



U.S. ELECTION ASSISTANCE COMMISSION

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Guidance for Pre-Election Testing: Electronic Ballot Delivery

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 ballot delivery (EBD) systems.

Defining Electronic Ballot Delivery (EBD) Systems

Electronic Ballot Delivery systems can be defined as the systems responsible for the electronic delivery of blank ballots and voter information packets. These systems use a combination of software and hardware that may or may not reside onsite or in the cloud and can be accessed from a voter's personal device (e.g. computer, cell phone, tablet, etc.).

These systems can be as simple as distributing PDF images of a ballot and voter information packet via email or as complex as logging into a public portal and accessing an electronically markable ballot.

Defining Pre-Election Testing

The purpose of pre-election testing is to verify that all software is functioning properly while also verifying that the EBD system is configured correctly. A pre-election test should be conducted on the EBD system 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 EBD systems 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 EBD

The following section outlines general guidance for conducting a pre-election test on an EBD system. **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 EBD system developers may provide additional guidance on system-specific testing recommendations.

Sample Pre-Election Test for Electronic Ballot Delivery

[Sample Election Office]

Specifications	Description
Purpose	Pre-election testing is conducted to verify that data has been transferred from the voter registration system to the electronic ballot delivery (EBD) system accurately and that the EBD system is functioning correctly.
Completed by	[Role of the person(s) responsible for this task]
Schedule	A pre-election test should be conducted on the EBD system 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	<ul style="list-style-type: none"> • Workstation Connected to Voter Registration (VR) System • Workstation Connected to EBD System • Printer
Steps	Suggested Test Procedures
Step 1	Verify EBD Absentee Status of Imported Voter Records <ul style="list-style-type: none"> • Verify the EBD Absentee Status of a sample of voters imported from the voter registration system. • Confirm the number of imported EBD Absentee voter records against the active number of EBD Absentee eligible voters reported in the voter registration system.
Step 2	Verify Election Setup <ul style="list-style-type: none"> • Verify election information is correct (e.g., election type, election date, etc.). • Verify that imported or entered ballot information matches the physical ballot. <ul style="list-style-type: none"> ○ Candidate contests, measures, etc. • Verify that no voter data is associated with your election and/or that no ballots have been issued. <ul style="list-style-type: none"> ○ This will serve as your zero report.
Step 3	Verify EBD System Reports <ul style="list-style-type: none"> • Verify the number of electronic ballots to be issued matches the number of imported EBD Absentee voter records (if applicable). • Verify EBD System generated reports and/or audit logs are functioning as expected.

<p>Step 4</p>	<p>Verify EBD System Voter Access Functionality</p> <ul style="list-style-type: none"> • Test voter access by logging into the EBD system using a test account (if applicable). • Verify voter information imported correctly, if applicable (e.g. precinct, ballot style, email address, etc.). • Verify that the test account can access the correct ballot and ballot packet. • Verify that the test account can access and mark the ballot (if applicable). • Verify ballot and ballot packet print functionality.
<p>Step 5</p>	<p>Reset Counts</p> <ul style="list-style-type: none"> • Reset Ballot access counts to zero (if applicable). • Clear test users (if applicable). • Verify EBD System delivery or access counts have reset to zero (if applicable).

Conclusions

The guidance for pre-election testing above is designed to assist election officials in ensuring that their EBD system 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.

Appendix A: Blank Pre-Election Test Template

[Sample Election Office]

Specifications	Description
Purpose	Pre-election testing is conducted to verify that data has been transferred from the voter registration system to the electronic ballot delivery (EBD) system accurately and that the EBD System is functioning correctly.
Completed by	Elections director, deputy director, and seasonal staff as necessary.
Schedule	A pre-election test should be conducted on the EBD system at least once before every election. This can typically be tested after system setup as part of a jurisdiction's pre-election procedures.
Supplies	<ul style="list-style-type: none"> • Workstation Connected to VR System • Workstation Connected to EBD System • Printer • [Supply 3] • [Supply 4]
Steps to complete	Goals
Step 1	Prepare for the pre-election test & gather all test materials. <ul style="list-style-type: none"> • [Important details about this step] • [Another thing to know]
Step 2	Verify hardware setup. <ul style="list-style-type: none"> • [Important details about this step] • [Another thing to know]
Step 3	Verify software configuration. <ul style="list-style-type: none"> • [Important details about this step] • [Another thing to know]
Step 4	Validate system accuracy. <ul style="list-style-type: none"> • [Important details about this step] • [Another thing to know]
Step 5	Prepare for election day. <ul style="list-style-type: none"> • [Important details about this step] • [Another thing to know]
Step 6	Complete a final review. <ul style="list-style-type: none"> • [Important details about this step] • [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]