Public Relations Kit

President's Letter

Hello to you and your staff!

Here at ES&S, we value your role in maintaining the strength of our democracy through secure and efficient elections. In fact, our most important work is helping you run successful elections by providing the tools and resources you need.

We know that successful elections are the result of careful planning, meticulous attention to detail, adherence to laws and procedures coupled with dedicated election officials and providers. Being a source of accurate information to the media, elected officials and voters on how your voting system operates can be a vital component of the process. That's where this public relations kit comes in. We hope you use this information as a reference tool regarding your new system, our company and more. The facts within can be shared with the media and other groups to explain how your voting system operates, as well as to speak to the security, accuracy and accessibility of the equipment. We hope you find this information valuable.

In addition to this guide, our media team is available to provide support as needed for inquiries that go beyond the scope of this guide. Please feel free to reach out; we want you to know that our doors are open, and we are listening. Our mission is clear; "maintain voter confidence and enhance the voting experience" and this guide is but one way to fulfill that mission.

I, along with the ES&S family, look forward to assisting you in providing better elections, every day. Thank you for choosing us as your elections partner.

President & Chief Executive Officer

Contents

Did you know...

If you're viewing this Public Relations Kit digitally, you can click on text in blue to navigate to different sections or open links. Clicking "Public Relations Kit" on the top of pages will bring you back to this Contents page.

Your Media Resource

ES&S has a number of resources to help you communicate to the public and the media through effective public relations.

Website: essvote.com
Our website contains information about all of our product offerings and services. The website is also home to high-quality images and videos you, or the media, can use.

Blog: essvote.com/blog
Our blog, accessible from our website, is a great place to learn more about industry trends and actions other election jurisdictions across the nation are taking, including stories and customer spotlights you or the media might find helpful.

Downloadable Assets: essvote.com/pr-kit-assets
Election and security-themed digital assets, including pictures, videos and information.Following us on social media lets you stay up to date on voting news and developments.

Glossary: essvote.com/glossary
A comprehensive list of election terminology.

Social Media
We post stories about election success from across the country, reshare information from important accounts such as the U.S. Election Assistance Commission (EAC) and send updates about important election dates and holidays such as National Voter Registration Day and more.

facebook.com/essvote

twitter.com/essvote

linkedin.com/company/
election-systems-&-software

ES&S Media Relations
Should you need additional resources or information about ES&S, its products or services, please don't hesitate to contact ES&S Media Relations. Our team stands ready to help you communicate accurate information to the media, elected officials and voters.

402-938-1300
media@essvote.com

Katina Granger
Public Relations Manager

News Releases

Transparency and factual, open communication help improve the implementation process and maintain trust among voters, poll workers and the media. Proactively sharing facts about your voting system while answering common questions, providing background about the decision, and outlining any possible changes to the election is key.

If you have recently implemented new voting equipment, or made changes to your voting process, a release is an excellent way to sum up essential information and share it with the media.

- **New, Secure Election Products Receive Federal Certification**
  https://www.essvote.com/blog/inside-ess/new-secure-election-products-receive-federal-certification/
- **Cybersecurity Student Researchers Put ES&S ExpressVote XL to the Test**
  https://www.rit.edu/news/rit-cybersecurity-student-researchers-put-voting-machine-security-test
- **'Wave of the Future' Voting Technology to Pilot in Atlantic County, New Jersey**
  https://www.atlantic-county.org/news/details.asp?ID=5043

When writing a news release make sure to include:

- Names of all new equipment
- When it will be implemented (date of first use)
- Benefits of the system, including security features
- A quote from your election office or ES&S
- Hyperlinks to the ES&S website for additional information
- What, if anything, will change for voters
- Other pertinent facts

Need Some Inspiration?

The following pages are a sample news release you may find useful in writing your own release. You can find more news releases from ES&S, our industry partners and customers at www.essvote.com/media-resources.

- **Technology wins on Election Day**
  The nation wasn't left waiting for initial election results thanks to the speed and accuracy of Election Systems & Software (ES&S) voting systems and the dedication of America's election officials. Voters and election officials across the U.S. celebrated the paper based system and its ease of use.
  https://www.essvote.com/blog/our-customers/technology-wins-on-election-day/
- **Technology Helps Philly Voters Cast Paper Ballots with "Extra Reassurance"**
  Voters at Philadelphia's polling places cast their paper ballots with "extra reassurance," with ExpressVote XL voting machines used city-wide. "Voters really love that they can see and verify their paper ballot before it's cast," said Nick Custodio, Philadelphia Deputy Commissioner.
  https://www.essvote.com/blog/our-customers/technology-helps-philly-voters-cast-paper-ballots/

Sample News Release

Jurisdiction Logo/County Seal
(Use jurisdiction press release template)

For more information, contact:
Name
Title
Email address
Phone number

DRAFT COPY – DO NOT DISTRIBUTE

Jurisdiction Name Chooses New Accurate, Secure, Accessible Voting Machines

ES&S voting systems selected as most cost-effective, secure and easy to use for voters and election workers

CITY, State – Date – Voters in JURISDICTION NAME will soon cast their ballots using a new secure paper-based voting system.

THE JURISDICTION selected a new system by Election Systems & Software (ES&S) after a comprehensive review of available systems. Election officials determined that the ES&S system provides a fully auditable voting solution that is accurate, secure and accessible to all voters. Just as importantly, the equipment is easy for both poll workers and election officials to navigate and manage.

"INSERT QUOTE FROM LOCAL ELECTION OFFICIAL."

The new system uses a variety of functions to ensure election information and cast vote records are secure. The new equipment includes: (select purchased equipment from the list below)

- **ExpressVote®** — The ExpressVote universal voting system uses touch-screen technology to produce a paper ballot, allowing voters to review their selections and verify that their vote was recorded accurately before submitting for tabulation. The fully auditable ExpressVote eliminates marginal marks and the need for interpretation of the voter's intent. Votes can be cast using the touch screen, a detachable UVC keyboard or with ADA support peripherals, such as a sip and puff device.
- **ExpressVote® XL** — The ExpressVote XL full-face universal voting system displays the full ballot on a 32-inch interactive screen and uses touch-screen technology to produce an independent voter-verifiable paper ballot. Voters can review their selections and verify that their vote was recorded accurately before submitting for tabulation. The secure system eliminates marginal marks and the need for interpretation of the voter's intent. Votes can be cast using the touch screen, a detachable UVC keyboard or with ADA support peripherals, such as a sip and puff device.

- **DS200®** — This poll place scanner and tabulator includes physical security features to secure sensitive components and election files. The DS200 operating system controls, limits and detects unauthorized access to all critical data, and includes safeguards that help protect sensitive data and verify authenticity.
- **DS300®** — ES&S' newest purpose-built poll place scanner and tabulator seamlessly supports all poll place and vote center ballot scanning and tabulation from early voting through Election Day. The DS300 can also serve as a tabulator for absentee voting and during recounts and audits.
- **DS450®** — This high-speed scanner and vote tabulator is capable of processing 72 double-sided 14-inch ballots per minute - without stopping for overvotes, write-ins or blank ballots. Equipped with ES&S' patented IMR™ and PTRAC® technology, the DS450 continuously scans and intelligently sorts ballots, ensuring ballots are read accurately and consistently.
- **DS950®** — This high-throughput central scanner and vote tabulator is designed to process absentee, early vote and Election Day ballot scanning and sorting in less time. This state-of-the art technology easily and seamlessly scans and tabulates previously folded and damaged ballots with fewer interruptions, allowing for quicker processing and with a longer life span.
- **ExpressPoll®** — The ExpressPoll gives poll workers a simple-to-operate device that reduces check-in and verification waiting time for voters, increases the accuracy of ballots issued and improves the Election Day experience for all. The ExpressPoll application runs on a tablet which gives poll workers an intuitive, easy-to-understand user interface that's similar to the digital devices they use every day.

"INSERT QUOTE FROM ES&S IF DESIRED – CONTACT media@essvote.com TO REQUEST."

The new system replaces outdated voting equipment that was more than XX years old. JURISDICTION's more than XXX,XXX registered voters will use the new system in the next election.

ABOUT ES&S: Election Systems & Software (ES&S) is the nation's leading voting systems manufacturer. For more than 40 years, ES&S has been supporting elections by creating and providing secure, accurate and accessible voting equipment to jurisdictions across the country. Learn more about ES&S at www.essvote.com and on Facebook at facebook.com/essvote.

###

For more information about ES&S, contact:

Katina Granger
ES&S Sr. Manager of Public Relations
media@essvote.com
402-938-1300

Effective Media Relations

The media can help promote an accurate image of your elections and educate the public about your voting systems. Below are some actionable tips and methods to help you be effective when dealing with the media, and help you develop and maintain good relationships with them.

Six Quick Tips

Tip 1: Build relationships.

Being accessible, proactively communicating, and engaging with reporters helps them do their job and helps ensure the public has accurate, timely information.

- Use your web presence to help educate in advance of an election.
- Don’t overestimate or underestimate a reporter’s knowledge.
- Use layperson terms and avoid using industry jargon and acronyms without explaining them.

Tip 2: Be accurate and reliable.

This is the number one rule when handling any interaction with the news media.

- You know your elections and you know your facts.
- Listen to exactly what the reporter is asking so that you can provide the right information. Ask clarifying questions.
- Avoid making jokes or saying things that when taken out of context could misrepresent the situation.
- Be thoughtful and empathetic; provide information that helps voters.
- Be as expedient as you can; understand that reporters are usually on deadlines.
- Never "spin" the facts; talk straight.

Tip 3: Nothing is off the record.

Anything and everything you say has the potential to be shared with the public.

- “Off the record” is simply a matter of trust between a journalist and their source, but it is always best to assume anything you say will be a matter of public record.

Tip 4: Seek first to understand the situation.

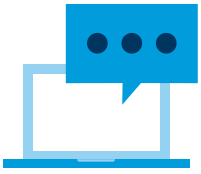
Never reply with “no comment.”

- If you don't know the answer, it's okay to say that you'll need to do some research and get back to them.
- Ask questions to help you understand the reporter's perspective and what information they believe would help their story.
- Use the tools provided in this kit to inform your answers.

Tip 5: Your message matters.

A clear, consistent message can ensure that the facts of the matter are understood.

- Know your talking points and how to define your message. Communicate key messages within the first moments.
- Be careful about giving your opinion.
- Be upfront and clear. Use easy-to-understand, direct language.
- Be aware of non-verbal communication.



Tip 6: Use social media.

- Your jurisdiction’s social media presence helps to ensure that you are taking part in the age of transparency and direct dialogue.
- Your social media networks provide you with a channel to communicate directly with the public.
- The public wants to know that you’re promptly addressing a situation.
- Social media allows you to communicate quickly and accurately.

The ES&S Media Relations team maintains a phone line and email account to support our customers and respond to media inquiries.

Phone: 402-938-1300
Email: media@essvote.com

It’s our policy to refer voter requests back to their jurisdiction for response.

Security Facts

For more than 40 years, ES&S has been committed to accuracy and security in its products to advance the voting process. The overriding design philosophy with all ES&S products is to ensure accuracy, security and reliability — a philosophy that has prevailed throughout our company's history.

We work hard on the security of our products, and we are constantly strengthening and improving them. Our products are designed to federal security voting standards and undergo rigorous testing, quality assurance, vulnerability scans and third-party test review.

Security in Seven

FACT 1

All ES&S tabulation systems are submitted to rigorous and extensive independent test campaigns as part of the Election Assistance Commission's (EAC) Voting System Certification Program. The EAC's security performance standards, developed by scientists, academicians and election officials, ensure unrivaled security

FACT 2

Federally-accredited independent laboratories thoroughly test all ES&S voting systems assuring unsurpassed integrity and transparency. These independent laboratories provide an unbiased assessment of the system's capabilities and hold ES&S accountable to federal regulations.

FACT 3

ES&S voting systems adhere to secure practices that surround the creation, transfer and storage of important election files and data. In addition, ES&S systems save a record of all user actions to the system audit log. These physical, digital and access-level security practices preserve the integrity of election data.

FACT 4

ES&S products employ hash validation, encryption and digital signing for all data in transit using cryptographic modules that meet the Federal Information Processing Standard (FIPS). This means the signatures of all files throughout the entire election process are validated each time a file is accessed.

FACT 5

ES&S systems use a unique encryption key for every election. This ensures all ES&S voting machines will only accept USB flash drives programmed for that election and prevents tampering by unauthorized agents.

FACT 6

ES&S systems use physical locks and tamper-evident seals. These provide safeguards against tampering before, during and after an election.

FACT 7

ES&S software is installed on hardened computers. A hardened computer is locked down to only perform the core functions required for an election. A hardened computer cannot connect to the internet, will not accept an unauthorized USB flash drive, and restricts authorized users to only perform actions necessary to run an election.

Security Partnerships

ES&S recognizes the importance of active participation with different security organizations. These partnerships enable ES&S, together with state and local elections officials, to strengthen the democratic process and elevate the protection of the critical elections infrastructure to a new level of security, accountability and reliability. ES&S recognizes the importance of collaboration in enhancing cyber-protections to ensure the integrity of the U.S. vote.

- ES&S works closely with state and federal officials, primarily the U.S. Department of Homeland Security (DHS), to share information, learn about potential risks and cooperate on cybersecurity strategy and practices. ES&S is a leader in the DHS critical infrastructure group discussions on this, helping to drive better information-sharing and higher standards for security.
- ES&S partners with multiple DHS Critical Infrastructure Program Offices including the Cybersecurity and Infrastructure Security Agency (CISA), the National Risk Management Center (NRMC) and the National Cybersecurity Assessment and Technical Services (NCATS) groups to monitor and share cyber threat information, detect and report indicators of compromise, develop and distribute election security best practices and raise the security awareness of election officials and the voting public.
- ES&S was the first voting system manufacturer to partner with the Center for Internet Security (CIS) to provide Albert sensors to applicable customers.
- ES&S was the first voting system manufacturer to enroll in the Elections Infrastructure – Information Sharing and Analysis Center (EI-ISAC) organization created to share critical cyber threat information developed by DHS and the Intelligence Community with State, Local, Tribal and Territorial (SLTT) organizations.
- ES&S was the first voting system manufacturer to undergo the Center for Internet Security (CIS) Handbook on Election Security self-assessment.
- ES&S co-chairs the Elections Infrastructure Sector Coordinating Council (SCC), an organization who in partnership with the Government Coordinating Council, works alongside voting system manufacturers and other interested parties to enhance election security and offer best practice guidelines.

Protecting Elections Together

U.S. Department of Homeland Security - We believe in strong partnerships and collaboration with DHS Critical Infrastructure Program offices including the Cybersecurity and Infrastructure Security Agency (CISA) and the National Cybersecurity Assessment and Technical Services (NCATS).

Information Sharing and Analysis Centers - An ISAC is a nonprofit organization that provides a central resource for gathering information on cyber threats to critical infrastructure and two-way sharing of information between the private and public sectors. We are a member of the Information Technology ISAC (IT-ISAC) and the Elections Infrastructure ISAC (EI-ISAC).

Albert and the Center for Internet Security - Albert is a unique voter registration network security monitoring solution that provides continuous remote monitoring through the CIS 24/7 Security Operations Center. Automated alerts allow election jurisdictions and ES&S to respond quickly when data may be at risk.

Getting the Facts Straight About Elections

Every election reinforces the importance of voting as the foundation of America's democracy. Nothing is more important to ES&S than maintaining the integrity of the voting process. By understanding the real risks to elections, we strengthen our ability to protect democracy.

1. **How does ES&S ensure voting systems count ballots accurately?**
   ES&S voting systems are certified under strict federal standards and guidelines, including rigorous security, accuracy and reliability testing. They are evaluated against the best practices of the National Institute of Standards and Technology (NIST) security protocols and standards, as well as the Center for Internet Security's (CIS) Critical Security Controls. Our systems have also undergone third-party penetration testing and vulnerability assessments to make sure they withstand the highest security standards. ES&S works closely with federal, state and local election officials, the U.S. Election Assistance Commission (EAC), the Department of Homeland Security (DHS), law enforcement and the election community at large to take all recommended steps to enhance election security.

2. **How do states and jurisdictions ensure elections are accurate?**
   Election jurisdictions follow a multi-layered approach to ensure all votes are counted as cast. Every state upholds established requirements for physical security and chain of custody to protect the security of their systems. These controls may include locks, seals, audit logs, witness signatures or other security measures. Pre-election logic and accuracy testing and post-election audits are proven processes that uphold the accuracy of elections. In addition, every state in the nation has a statutory process for legal challenges, recounts or contests to election results. Election authorities in each state determine their auditing processes according to state law.

3. **Does ES&S support post-election audits?**
   ES&S is a strong supporter of state and local administrations in their work to provide secure, accurate elections. Post-election audits are a legal process by which election officials verify that votes were counted accurately and is conducted by election officials according to state law. ES&S voting systems support these audits by providing election details (logs, cast vote records, reports, etc.) which election officials utilize for this purpose. ES&S supports the highest standards for security, including strict chain-of-custody protocols for equipment and all applicable laws, regulations and certification requirements.

4. **Can we trust ES&S voting machines?**
   ES&S voting equipment has been proven accurate and secure through thousands of hours of testing and thousands of elections nationwide. ES&S voting machines are certified by the EAC and undergo robust testing by NIST-accredited Voting System Test Laboratories (VSTLs) for accuracy, reliability, usability and security. Several states also engage independent firms to audit the security of voting machines as part of the certification examination process in their states. Along with additional independent testing engaged by ES&S and logic and accuracy testing performed by jurisdictions before every election, voters can be assured that ES&S voting systems perform as designed and certified, and ballots will be counted as cast.

5. **Can voting machines be hacked?**
   Voting machines have been hacked at staged demonstrations and in laboratories, but these environments do not reflect an actual election scenario where multiple layers of physical and cyber security are always in place. These measures include pre-election testing, locks, restricted access, tamper-resistant seals, chain-of-custody protocols, and voting machines which are locked down to ensure limited access, along with more advanced technology found in newer equipment.

6. **Have America's voting machines been hacked in the past?**
   While the threats are very real, there's no evidence that any vote in a U.S. election has ever been compromised by a cybersecurity breach. To date, the totality of security measures — such as tamper-resistant seals, audits, voting machines which do not connect to the internet (see modem note below), along with more advanced technology found in newer equipment — provides for an environment that would be difficult to compromise. An additional layer of security to U.S. elections is that voting systems are used and deployed in a decentralized manner across the nation's more than 10,000 voting jurisdictions. This decentralization greatly diminishes the chance or impact of a large-scale attack. While there is no evidence of any hacking of any voting machine currently in use in an election, as threats become more sophisticated, so must voting machines and the nation's entire voting infrastructure.

7. **Where is ES&S's software developed?**
   All ES&S tabulation software is developed and compiled exclusively in the USA.

8. **Is ES&S affiliated with any other companies which produce voting systems?**
   ES&S has no financial or ownership ties to any other voting system manufacturers.

9. **Are modems installed in DS200s nationwide?**
   Modems are not present in ES&S DS200 machines in states where modeming technology is not permitted or certified. In a few states it is a legal practice to use cellular modems to transmit unofficial election results after the polls are officially closed and all voting has ended. In states where modem transmission is permitted, ES&S uses mobile private network connectivity, industry best practices, and numerous security safeguards to protect the transfer of these unofficial election night results. Final official results are physically uploaded at election headquarters prior to final certification. The physical ballots and printed results tapes are always protected.

10. **How do we know modems aren't in machines where they are not permitted?**
    Modem components are not resident on the DS200 by default, but rather a separate board that is only installed in DS200s in those jurisdictions where a state may permit their legal use. Additionally, DS200s without a modem component do not include the application or the network architecture required to support modeming and allow a modem to operate on the machine. It's also important to note that today's modern cellular modeming technology also requires a private network service provider such as Verizon.

11. **Are elections systems providers being transparent?**
    ES&S values transparency and works closely with all levels of the U.S. government, academia and other experts to ensure the integrity of America's elections. ES&S has invited and welcomed numerous experts and government officials, including critics, to see its operations firsthand and to discuss improvements. ES&S actively collaborates with DHS, has all its equipment certified through the U.S. Elections Assistance Commission (EAC), and willingly takes part in many other collaborations with groups and individuals interested in protecting America's voting system.

12. **Does ES&S use independent testing of its voting equipment?**
    Yes, in multiple ways. ES&S voluntarily adheres to the Federal Testing Program conducted by the EAC, a federal agency created by the Bi-Partisan Help America Vote Act of 2002. Under the EAC, ES&S submits all its systems to VSTLs accredited by NIST. These labs perform stringent tests in accordance with the federal voting system standards. Layered upon the reviews conducted under the Federal Test Program, several states also engage independent firms to audit the security of voting machines as part of the certification examination process in their states. Additionally, ES&S frequently engages with cybersecurity firms to conduct independent third-party testing, including penetration testing and source code reviews. Among recent engagements, ES&S submitted our complete end-to-end voting configuration of software and hardware for testing by a Cybersecurity Infrastructure Security Agency (CISA) Critical Product Evaluation Program at one of the nation's leading centers for research and development in energy, national security, science and environment, to perform third-party independent testing of both our hardware and software to ensure the resilience and security of our voting systems.

13. **When I cast my ballot, does it matter whether I put my paper ballot face-up or face-down in the scanner?**
    No. Thanks to dual-scanning technology, ES&S tabulation machines – the DS200, DS450 and DS850 – can read ballots no matter which direction they are placed in machine.

14. **Does ES&S have a process in place to receive and respond to unsolicited vulnerability reports from cybersecurity researchers and other third parties?**
Yes, ES&S utilizes its internal corporate information security staff to receive, evaluate and act upon, as necessary, unsolicited vulnerability reports from cybersecurity researchers and other third parties as part of a Coordinated Vulnerability Disclosure Program (CVDP). In addition, ES&S maintains a link on its website for the purpose of receiving and responding to reports and/or inquiries related to security:
https://www.essvote.com/feature/security/

15. **Does ES&S support security enhancements to the nation's election infrastructure?**
ES&S fully supports paper-based voting technology coupled with legal post-election audits. ES&S supports the creation or adoption of industry standards and guidelines which further strengthen the nation's critical election infrastructure, and asked Congress to pass legislation establishing a more robust testing program. We know that improving the confidence of every voter requires a tight collaboration between federal, state and local election officials, the EAC, DHS, law enforcement, voting system manufacturers, and the election community at large. That's why ES&S has taken multiple steps to bolster security, including forming partnerships with organizations to help us provide necessary and continuous improvements in election security. Some of these security partnerships include:
    - DHS Election Task Force
    - FBI election crime unit
    - U.S. Intelligence community
    - CISA
    - Elections Infrastructure Information Sharing and Analysis Center (EI-ISAC)
    - Information Technology Information Sharing and Analysis Center (IT-ISAC), Elections Special Interest Group (E-SIG)
    - NIST
    - Sector Coordinating Council (SCC)

16. **How does ES&S protect its hardware and software supply chain?**
As standard practice, each release undergoes extensive security testing and ES&S provides a complete set of software components to the VSTLs for review. ES&S also conducts thorough security reviews of our entire supply chain to ensure that every component is trusted, tested and free of malware. Every single item and manufacturer are approved and under engineering revision control. That's the advantage of an ES&S purpose-built system versus one with components bought off the shelf.

17. **If I have a key that can open an ES&S machine lock, does that mean I can easily get into and hack the machine?**
No. Doors and locks are just one of the deterrents to tampering with a voting machine. During an election, there are many security measures beyond doors and locks, including tamper-resistant, serial-numbered seals to ensure security. If a seal is broken, it can't be replaced without detection. We also have multiple layers of encrypted security on the data, including unique encryption keys for every election. This ensures that all our voting machines will only accept USB flash drives programmed for that election and prevents tampering by unauthorized agents.

18. **I understand ES&S ballot marking systems use barcodes. Can barcodes really be trusted?**
Barcodes are a trusted, tested, universal technology used in a variety of ways across many different industries to improve safety, accuracy, speed and efficiency. DMVs, pharmacies, hospitals, banks and food manufacturers all use barcodes. Vote counting machines (called tabulators) read barcodes in the same way they read the oval positions on a paper ballot—so a summary card with barcodes contains the same data as on a hand-marked ballot. Because barcodes offer a reliable way to accurately read information, the technology all but eliminates the possibility of human error (e.g. poorly marked ballots, misinterpretation of voter intent). Displayed along with human-readable text, summary cards with barcodes are fully auditable.

19. **Are you aware of any data breaches or other cybersecurity incidents in which an attacker gained unauthorized access to your internal systems, corporate data or customer data?**
No, we are not aware of any cybersecurity incidents in which an attacker gained unauthorized access to ES&S internal systems or corporate data.

20. **Does ES&S support the use of paper in elections?**
    ES&S views paper records as critical for auditing. In 2018, ES&S decided to no longer sell paperless voting machines as the primary voting device in a jurisdiction because it is difficult to perform a meaningful audit without a paper record of each voter's selections. ES&S was the first tabulation provider to ask Congress to pass legislation requiring an auditable paper record of every vote cast. Using a physical paper record sets the stage for all jurisdictions to perform statistically valid post-election audits. Every single one of our universal voting machines produces a paper record that can be tabulated and audited.

21. **I understand that ES&S election software operates on Windows. What does that mean for election security?**
    Election systems are hardened, meaning that the computer that runs Windows is locked down with allowed access only to the functions required to conduct an election. Unused ports are blocked, and unnecessary services are removed. This hardening means that work stations running on Windows platforms are protected from the types of risks more commonly associated with mainstream technologies. For systems that currently use Windows 7, ES&S and Microsoft will provide ongoing support for that software until jurisdictions can upgrade to our latest versions which now incorporate Windows 10.

22. **Does ES&S Electionware use fractional, weighted or proportional voting?**
    No. ES&S Electionware software counts every vote fully.

23. **Do any of your systems currently deployed have any kind of remote access capability, and, if so, how many?**
    No ES&S product or system has remote access capability; ES&S does not provide this capability.

24. **ES&S systems in the past included remote-access capability—why?**
    More than a decade ago, ES&S, along with others in this industry and many other industries, provided software upon customer request for customer workstations—not voting machines—for troubleshooting purposes. While no known issues arose with this practice, ES&S has not provided this capability since 2007 and never provided it for voting machines.

25. **Are older voting machines secure?**
    Older equipment is protected by multiple layers of physical and technical security including tamper-resistant seals and controlled access. That said, newer equipment has more advanced technology and is more secure.

26. **How big is ES&S?**
    ES&S serves about 1,679 county-level jurisdictions across the U.S.

27. **Who owns ES&S?**
    ES&S is 100% American-owned by McCarthy Group and individual members of ES&S management. McCarthy Group originally partnered with the founders of ES&S in 1987 and for more than thirty years has supported ES&S as it has grown into the industry leader with solutions for each step of an election. ES&S' stable partnership with McCarthy Group has enabled continuous investment in research and development, resulting in new and improved voting technology built with the highest standards of security that help election officials run secure and successful elections.

28. **Why trust a private company with our nation's elections?**
    The elections infrastructure, like the nation's power grid, is made up of public and private partnerships. As DHS says in describing critical infrastructure, there is a shared responsibility among multiple stakeholders because neither the government nor the private sector alone has the knowledge, authority, or resources to do it alone.

Information current as of September 2022.

Stay up-to-date on the latest FAQs by visiting: **essvote.com/faqs**

Supply Chain Security

ES&S works with leading security experts to create the most secure supply-chain possible — with rigorous inspections at every step — to provide accurate and reliable elections for our nation.

VETTING

Every partner in ES&S' global supply chain must regularly undergo a multi-point, in-depth check for security, safety, reliability and adherence to stringent operating procedures.

ES&S tabulation systems are purpose-built, which means we know and vet the manufacturer of 100% of the individual components.

PRODUCT AUTHENTICATION

All electronic components are certified to Electronic Components Industry Association standards. These standards, developed to fight counterfeiting, are upheld with a 76-point audit of manufacturer and distributor quality management systems.

PHYSICAL SECURITY: ACCESS BADGES, CAMERAS AND 24-HOUR MONITORING

ASSEMBLY

Trusted manufacturing partners inspect the components upon arrival; this includes using high-powered microscopes to look for irregularities.

- Security assessments are conducted on each of our manufacturing partners.
- Key manufacturing personnel have gone through federal background checks.
- All manufacturing partners are ISO-compliant, following highly regulated processes for quality management.

PHYSICAL SECURITY: LOCKED AND SEALED CONTAINERS, SEAL NUMBERS LOGGED AND VERIFIED DURING TRANSIT

IMPORTING

100% of our shipping partners are Customs Trade Partnership Against Terrorism (CTPAT) certified—which is the U.S. Customs and Border Protection's highest level of cargo security.

- CTPAT is the Authorized Economic Operator (AEO) program for the U.S.
- All CTPAT certified distributors are required to demonstrate that their supply chains are secure from the point of origin to the point of distribution.
- Other critical infrastructure sectors, including defense and healthcare, trust and use CTPAT certified distributors.

PHYSICAL SECURITY: ACCESS BADGES, CAMERAS AND 24-HOUR MONITORING

FINAL CONFIGURATION & VALIDATION

Before units are approved for delivery to customers, important steps take place:

- Our systems are tested by an independent, US-based laboratory that completely dismantles units to verify that the firmware on the programmable active components meets all specifications and is quality tested to our exacting standards.
- In Omaha, Nebraska, the final hardware is configured and the final end-to-end QA testing is conducted, which includes installing the certified software and firmware.

PHYSICAL SECURITY AT CUSTOMER LOCATIONS: ACCESS BADGES, CAMERAS AND 24-HOUR MONITORING

DELIVERY & INSTALLATION AT CUSTOMER LOCATIONS

- For transit, tamper-proof seals are placed on truckloads, and access to freight terminals is restricted.
- Upon delivery to customers, the firmware is verified once more.

Product Testing

Product Development

We work from federal testing guidelines, designing tabulation equipment to meet or exceed every requirement.

Pre-certification Testing

We internally conduct every test described in the federal guidelines to ensure **zero defects** prior to applying for certification.

Additional Security Testing

We voluntarily send our end-to-end voting configuration to be tested by independent cybersecurity labs such as the Cybersecurity and Infrastructure Security Agency's (CISA) Critical Product Evaluation (CPE) program, which works to improve the security of nuclear power facilities, electrical grids and other U.S. critical infrastructure.

Federal Certification

The Federal Test Program reviews:

- ES&S' application
- The test plan
- The test report

Following review, the Election Assistance Commission makes a decision on certification.

Federally accredited labs test tabulation equipment as described in the Federal Test Program. These stringent tests require:

1.5 million consecutive ballot positions correctly read by tabulation equipment

3+ million lines of source code reviewed

48 hours of consecutive environmental tests with no issues; if any issues, the clock restarts

Full security audit of the election management software

Penetration testing of the voting system

ES&S has

30

federally certified voting systems

State Certification

Most states require a state code compliance review and approval by Secretary of State or state board, in addition to federal certification. **Some states require field tests of the equipment before certifying.**

Bottom Line

These strict guidelines and exacting series of tests are developed for one purpose: to make sure systems perform as designed and certified.

Information current as of August 2023. For certification details, visit essvote.com/certification

Testing & Accuracy

In order to earn EAC certification, voting systems must be tested for conformance to pre-established standards. Certification testing under the EAC's program can only be performed by accredited Voting System Test Labs (VSTLs), which have demonstrated technical competence to test voting systems.

CERTIFICATION TEST PROCESS

The testing generally consists of three phases:

Pre-test Activities → National Certification Testing → National Certification Report Issuance and Post-test Activities

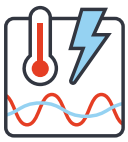
CERTIFICATION TESTING

SOURCE CODE INSPECTION

Both manual and automated source code inspections are performed for the following types of inspections: Compliance, Functional, COTS, Security, and Build.

OPERATION ENVIRONMENTAL TESTING

Availability: This tests that equipment will respond to operational commands and accomplish the function. For example, pushing the power button will turn on or off the equipment.



Temperature and Power Variation: This procedure tests system operation, consisting of ballot-counting cycles, under varying environmental conditions for at least 163 hours.

Product Safety: This evaluates the voting system to the requirements set forth in UL-60950-1, "Safety of Information Technology."

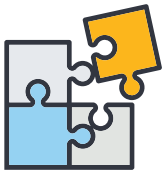
Maintainability: The ease with which maintenance actions can be performed.

PERFORMANCE-BASED SYSTEM TESTING

Volume & Stress:
These tests investigate the voting system's response to short term overloads, such as processing atypical high volume of ballots/voters per precinct and processing more than expected number of precincts.

Logic & Accuracy:
This tests the ability of the voting system to capture, record, store, consolidate, and report the specific selections, and absence of selections, made by the voter.

This test requires the system to correctly read **1.5 million consecutive ballot positions without error.**



System Integration:
The primary objective of this test is to validate that the voting system functions correctly when all the elements (hardware, software, documentation, etc.) are used together.

CERTIFICATION TESTING (CONTINUED)

SECURITY

Security requirements apply to the system's hardware, software and documentation. During the Security Tests, the voting system shall be tested for:

Access Control: Procedures and system capabilities that limit or detect access to critical system components in order to guard against loss of system integrity, availability, confidentiality, and accountability.

Physical Security: Measures and procedures that prevent disruption of the voting process at the polling place and corruption of data.

Software Security: Standards that address the installation of software, including firmware, in the voting system and the protection against malicious software.

USABILITY/ACCESSIBILITY

These tests focus on voters and poll workers being able to successfully interact with voting systems.

It ensures general usability with voting systems and alternative language requirements follow state or federal law.

It includes all voters, including those who have physical, sensory, or cognitive disabilities. It also assists those not usually described as having a disability, e.g., voters with poor eyesight or limited dexterity.

HARDWARE ENVIRONMENTAL TESTING

These tests simulate the stresses that voting machines and ballot counters face during storage, transport, maintenance, and repair. Tests include:

- **Bench Handling**
- **Vibration**
- **Low Temperature**
- **High Temperature**
- **Humidity**

ELECTRICAL HARDWARE TESTING

These tests demonstrate the system's ability to be able to continue operating, without damage or loss of data, while facing a range of electrical conditions:

- **Electrical Supply:** Tests the ability to operate with the electrical supply ordinarily found in polling places, central tabulation facilities, or computer room facilities.
- **Backup Power:** Tests that all voting machines are capable of operating with no interruptions for at least two hours on backup power.
- **Electrical Power Disturbances**
- **Electrical Fast Transients**
- **Lightning Surges**
- **Electrostatic Disruptions**
- **Electromagnetic Emissions**
- **Electromagnetic Fields**

PHYSICAL CONFIGURATION AUDIT (PCA)

A comparison of the voting system components submitted for testing to the manufacturer's technical specifications. It confirms that the documentation submitted meets the national certification requirements.

TECHNICAL DATA PACKAGE (TDP) REVIEW

A formal review of the documentation submitted along with the system under evaluation.

Ballot Security

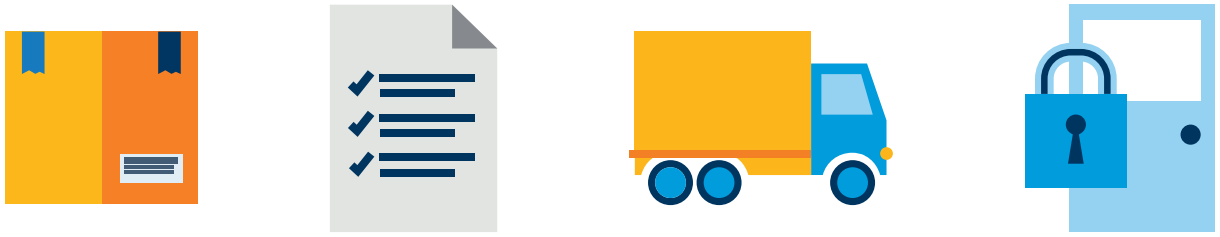
Ballot security is an umbrella term for the methods used to help prevent voter fraud. Ballot security and tracking of ballots are essential to the conduct of accurate and fair elections, because ballots are a critical element of an election. As with most U.S. election practices, how ballots are kept secure varies by State and sometimes even within a State.

Protect Election Integrity

A comprehensive and accountable ballot security program makes it possible to:

- Recreate and/or recount an election when results are in question
- Determine ownership if any misconduct is revealed
- Fraud prevention
- Assess the performance of poll workers and the effectiveness of election procedures
- Assure candidates, the voters and the media that all votes cast are counted

Ballot security and accountability help preserve the integrity of the election process and those who administer it.



Ballot Security Methods

Election officials can employ methods such as these to protect and keep track of ballots, as well as secure and account for them:

Shrink Wrapping

- Shrink wrapping of ballots, either with or without numbering and/or stubs, not only protects the ballots, but provides a level of security. Open or torn packages can be identified, checked to ensure ballots are not missing or damaged, and can be re-wrapped prior to use.

Boxing and Labeling

- Box either by precinct or in bulk. Use detailed labels and tamper evident tape to provide evidence of unauthorized opening.

Shipping

- Include a detailed shipping document, or the original ballot order form to confirm receipt of the correct ballot quantities.

Storage

- Store in a secure area, preferably locked and sealed if possible. Access should be controlled, and an entry and exit log maintained.

Delivery to the Precinct

- Place numbered seals on the package and record the seal numbers assigned to each precinct.
- Prior to opening polls, conduct an inventory of ballots received.

During Polling Hours

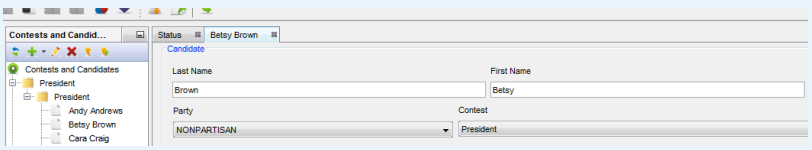
- Open only one box or container of ballots, starting with the lowest numbered box to maintain control over inventory.
- Keep unopened containers in a secure and protected area.

Closing the Polls

- Complete the necessary documentation to record ballots voted, spoiled, remaining, or other. Voted and unused ballots should be secured and/or packaged as directed for return to the election office.

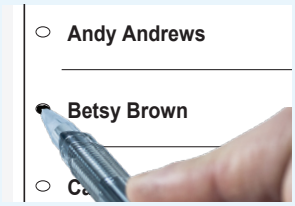
How It Works: Ovals & Barcodes

STEP 1: CREATE THE BALLOT



Candidate names are entered in a software application. This application generates the layout for the oval ballot on paper and for the ballot on the touch screen. It also creates the database that resides on the tabulator to record votes.

PEN WITH PAPER

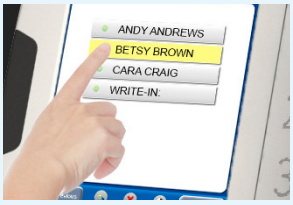


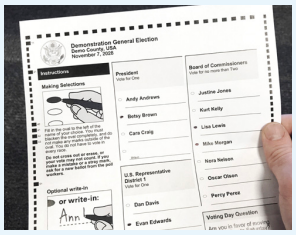
Voter makes selections by filling in the oval next to the name of the candidate.

STEP 2: VOTER MAKES SELECTIONS

TOUCH SCREEN WITH PAPER

Voter makes selections by touching the candidate's name or by using an assistive device.



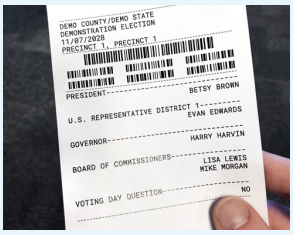


The voter reads the text to verify their selections.

STEP 3: VOTER VERIFIES MARKED BALLOT

A marked ballot is printed.

The voter reads the text to verify their selections.

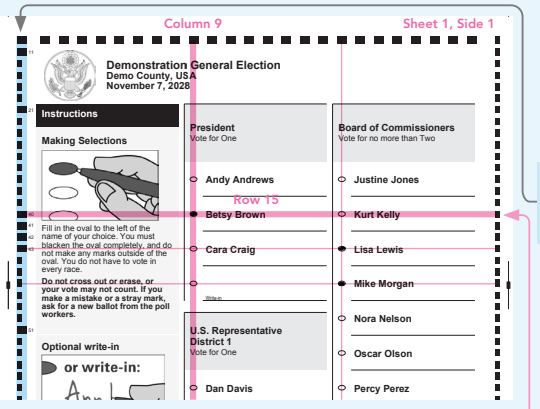


Voter inserts the marked ballot into the tabulator.

STEP 4: VOTER CASTS THEIR MARKED BALLOT

Voter inserts the marked ballot into the tabulator.

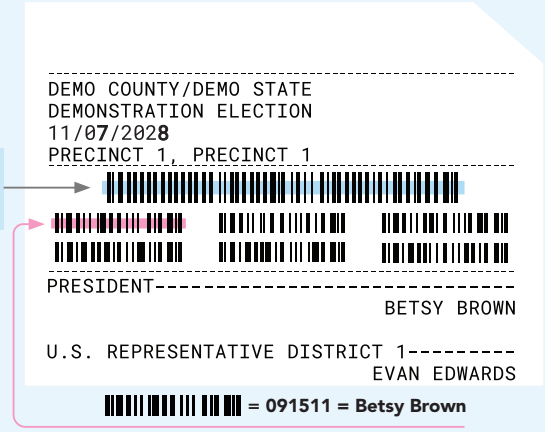
STEP 5: TABULATE THE BALLOT



Column 9, Row 15, Sheet 1, Side 1 = 091511 = Betsy Brown

The tabulator reads the barcodes on the paper ballot and counts the voter's selections.

The master barcode identifies the ballot style and contests to be tabulated.



= 091511 = Betsy Brown

The tabulator reads the barcodes on the paper ballot and counts the voter's selections.

BOTTOM LINE: Ballots with ovals and ballots with barcodes are counted by the same tabulator in the same way.
The human-readable text of the candidate's name appears on both ballots for voter verification and auditing purposes.

AUDITABLE, ACCURATE & ACCESSIBLE

	PEN WITH PAPER	TOUCH SCREEN WITH PAPER
Auditable by hand and machine	✓	✓
Uses barcodes for tabulation	✓	✓
Undergoes Logic and Accuracy (L&A) testing	✓	✓
Eliminates the ability to overvote		✓
Prevents voters from making unclear or partial marks		✓
Meets and exceeds ADA standards		✓

ANATOMY OF A BARCODE

Every barcode is made up of a series of digits, with each digit from 0-9 represented by black-and-white vertical bars that are scanned faster and more reliably than printed numerals.

Each digit is represented by a different pattern of black or white bars, with each pattern block made up of the same total number of bars. These blocks have been designed to ensure that they accurately decode to the same number whether the barcode is scanned upside up or upside down.

Customer Support Hotline

Dial ES&S at 877.377.8683

Election Day support hotline hours: **7am to 7pm CT**

Need a Credit or Invoice, Maintenance and Licensing Issues, Place an Order

HOTLINE OPTION 1
orders@essvote.com

Payments and Statements

HOTLINE OPTION 2
statements@essvote.com

Voter Registration

HOTLINE OPTION 3
helpdesk@essvote.com

Hardware Support

HOTLINE OPTION 4, THEN OPTION 1
hardware@essvote.com

Software Support

HOTLINE OPTION 4, THEN OPTION 2
software@essvote.com

Equipment Maintenance and Equipment Installation

HOTLINE OPTION 5
equipment@essvote.com

All Other Election Related Services and Support

HOTLINE OPTION 6
customersupport@essvote.com

Note: all information contained in this Public Relations Kit is current as of print date.
Information on essvote.com is regularly maintained; please reference links to access updated content.