Monitoring Program which ensures, through various check points, that the voting systems used in the field are in fact the same systems the EAC has certified.

View the **EAC's Voting Equipment FAQs** for more information

Alt text for image: Blue header and footer on a red background. EAC Logo. EAC Quality Monitoring Program. The EAC's certification program establishes accountability through its Quality Monitoring Program which ensures, through various check points, that the voting systems used in the field are in fact the same systems the EAC has certified. Seal icon with text "Best Quality." View the EAC's Voting Equipment FAQs for more information.

4. **Text:** Election officials use many procedures and tools to safeguard the voting process. Find out more about voting system security measures here:
https://www.eac.gov/sites/default/files/electionofficials/security/Voting_System_Security_Measures_508_EAC.pdf



Alt text for image: Red background with a blue header and footer. EAC logo. Voting System Security. Common Best Practices: Locks, Tamper-evident seals, Security cameras, System testing, Audits, Physical and cybersecurity access controls, Chain of custody tracking Image: White outline of a shield with a white lock. View the EAC's Voting System Security guide.

5. **Text:** Election administration requires careful attention to security to maintain the integrity of the entire voting process -from voter registration through final results certification. Learn more at <https://www.eac.gov/>



Alt text for image: Red header and footer on a blue background. EAC logo. Securing Election Technology. Election officials use many security measures to make sure that each piece of the voting process is secure. This includes using tools and procedures to secure voting systems and technology. Image: White ballot box with a blue circle and white checkmark. Grey arrows pointing from a computer screen with a red circle with a white checkmark, to a ballot, to a white lock with a grey circuit board design, back to the computer screen. To learn more, visit [eac.gov](https://www.eac.gov).

Resources

Communicating Election and Post-Election Processes Toolkit

<https://www.eac.gov/election-officials/communicating-election-and-post-election-processes-toolkit>

This toolkit can be used to create educational materials about pre- and post-election processes that observers and the public can understand. Election officials in any size jurisdiction can adapt this toolkit to fit their observer and voter education needs.

Voting System Security Measures

<https://www.eac.gov/voters/election-security>

This guide outlines some of the many best practices local election officials follow to secure voting systems through an election cycle. It's important to note this is a broad list of common security measures and procedures to protect the integrity of an election. This resource can be used by election officials as they develop their communication plans about this critical part of election administration.

Best Practices: Election Technology Security

<https://www.eac.gov/election-officials/election-technology-security>

Election administration requires careful attention to security to maintain the integrity of the entire voting process. Election officials develop and follow procedures to ensure the security of all components of the election process—from voter registration through final results certification. This guide highlights security features that are essential for protecting election technology.

Best Practices: Chain of Custody

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

Chain of Custody refers to the processes, or paper trail, that documents the transfer of materials from one person (or place) to the next. Every state and local jurisdiction has its own controls for ensuring the chain of custody of election materials is properly maintained. This guide is intended to provide examples of best practices, checklists, and forms for maintaining a proper chain of custody.

Election Management Guidelines

<https://www.eac.gov/election-officials/election-management-guidelines>

The Election Management Guidelines (EMG) was as created to assist state and local election officials in effectively managing and administering elections. These guidelines complement the technical standards for the Voluntary Voting System Guidelines for voting equipment. Chapters include Contingency Planning, System Security, Physical Security, Voting System Certification, Acceptance Testing, Documentation and Audit Trail, Post-Election Audits, and more.

EAC Election Security Preparedness Webpage

<https://www.eac.gov/election-officials/election-security-preparedness/>

