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**ADVISORY 2013-04**

August 14, 2013

To: All County Boards of Elections  
Directors, Deputy Directors, and Board Members

Re: Electronic Pollbooks

**SUMMARY**

A number of counties have publicly expressed interest in procuring electronic pollbooks (e-pollbooks) for use in an in-person absentee voting environment on Election Day, or both. In order to assist counties as they look toward the possible purchase of e-pollbooks, this Advisory establishes minimum system requirements and functionalities for e-pollbooks and procedures that county boards of elections should adopt when procuring them.

As you are aware, the General Assembly is currently considering Senate Bill 109, which includes testing and certification requirements for the use of e-pollbooks. While the General Assembly continues their work, this Advisory provides instructions that will be the basis of such a system should the legislation pass.

While it is my hope that legislation is enacted, I believe that while you continue your work to improve elections in your county, it is important that you have clear and consistent guidelines – particularly when considering such a significant investment.

For boards of elections that already use e-pollbooks, the instructions contained in this Advisory for other counties should be followed or implemented. To the extent this is not practical, please work with your elections attorney to discuss the issue and resolve it.

**INSTRUCTIONS**

**A. System Requirements**

1. An e-pollbook must be programmed so that the coordinated action of two precinct election officials who are not members of the same political party is necessary to start-up and close-down the e-pollbook.

2. The information contained on an e-pollbook must be encrypted.
3. If networked with the county voter file, the data contained in the county voter file for the network must be located on a private server with secure connectivity between the voting location or satellite absentee voting location and the county voter file.
4. If the e-pollbook is to be used at an absentee voting location other than the board of elections' office, its communication capabilities must be demonstrated to provide secure, reliable transmission of voter and election information.
5. The e-pollbook must be compatible with:
  - a. The voter registration system used in the county and any software system (middle ware) used to prepare the list of registered voters for use on the e-pollbook;
  - b. Any hardware attached to the e-pollbook, such as signature pads, barcode scanners, printers, and network cards; and
  - c. The statewide voter registration system.
6. The e-pollbook must have the capability to:
  - a. Store a local version of the database that serves as a backup; and
  - b. Produce a list of audit records that reflect all of the actions of the system, including in-process audit records that set forth all transactions.

All audit and transaction records must be retained by the board of elections for at least six years.

7. The e-pollbook must have the capacity to transmit all information generated by the voter or precinct election official as part of the process of casting a ballot, including the time and date stamp indicating when the voter voted and the electronic signature of the voter, for retention by the county election board for at least six years.
8. The e-pollbook must have the capability to interface with a peripheral signature pad, tablet, or other signature capturing device that permits the voter to make an electronic signature for comparison with the signature on file as displayed by the e-pollbook. The image of the electronic signature must be archived for at least six years for post-election reproduction by the board of elections and inclusion in the county's voter registration system if desired.
9. The e-pollbook must include the following documentation:
  - a. Clearly-worded, complete, and detailed instructions that allow a precinct election official to set up, use, and shut down the e-pollbook.

- b. Training materials that:
    - i. May be in written or video form; and
    - ii. Must be in a format suitable for use at a polling place, such as simple "how to" guides; and
  - c. Fail-safe data recovery procedures for information included in the e-pollbook.
- 10.** The e-pollbook must adhere to known best practices of manufacturing and quality assurance.
- 11.** The e-pollbook and any hardware attached to it must be designed to:
- a. Limit risk of injury or damage to any individual or hardware, and
  - b. Prevent fire and electrical hazards.
- 12.** The e-pollbook must have the ability to manage any known implementation of an Ohio election including, but not limited to a general, primary, special, municipal, and concurrent election (example: when both a county and municipality are holding their elections on the same date, in the same space). This capability should be evaluated as part of acceptance testing.

## **B. Required Functionalities**

- 1.** The procedures for setting up, using, and shutting down an e-pollbook must be reasonably easy for a precinct election official to learn, understand, and perform.
- 2.** The e-pollbook must enable a precinct election official to verify that the e-pollbook:
  - a. Has been set up correctly;
  - b. Is working correctly so as to verify the eligibility of the voter;
  - c. Is correctly recording that a voter has voted; and
  - d. Has been shut down correctly.
- 3.** The e-pollbook must be capable of searching the county's list of voters, street segments, precincts, and voting locations to determine the voter's correct precinct and voting location and, if the voter is not eligible to vote at that precinct and voting location, generate a locally-configurable notice to the voter containing the name and address of the voter's proper precinct and voting location.
- 4.** The e-pollbook must include a barcode or magnetic strip reader that:
  - a. Permits a voter who presents a valid Ohio driver's license or state identification card to scan or swipe the license or card; and

- b. Has the capability to display the voter's registration record upon processing the information contained within the barcode or magnetic strip on the license or card.
5. The e-pollbook must permit a precinct election official to enter information regarding an individual who has appeared to vote and verify whether the individual is eligible to vote, and if so, whether the voter has:
  - a. Already cast a ballot in the election at that polling place;
  - b. Requested an absentee ballot; or
  - c. Is in a confirmation status that requires the voter to cast a provisional ballot.
6. The e-pollbook must be able to display an electronic image of the signature of a voter taken from the voter's registration record, if available, and other electronic images, if necessary.
7. The e-pollbook must:
  - a. Permit a voter to sign a poll list even when there is a temporary interruption in network connectivity; and
  - b. Provide for the uploading of each signature and its assignment to the voter's registration record.
8. After a voter's eligibility has been determined, the e-pollbook must permit a precinct election official to enter information indicating that the voter has voted in the election and, if applicable, the party/ballot selected by the voter.
9. The e-pollbook must be capable of generating a locally-configurable "authority to vote" notice or transmittal slip displaying the voter's party (if relevant), voting jurisdiction(s) and/or districts and/or ballot style.
10. The e-pollbook must be capable of generating a locally-configurable report to be exported at least three times per Election Day (6:30 a.m., 11:00 a.m., and 4:00 p.m.) listing all registered voters for that precinct and/or polling place that includes an indicator of which registered voters have cast a ballot (including an absent voter's ballot prior to Election Day) as of the date/time the report is exported.
11. After Election Day, the e-pollbook must permit voter history to be quickly and accurately uploaded into the county voter registration system.

### **C. Procurement and Testing Requirements**

- 1.** An e-pollbook should only be used in the county after a pilot project is run in that county that demonstrates the functionality of the e-pollbook as it will be used in the county. Before the pilot project is run, the county must have objective goals for the project by which the e-pollbook can be evaluated and determined to be appropriate for countywide deployment.
- 2.** The system should be delivered with end user documentation, system-level documentation, and a clear model of the system's architecture.
- 3.** The vendor shall make a declaration of its supply chain and provide detailed information on system consumables.
- 4.** The source code and related documentation, together with any periodic updates as they become known or available, but not including variable codes created for specific elections or data from the county's voter registration system, must be placed in escrow with an independent escrow agent.
- 5.** All repair and maintenance policies must be provided and reviewed.
- 6.** References, including customer lists and known anomalies in prior implementations (and their resolution), should be disclosed prior to purchase.
- 7.** Training materials should be reviewed as part of the procurement process. This should include providing the training materials to staff and precinct election officials prior to purchase to evaluate the ease of use of both the system and the training materials. As part of acceptance testing, the county must provide a copy of the training materials to the testers for use in testing.
- 8.** The internal quality assurance procedures of the vendor, as well as any internal or external test data, including test plans, test data, test results, and any subsequent reports, must be provided and reviewed.
- 9.** Acceptance testing of the e-pollbook should demonstrate its compatibility with any hardware that may be attached to it: network cards, barcode scanners, ballot-on-demand printers, etc.

10. Acceptance testing of the e-pollbook should demonstrate the correct handling of every record in the list of electors and how the record's contents are used, transformed, stored, and transmitted by the e-pollbook.
11. The e-pollbook must demonstrate that it correctly processes all activity regarding each voter registration record included on the list, including the use, alteration, storage, and transmittal of information that is part of the record. Compliance with this must include the mapping of the data life cycle of the voter registration record as processed by the e-pollbook.
12. Acceptance testing should validate all of the vendor's assertions regarding functionality, usability, security, accessibility, reliability, and sustainability.

If you have any questions regarding this Advisory, please contact the Secretary of State's elections attorney assigned to your county at (614) 466-2585.

Sincerely,



Jon Husted