# Guidance for Pre-Election Testing:
# Electronic Poll Books

*U.S. Election Assistance Commission*

# Introduction

This document is one in a series created by the U.S. Election Assistance Commission's (EAC) Election Supporting Technology Evaluation Program (ESTEP). These documents are designed to guide election officials in administering Federal elections. This document provides guidance for conducting a pre-election test on electronic poll books (EPBs).

## Defining Electronic Poll Books (EPBs)

Simply defined, EPBs are laptops, tablets, or kiosks designed to replace paper poll lists, that access digital voter registration records for their representative jurisdiction. In contrast to a voting system, EPBs' primary users are election workers and do not collect or tabulate cast vote records. EPBs were initially designed to automate the election process and alleviate the burden on election workers, who update voter registration records and evaluate a voter's eligibility to participate in the election process. In recent years, these systems have evolved to serve a variety of administrative functions before, during, and after an election. EPBs can now be used to capture voter signatures, identify a voter's ballot style or preferred language, detect ineligible voters, and extract data reports.

## Defining Pre-Election Testing

The purpose of pre-election testing is to verify that all software is functioning properly while also verifying that the EPB is configured correctly. A pre-election test should be conducted on the EPB at least once before every election. The steps and plans prepared for your jurisdiction's pre-election test can also be used for acceptance testing on new or updated EPBs provided by a developer.

**Note: For the purposes of this document, pre-election testing is intended to be synonymous with logic & accuracy (L&A) testing, public tests, preventative maintenance testing, or acceptance testing.**

## Pre-Election Testing Guidance for EPBs

The following section outlines general guidance for conducting a pre-election test on an EPB. **Please note that this guidance is not designed to be exhaustive.** Election officials should develop pre-election test procedures in alignment with jurisdictional election laws or rules, and directives from their chief election officials. In some cases, affiliated EPB system developers may provide additional guidance on system-specific testing recommendations.

# Sample Pre-Election Test for Electronic Poll Books

[Sample Election Office]

| Specifications | Description |
|---|---|
| **Purpose** | Pre-election testing is conducted to verify that data is transferred correctly to and from the EPB and that the system operates as expected. |
| **Completed by** | [Role of the person(s) responsible for this task] |
| **Schedule** | A pre-election test should be conducted on each EPB at least once before every election. This can typically be tested after system setup as part of a jurisdiction's pre-election procedures. |
| **Test Materials** | • Electronic poll book device(s)<br>• Voter registration system (if applicable)<br>• Power cords, batteries, and connection cables<br>• Printers and printer paper (if applicable)<br>• Wireless private network devices (if applicable)<br>• Physical storage and equipment keys (if applicable) |

| Steps | Suggested Testing Procedures |
|---|---|
| **Step 1** | **Prepare for the Pre-Election Test**<br>• Develop a test plan.<br>• Secure the testing location.<br>• Identify key testing personnel.<br>• Provide public notice of testing (if applicable).<br>• Gather all test materials. |
| **Step 2** | **Verify Hardware Setup**<br>• Remove all hardware for the EPB from its storage location.<br>• Plug in and connect all cords.<br>• Power on all equipment, including:<br>    o EPB device(s),<br>    o Printers (if applicable), and<br>    o Wireless private network devices (if applicable).<br>• Ensure that printer paper is available and insert a new paper roll into the printer (if applicable).<br>• Verify that the EPB receives power by locating the charging indicator.<br>• Verify that the EPB is connected to a private network (if applicable). |

| | |
|---|---|
| **Step 3** | **Verify Software Configuration**<br>• Verify that the election data programmed on the EPB is correct for the upcoming election, including:<br>    ο Election date,<br>    ο Precinct or polling location(s), and<br>    ο Type of election (primary, general, etc.).<br>• Verify that access has been granted to the appropriate users.<br>• Install the test data file onto the EPB.<br>• Verify that the test data file is accurate once installed. |
| **Step 4** | **Validate System Accuracy**<br>• Power on and login to the EPB.<br>• Print a zero report of checked-in voters, and make sure all field totals are "0".<br>• Test any check-in activity workflows that would take place during an election on a batch of voters (at least three-to-five EPB), including:<br>    ο Regular check-in,<br>    ο Check-in of provisional voters,<br>    ο Check-in of absentee or mail-in voters,<br>    ο Voter ID verification (if applicable),<br>    ο Signature verification (if applicable), and<br>    ο Ballot style verification (if applicable).<br>• Test printing for each voter check-in (if applicable).<br>• Test ballot spoiling procedures (if applicable).<br>• Ensure data is synced between all network-connected EPBs (if applicable).<br>• Ensure that the EPB sends and receives the expected test data from the voter registration system (if applicable). |
| **Step 5** | **Prepare for Election Day**<br>• Clear any test data on the EPB.<br>• Ensure that the correct voter registration data files have been uploaded or downloaded on the EPB, if not synced to the voter registration system.<br>• Verify that the battery power is 100%. If under 80%, the EPB should remain plugged in to charge.<br>• Power off and unplug all devices, including:<br>    ο EPB device(s),<br>    ο Printers (if applicable), and<br>    ο Wireless private networks (if applicable).<br>• Seal all devices and return them to their storage location. |
| **Step 6** | **Final Review**<br>• Complete a final validation check.<br>• Resolve any discrepancies or deficiencies from the pre-election test.<br>• Store all documentation of completed pre-election tests in a designated area per jurisdictional retention rules. |

# Conclusions

The guidance for pre-election testing above is designed to assist election officials in ensuring that their electronic poll book (EPB) functions as expected during an election. Pre-election tests should be conducted before every election to ensure the proper working order of election equipment. Election officials should develop their own pre-election test procedures in alignment with jurisdictional election laws and directives from their chief election officials.

If you have any recommendations for improving these practices, please contact the EAC's Election Supporting Technology Evaluation Program at [estep@eac.gov](mailto:estep@eac.gov).

# Appendix A: Blank Pre-Election Test Template

## [Sample Election Office]

| Specifications | Description |
|---|---|
| **Purpose** | Pre-election testing is conducted to verify that data is transferred correctly to and from the EPB and that the system operates as expected. |
| **Completed by** | [Role of the person(s) responsible for this task] |
| **Schedule** | A pre-election test should be conducted on each EPB at least once before every election. This can typically be tested after system setup as part of a jurisdiction's pre-election procedures. |
| **Test Materials** | • Electronic poll book device(s)<br>• Power cords, batteries, and connection cables<br>• [Supply 3]<br>• [Supply 4] |

| Steps | Goals |
|---|---|
| **Step 1** | **Prepare for the Pre-Election Test**<br>• [Important details about this step]<br>• [Another thing to know] |
| **Step 2** | **Verify Hardware Setup**<br>• [Important details about this step]<br>• [Another thing to know] |
| **Step 3** | **Verify Software Configuration**<br>• [Important details about this step]<br>• [Another thing to know] |
| **Step 4** | **Validate System Accuracy**<br>• [Important details about this step]<br>• [Another thing to know] |
| **Step 5** | **Prepare for Election Day**<br>• [Important details about this step]<br>• [Another thing to know] |
| **Step 6** | **Final Review**<br>• [Important details about this step]<br>• [Another thing to know] |

**Final check**

Did you remember to ...

☐ [Do this for Step X]

☐ [Do that for Step Y]

☐ [Do the other thing for Step Z]

**Additional Notes**

[Notes]