

## **THE PRODUCTIVE PRECINCT:**

Improving Efficiency With Electronic Poll Books

## ABSTRACT

Across the country, election administrators are improving poll site efficiency by replacing traditional paper poll books with electronic poll books (EPBs). EPBs address many of the issues inherent in the production, delivery and usage of paper poll books. They enable faster check-in, eliminate printing costs and improve post-election data management, among other benefits. Choosing the right EPB solution requires careful consideration. To ensure an effective transition, choose a solution that accommodates local needs and includes support from a proven provider.

## INTRODUCTION

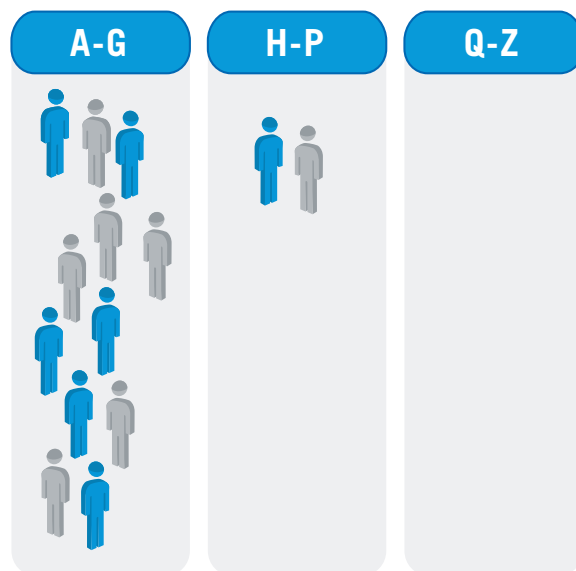
Long lines are a constant issue at polling places across the United States. With causes ranging from malfunctioning voting equipment to poorly designed ballots to surges in turnout, long lines are a top concern for election administrators in every county and precinct.

One of the ways election administrators can shorten lines — and improve overall poll site efficiency — is by replacing traditional paper poll books with EPBs. EPBs, which run on laptop, tablet or handheld computers, allow poll workers to complete the check-in process faster and easier. EPBs also enhance auditing and security, expedite exception handling and improve reconciliation of voter registration data.

In this white paper, we examine why EPBs are necessary, explain the benefits EPBs deliver and help election administrators understand how to choose the right EPB system.

## SITUATION ANALYSIS

Although long lines occur for a variety of reasons, a frequent culprit is bottlenecks at voter check-in stations. When voters enter a polling place, check-in is the first activity they complete. Check-in stations are typically divided into alphabetical sections (for example: A-G, H-P, Q-Z) and voters line up accordingly. When voters reach the front of the line, they state their name and/or provide identification (such as a driver's license) and a poll worker finds the voter's name in the paper poll book. If required, the voter signs the book and receives a paper statement (an "Authority to Vote" slip) that allows them to proceed to the next step — voting by electronic (DRE) or paper means (optical scan).



When turnout is high, alphabetical lines cause bottlenecks due to the uneven distribution of last names. A voter whose last name starts with G, for example, may need to wait behind 10 people in the “A-G” line even if the “Q-Z” line is empty. When multiple precincts share the same poll site, voters often stand in the correct alphabetical line for the wrong precinct, eventually waiting twice as long as necessary.

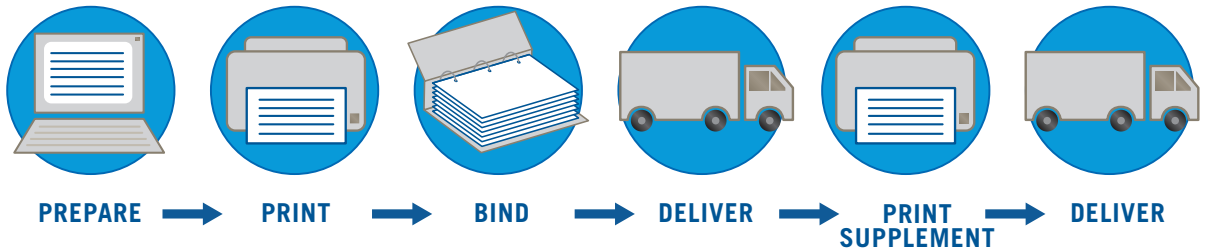
Alternately, delays may occur because of how much information poll books contain. Poll books are generally printed in landscape format and spiral bound at the top edge. One page holds information for six to 25 voters, depending on size and spacing. Each listing includes the voter’s address and other information (date of birth, political party, gender, race, etc.) depending on local requirements. Many poll books also include an image of the voter’s signature for visual comparison during check-in. Finally, there may be additional election-specific notations, such as whether the voter requested an absentee ballot, or whether the voter is required to show identification. This is a great deal of information for each poll worker to sift through, considering that most poll workers are volunteers who may or may not have received sufficient training.

On the other hand, additional delays occur because paper poll books do not contain enough additional information to ensure fast exception handling. Exceptions include voters who are at the wrong poll site, voters who are required to use provisional ballots and voters who requested an absentee ballot but showed up to vote in person. To resolve these issues, poll workers often need to consult an election official, who may need to call election headquarters. Because many exceptions occur simultaneously across the state, each call causes further delay.

Delays are not the only drawbacks of paper poll books. Two others are printing and post-election data handling.

It is very expensive to prepare, print, bind and deliver paper poll books. Whether printed in-house or outsourced, poll books require high-speed printers, paper (up to 40,000 sheets for a county with 800,000 voters) and toner. Deadlines are critical, so staffs often work around the clock to complete the job on time. After poll books are printed, they must be manually punched and bound, then loaded in precinct supply kits and hand-delivered by truck. Voter registration data often changes in between poll book printing and election day, so jurisdictions frequently issue supplemental poll books, giving poll workers two (or more) documents to handle.

## PAPER POLL BOOK PROCESS



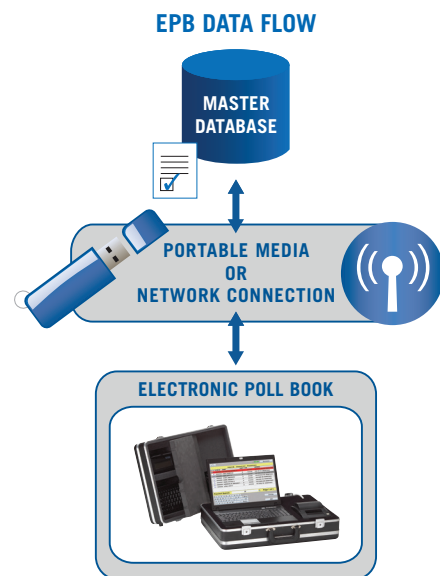
Post-election data handling requires a similar investment in time and manual labor. Paper poll books must be returned to election offices and stored. (In large jurisdictions, it is not uncommon for poll books to be misplaced.) During the next few weeks, staff members must “wand in” each poll book, scanning the bar code under the voter’s name to update the voter’s history. (If bar codes are not used, staff members enter each voter’s ID into a database manually.) Because it is manual, this process is time-consuming and error-prone. On average, a worker scans two poll books per hour. In an 800,000-voter county, updating voter history requires approximately 400 person-hours. In one informal study by election officials in North Carolina, the actual number was 512 person-hours (eight people working eight-hour shifts for eight days).

During a recount, jurisdictions use a similar manual process to recount every election day check-in noted in the poll book and cross reference this to the total number of votes cast at each poll site. This process can be even more time-consuming than recording voter histories due to a number of issues, such as ballot challenges.

## THE ELECTRONIC POLL BOOK SOLUTION

If election officials want to reduce congestion at poll sites, current processes for voter check-in and post-election data handling must become more automated and more efficient. EPBs offer an ideal solution.

An EPB is a software application running on a laptop, tablet or handheld computer. It receives authorized voter registration data from a secure master database via portable media (thumb drive, CD, DVD) or a secure network connection. The concept is straightforward and delivers a long list of benefits:



- **Faster check-in.** Each EPB unit contains all voter registration data for the precinct and the jurisdiction, so there is no need for alphabetically divided lines. This simple change shortens lines and helps eliminate bottlenecks. To check in a voter, poll workers enter the name in a search field or scan a driver's license or voter ID card. Both methods are faster than leafing through a paper poll book, and the end result is higher efficiency.
- **No printing costs.** All EPB data arrives electronically, enabling jurisdictions to eliminate costs associated with printing, binding and delivery of paper poll books. No paper is used, which supports environmental sustainability.
- **Quick voter redirection.** Because EPBs include voter registration data from the entire jurisdiction, it is easy to help a voter who has arrived at the wrong poll site. Poll workers switch to a city- or county-wide search and find the voter's correct precinct. (Some solutions include maps with driving directions.) Paper poll books only contain voters for one precinct, which makes redirecting lost voters much more difficult.
- **Instant data availability.** Many EPB systems provide instant, real-time access to data on election day. Election officials can perform real-time audits, reconciling voting machine totals and check-in totals to catch discrepancies early. Political party representatives can quickly check turnout among their base. Election officials can see turnout displayed by the hour to identify peak times, so they can improve staffing or add more voting machines for the next election.
- **No manual voter history scanning.** EPBs deliver an accurate voter history credit file instantly on election day, eliminating the need to record results manually.
- **No supplemental poll books.** EPBs receive an accurate data file on or immediately before election day, so there is no need for supplemental poll books. Poll workers only have one electronic file to deal with instead of multiple paper documents.
- **Easier exception handling.** Access to all voter registration data improves exception handling, making it easy to check whether voters have already voted by absentee ballot, need to show a certain form of ID before voting, or need a provisional ballot. With EPBs, poll workers can resolve these issues quickly without placing time consuming calls to election headquarters.



## CHOOSING THE RIGHT EPB

EPBs are quickly becoming popular because of the issues they resolve and the improvements in efficiency they enable. Choosing the right EPB solution for a specific jurisdiction requires careful consideration. Although there are relatively few EPB systems available, they have important variations in configuration and performance.

Here are some questions election administrators should ask EPB providers before making a purchase decision:

- **How is voter registration data acquired from the state/master database?**

In most EPB implementations, a stand-alone application imports voter registration data from the state/master database and creates one data file for all EPB units. With this approach, the time-consuming data transfer occurs only once. Then each EPB can be configured with the same deployment file, as opposed to each EPB unit receiving voter registration data from the state/master database individually. This also eliminates the need to manage separate files for each unit, and simplifies data reconciliation.

- **Can the EPB be customized for state and local requirements?**

EPBs should be easy to configure for unique state and local requirements. Ideally, the software interface offers a way to select from a menu of options. It is much more challenging (and expensive) to create customized versions of EPB software for individual installations.

- **Does the EPB offer flexible data handling and reporting?**

Look for EPB solutions that automate both pre-election and post-election data merges. It is also important that data be represented graphically, arranged in a variety of standard and custom reports for different decision makers, and exported to multiple file formats.

- **Is the EPB independent from voting machines?**

If EPBs are connected to the same IT architecture as voting machines, it raises a long list of issues for how EPBs are configured, used and certified. If EPBs remain separate from voting technology, data independence is assured.

## SUMMARY

Electronic poll books offer a proven, reliable way for election officials to avoid bottlenecks during voter check-in and improve overall poll site efficiency. EPBs have many functional advantages over traditional paper poll books, as well as measurable cost advantages. When the time is right to make the transition to EPBs, jurisdictions need to choose a solution that matches local needs and includes support from a provider that understands poll site procedures and election-specific data management.

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