Election Officials Manual

Chapter 10: Preparation of Election Equipment

July 2024

I. Introduction

This chapter includes instructions for preparing election equipment prior to the election, including an introduction to the equipment, procedures for programming and testing the equipment, and security requirements. Questions about the content of this chapter should be directed to Elections@Michigan.gov.

II. Electronic pollbooks (EPB)

The Bureau of Elections' electronic pollbook (EPB) is used for processing voters, generating precinct reports, and recording voter history at in-person polling places. The Election Day EPB is an offline program that must be downloaded from the QVF and loaded onto a laptop before each election. The contents of the Election Day EPB are unique to each precinct. The Election Day EPB is designed for security and is password protected. It is not connected to the internet.

The Early Voting EPB is a web-based application with a secure, live connection to the QVF, that serves largely the same purpose as the Election Day EPB but for early voting instead of Election Day voting. Because early voting occurs on at least nine days prior to Election Day while voters may also be returning absentee ballots, and because some voters have the choice of using multiple early voting sites, the Early Voting EPB is connected to the internet to allow clerks and election inspectors to access and update voter records in real time. The Early Voting EPB is also password-protected, and requires several layers of authentication to access.

Jurisdictions are required to use EPBs to manage Election Day precincts and early voting sites. Key EPB capabilities that allow for efficient election management include the following:

- Registration and absent voter information for every voter in the Election Day precinct (or assigned to the early voting site)

- The ability to quickly locate a voter's record by scanning a voter's Michigan driver's license or state identification card with a barcode scanner

- The ability to assign and record the voter's ballot immediately upon confirming the voter's registration

- The ability to look up the correct polling place for voters who appear at the wrong precinct on Election Day

- The ability to maintain and print accurate reports, including a ballot summary that calculates the total number of ballots cast in the precinct

Preparing the Early Voting EPB

Each early voting coordinator is responsible for configuring the Early Voting EPB in QVF before the start of the early voting period. This includes all of the following steps:

- Early voting region setup

    - EV region details

    - EV site locations and hours

- Early voting EPB setup

    - EV election inspectors (EPB users)

    - EV laptops (devices)

    - Multifactor authentication

    - EV site tabulator configuration

In the case of temporary EPB failure or temporary loss of an internet connection during the early voting period, each early voting site should have an offline listing all voters in the EV site at the beginning of the early voting period, and a supplementary voter change report generated daily that accounts for any updates to voter statuses during the early voting period.

Preparing the Election Day EPB

The EPB must be prepared by the local clerk prior to Election Day. The following steps must be taken to prepare each laptop that will run the Election Day EPB software:

1. The clerk should check for and install any operating system updates for the laptop.

2. The clerk should ensure the laptop's Wi-Fi connection is disabled before Election Day.

3. The EPB must be exported from the QVF after 4 p.m. on the day before Election Day.

In case of EPB failure, a precinct list and paper pollbook should always be available in the precinct. Voters should never be turned away due to a failure of the EPB.

III. Voting systems

In Michigan, counties are allowed to select and purchase their own certified tabulators and election equipment. This results in the use of a number of different tabulators, manufactured by three different vendors. Clerks who encounter technical issues with their tabulators should consult their tabulator reference manual or the vendor from whom the tabulator was purchased. Every in-person precinct on Election Day must have its own tabulator. Early voting sites can be configured to have tabulators accept the ballots for individual precincts, groups of precincts, jurisdictions, groups of jurisdictions, or entire counties, depending on early voting region size.

Each precinct must also have a voter assist terminal (VAT). The VAT is a device used by voters to electronically mark their ballot at the polling place rather than physically marking a paper ballot (sometimes called a ballot marking device). The marked ballot is then printed and placed in the tabulator. Any voter can use the VAT, though it is often used by voters who have a disability that makes it difficult for the voter to physically mark a paper ballot. In polling places containing multiple precincts, clerks may opt to supply only one VAT for every two precincts.

Early voting sites may also utilize ballot-on-demand (BOD) printers to print a ballot of the correct style for each voter, as an alternative to having pre-printed ballots for every precinct in the early voting region at the site.

Each voting system vendor has a different model of BOD printer. Early voting coordinators may decide whether to have BOD printers or pre-printed ballots for each ballot style present at the early voting site.

Administrative rules promulgated by the Secretary of State require that tabulator programs and voting devices be tested prior to each election. Every element of the voting device should be tested separately, as explained in the following section.

IV. Tabulator programming and rejected ballots

Tabulators are programmed to reject invalid ballots. Invalid ballots include the following:

Blank ballots

Blank ballots occur when a voter does not complete their ballot, but a tabulator may also interpret a ballot as being blank if the voter attempts to complete their ballot with ink that is not black or blue or if the voter makes marks on the ballot which are not dark enough to be detected by the tabulator.

Ballots with overvotes

Overvotes occur when a voter votes for more candidates than permitted for a given office. An overvote may also occur if the voter has crossed out a mark, attempted to erase a mark on a ballot, or otherwise made a mark on the ballot that the tabulator interprets as an attempt to vote for more candidates than allowed.

Ballots with crossover votes

Crossover votes occur because a voter has voted in races for both parties during a partisan primary. Although primary elections for the two major parties appear on the same ballot in partisan primaries, the voter is only permitted to participate in one party's primary. The voter cannot participate in one party's primary for one office and the other party's primary for a second office. As with overvotes, inadvertent or erased marks may be interpreted by the tabulator as an attempt to cast a crossover vote.

Voter's right to cure rejected ballot

When a tabulator rejects a ballot, the ballot is ejected back from the same slot into which the ballot was originally fed. Federal law requires that tabulators allow the voter an opportunity to correct an improperly marked ballot. Proper programming—allowing the recording of the number of votes a voter may cast for each office on the ballot—allows tabulators to properly reject invalid ballots and allows voters their federally mandated opportunity to correct those ballots.

When the tabulator rejects a ballot, the tabulator will display a message explaining the reason for the rejection. An election inspector should consult the tabulator to determine the reason for the rejection and discretely explain that reason to the voter. To preserve ballot secrecy, this explanation should be made without looking at the voter's ballot. The voter should then be issued a new ballot, allowed to complete that ballot, and allowed to feed that ballot into the tabulator.

V. Pre-election logic and accuracy testing

Every city and township election commission is responsible for conducting a preliminary logic and accuracy test of every tabulator and VAT prior to each election. Additionally, one or more selected tabulators must undergo a public logic and accuracy test. VATs are not required to undergo public testing.

The clerk should conduct the preliminary logic and accuracy test on every tabulator and VAT to be used in the election immediately upon receipt of the tabulator programs.

The public accuracy test for early voting equipment must be conducted at least five days prior to the start of early voting. The public accuracy test for Election Day equipment must be conducted at least five days prior to the election. For any jurisdictions that will be administering early voting, the BOE recommends that public accuracy tests for both Election Day and early voting equipment be done together by the earlier date. The location and time of the public accuracy test must be published in a newspaper or journal of general circulation at least 48 hours prior to the public test.

Post-test storage of testing materials

All election materials used to conduct logic and accuracy testing, including the test deck, the chart of predetermined results, the zero tape, and the accuracy test results must be secured in an approved ballot container for the duration of the retention period. The number on the seal used to secure the pre-election test materials must be recorded on the *Tabulator Test Certification*, the *Voter Assist Terminal Preparation Checklist and Test Certification* form, and the *Ballot Container Certificate*. The serial numbers on the seals used to seal the programs into the tabulator and VAT following successful testing must be recorded in the *Clerk's Preparation Certificate* in the pollbook.

The same ballot container may be used to store materials from both the preliminary and public tests if the following steps are taken:

- The test materials from the preliminary accuracy test are sealed into an approved container directly following the test and the seal number is documented on the proper test certification forms and ballot container certificate.

- Prior to the conducting of the public accuracy test, the original ballot container seal is broken and verified against the preliminary test certification forms and deposited into the container. The tabulator test deck is removed and used to conduct the public accuracy test.

- The test materials from the public accuracy test are deposited into the ballot container directly following the test and a new seal is affixed.

- The new seal number is documented on the *Test Certification* form and on the *Ballot Container Certificate*.

No Election Day materials may be stored in the ballot container where the preliminary and/or public test materials are stored.

VI. Sealing the tabulators and VATs after pre-election testing

After the completion of the preliminary test ensuring the program is correct, the program memory device or devices must be sealed in either the tabulator or in an approved container. The seal numbers must be properly recorded and retained through the state retention period. When the program has been prepared for an election with federal offices, the tabulator program used on Election Day must also be retained for an additional 22-month federal retention period. The tabulator program may be transferred from the memory device to another medium during this retention period; the program does not need to remain on the tabulator's memory device.

Independent of the logic and accuracy testing and program security, the electronics of the tabulator must be protected. This protection is accomplished by the application of adhesive security seals. These seals are designed so that any attempt to access to the inside of the tabulator cases after the conclusion of the preliminary accuracy test will break one of the seals, revealing the attempt. Documentation of the seal number and the

date of sealing should be on signed letterhead stationery stored in the clerk's office.

At the conclusion of the preliminary test, the VAT program should be sealed in the VAT. The seal number should be recorded and retained for the state retention period. There is no federal retention requirement of the VAT program.

VII. Voter assist terminal Election Day testing

The voter assist terminal or VAT must be tested in the precinct on Election Day prior to the opening of the polls. The clerk should include a test ballot in the election supplies delivered to the precinct; the test ballot is used to test the VAT. The test ballot should be a blank piece of paper, preferably the same weight as the VAT ballots. The words "Test Ballot" should be written on the test ballot. The test ballot may not be an official precinct ballot. Stubbed and numbered blank VAT ballots also should not be used to test the VAT.

To conduct the VAT test, an election inspector should load the test ballot into the VAT and complete the VAT process for printing a blank ballot. This test ballot must not be tabulated. The test ballot must be returned to the local clerk in the local clerk's envelope at the end of the election.

VIII. Common tabulator issues

This section explains how certain common tabulator issues may be solved.

Tabulator not turning on or using battery power when plugged into wall socket

To fix a tabulator that is not turning on or using battery power when plugged into a wall socket, the election inspector should do the following:

- Verify the power cord is securely plugged into the back of the tabulator
- Verify the power cord is securely plugged into the power source
- Verify the power is flowing through the wall socket or power strip to which the tabulator is connected

Tabulator not accepting ballots

To fix a tabulator that is not accepting ballots, the election inspector should verify that the path for the ballot to feed through from the front of the tabulator into the ballot box is unobstructed. The feed slot into the ballot box comes with a security flap that can be locked down; the election inspector should ensure that this flap is open.

Public counter shows ballots tabulated or votes cast when tabulator is powered on before polls open

A tabulator may show that ballots have been tabulated or votes have been cast when the tabulator is powered on before polls open if the tabulator was not zeroed out after preliminary logic and accuracy testing. The election inspector should erase any votes or ballots stored in the tabulator's memory by zeroing out the tabulator before the polls open.

Other or continuing tabulator issues

An election inspector who encounters tabulator issues other than those explained here, or who takes the recommended actions but for whom the tabulator issues persist, should immediately contact their local clerk.