

# Securing the Paper Trail

Paper-trail voting is only as secure as the management practices that support it

America's decades-old reliance on electronic voting is shifting as many jurisdictions choose paper-trail systems for secure, auditable, transparent balloting.

Despite best intentions, many find that the transition to paper creates new challenges. And while paper offers the promise of a clear audit trail for an election, paper alone does not secure election results.

To gain the benefits of the paper trail, jurisdictions must protect that trail at every step. Adopting any new voting system demands careful attention to people, processes, procedures and – always – new technology. Those who aren't prepared risk expensive missteps, loss of voter confidence and, ultimately, compromising the integrity of the election.

## Best Practices for Managing the Paper Trail

These tips – based on boots-on-the-ground vendor experience and real-world feedback from election officials – are designed to help jurisdictions avoid paper pitfalls and optimize the gains of moving to paper-based voting.

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Voters should understand that there is a learning curve related to using their new system. They may need more time to vote, and jurisdictions should take steps to minimize long lines.

## Spread the Word

Voter comfort and acceptance are keys to confidence in the election process. With effective voter education and outreach, all your voters – whether veterans of the pre-electronic-voting era, digital natives who have only ever voted electronically, or first-time voters - will know a paper system has arrived, and they will know how to use it.

Education can take various forms, with many jurisdictions sharing demonstrations and videos on social media, through flyers and with the help of local news media. Live demos on Facebook allow voters to ask questions in real time.

Of course, nothing beats letting voters try the real thing.

Within weeks of purchasing a paper-trail voting system, Elections Administrator Jennifer Anderson in Hays County, Texas, placed new devices in the courthouse, the county government center and at three precinct offices for citizens to test drive. Anderson and staff walked curious residents through the process – from inserting a blank document, to using a touchscreen to make choices, printing the record and inserting it into a scanner to be officially counted.

By familiarizing voters with the steps of a new voting process, election officials can cut down on potential problems such as “fleeing voters,” those who attempt to leave the polling place with their unscanned paper ballot. Hays County officials reported timely vote counts and only one instance of a “fleeing voter.” In nearby Travis County, however, numerous “fleeing voters” triggered a required recount that delayed final results until 3:45 a.m.

Poll worker training and support also leads to a successful transition to new systems. Ideally, your vendor will provide training materials and onsite worker support. Understanding what your vendor will provide before the contract is signed is a good starting point.

Live classes and online tutorials are useful for front-line workers. An end-of-course assessment can help assure that workers are ready to assist voters when the polls open.

Well educated poll workers boost voter confidence and shorten lines by heading off voter confusion and anticipating questions.

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Experts recommend ordering preprinted ballots well in excess of logical voter turnout for 2020 elections. Potential paper waste is better than disenfranchising voters because of shortages.

## Manage your paper trail before voting starts

The proper selection, care and handling of paper is critical to a smooth election cycle, but handling paper in volume is new for many election offices.

Tips for managing paper follow:

- Paper quality affects toner or ink adhesion, smudging, dust, scanning and tearing. Use the highest quality paper your vendor recommends.
- Order an excess of paper and/or preprinted ballots. Look at the last similar election's turnout, voter rolls and political changes. Some states mandate a ballot count, such as 100% of registered voters.
- Use familiar letter-width paper, if possible. Narrow, receipt-shaped vote records can confuse voters.
- Conduct pre-election testing with the same paper to be used in the election.
- Humidity can increase the size of paper. Store paper and ballots in a climate-controlled space throughout the election cycle. This includes the polling place (for example, close the doors on a rainy day).
- For quality control, use ballot-printing overlays if your vendor provides them.
- If using a local printer, make certain that they are approved by your system vendor, if your vendor offers a printer certification program to control the quality of ballot printing.

## Consider on-demand ballot printing

An on-demand ballot printing system can take the guess work out of ballot print quantities and can ensure each voter receives the correct ballot. For example, under St. Louis County's previous voting method, officials guessed how many ballots to pre-print, potentially running out or destroying extras. Managing a large number of different ballots for different precincts led to distribution errors that marred some elections.

The County chose a print-on-demand system that debuted on Nov. 5, 2019. In addition to preventing over- and under-printing, the new system adds efficiencies by printing the correct ballot style for each voter checked in at the polling place.

"The equipment worked almost flawlessly at the 30 polling locations we utilized," Rick Stream, the board's Republican elections director, told the St. Louis Post-Dispatch.

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## Control your paper's chain of custody, or destroy your election's integrity

The value in a paper-trail system is in its auditability. The system has NO VALUE if the integrity of the paper trail is compromised. Officials must be able to prove custody of complete, unaltered paper records from ballot creation, through Election Day, and until an audit or recount.

Post-election audits, including risk limiting audits (RLAs) are meaningless without these vital steps:

- Follow any state and local election laws that pertain to ballots and storage.
- Establish processes to preserve the chain of custody for all ballots.
  - Use secure, tamper-evident transport bags or boxes.
  - Track who accesses ballots at each step.
  - Record the serial numbers of tamper-evident seals, noting date and time of when affixed and broken.
  - Account for all ballots and ballot storage bags or boxes at the end of Election Night.
- Reconcile the number of ballots returned post-election against the ballot counts in tabulation reports.
- Structure clear processes for managing provisional paper ballots during an audit. If possible, select a system with intelligent scanning that will not accept a provisional ballot, removing the need for poll worker intervention.
- Secure post-election ballots, restricting physical access to authorized personnel. Log all access.
- Procure adequate storage space and ensure it is safely protected against fire, floods and other physical risks.
- Maintain ballots for the legally required length of time and prepare for proper destruction afterward.

## Choose the Best Technology for Your Locality

Several methods of paper-based voting exist. Today's primary options include vote-by-mail, hand-marked paper and machine-marked paper (with a ballot marking device).

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Regardless of the voting method you provide, there is a growing consensus that technology that embeds voter choices in barcodes on the paper ballot record should be avoided. In September, [Colorado banned \[https://www.cnn.com/2019/09/16/politics/colorado-qr-codes-votes/index.html\]](https://www.cnn.com/2019/09/16/politics/colorado-qr-codes-votes/index.html) the use of barcodes for counting votes over security concerns. On Election Day in Northampton County, Pennsylvania, an improperly calibrated barcode system resulted in 26,000 votes in a highly contested race being incorrectly counted. This forced officials to hand count the paper records overnight to determine official results before they could be released to the public.

In Orange County, California, officials chose a barcode free solution. “(Our new system) provides a full human readable paper ballot throughout the process, not a computer barcode,” said Neal Kelley, who oversees elections in one of the largest jurisdictions in the country with more than 1.6 million registered voters.

Kelley, an appointee to the U.S. Department of Homeland Security Election Security Task Force, which helps oversee the nation’s election infrastructure, emphasizes the need for intelligent scanning technology. “That’s important to our voters and for the security of our vote. That’s an absolute must for me.”

Another technical choice to evaluate is the type of accessible voting solution to trust for ADA and election code compliance.

Voters with disabilities may vote on a touchscreen, use a sip and puff device or hear choices through headphones, but a truly equal system will produce the same type paper ballot generated by every other voter, to be scanned in the same machines.

## **Conclusion: Learn from experience, prepare strong processes**

Choosing paper-trail voting is only one step toward secure elections. Building and maintaining a strong security framework to support the use of paper requires the right people, processes, procedures and technology.

As with anything new, successfully managing this transition requires planning carefully, acquiring new skills and fine-tuning procedures. Sharing experiences and learning from each other will help improve the election process for all. The result is strong voter confidence and trust in democracy.

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### **About Hart**

Working side-by-side with election professionals for more than 100 years, Hart is committed to helping advance democracy one election at a time. Hart’s mission fuels our passionate customer focus and a continuous drive for technological innovation. The result is Verity® – truly different election technology. Reimagined from the inside out, Verity Voting promises to provide jurisdictions with a future-proof investment in secure, transparent voting.

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