



NORTH CAROLINA

STATE BOARD OF ELECTIONS

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Numbered Memo 2021-01

TO: County Boards of Elections
FROM: Karen Brinson Bell, Executive Director
RE: Procedures for Purchasing Voting Equipment
DATE: March 1, 2021 (Revised April 14, 2023; July 20, 2023)

This Numbered Memo updates [Numbered Memo 2019-04](#) and details the procedures a county board of elections is required to follow when seeking to purchase certified voting systems and components.

When seeking to use a new voting system in the county, a county board of elections must follow the same procedures regardless of when the voting system was certified.

Only voting systems certified by the State Board may be used in North Carolina. North Carolina law and the Elections Systems Certification Program adopted by the State Board establish the role of the county board of elections in selecting a new voting system for that county and impose procedures during and after the adoption and acquisition of a certified voting system for use in the county.

For detailed information on the certification process and the role of the State Board and vendors, please see the [Elections Systems Certification Program](#).

Voting Systems Certified by the State Board

The following voting systems are certified for use in North Carolina:

- ES&S EVS 6.3.0.0
 - DS200 precinct tabulator
 - DS300 precinct tabulator
 - DS850 central tabulator
 - DS450 central tabulator
 - DS950 central tabulator
 - ExpressVote ballot marking device
- ES&S EVS 5.2.4.0
 - DS200 precinct tabulator
 - DS450 central tabulator
 - DS850 central tabulator
 - ExpressVote ballot marking device

- AutoMARK ballot marking device
- Hart InterCivic Verity Voting 2.2/2.5
 - Verity Scan precinct tabulator
 - Verity Touch Writer ballot marking device
 - Verity Central Workstation central tabulator
 - Verity Print ballot on demand
- ES&S Unity 3.4.1.1
 - M100 precinct tabulator
 - DS200 precinct tabulator
 - M650 central tabulator
 - DS850 central tabulator
 - AutoMARK ballot marking device
- ES&S Unity 3.0.1.1
 - M100 precinct tabulator
 - M650 central tabulator
 - AutoMARK ballot marking device
- Clear Ballot ClearVote 1.4¹
 - ClearCast precinct tabulator
 - ClearAccess ballot marking device
 - ClearCount central tabulator
 - ClearAudit election audit system

Requirements for Adopting and Acquiring a Certified Voting System

Ultimately, the county board of commissioners (with the recommendation and approval of the county board of elections) must adopt and acquire a voting system that is certified by the State Board for use in the county. Before the board of county commissioners approves the adoption and acquisition of a voting system, the county board of elections must do the following:²

Step 1: Witness a demonstration of the recommended voting system plus at least one other certified voting system not currently used in your county. The demonstration can take place in the county or at a site designated by the State Board.

- The demonstration should be organized as part of a public meeting with invitations sent to the county board of commissioners, the county manager, the county attorney, and the political parties in the county.
- The county board should give public notice of the demonstration and meeting, as it does for all other board meetings.

¹ Clear Ballot is not currently used in any county in North Carolina.

² See G.S. § 163-165.9 and Section 3.3.2 of the Certification Program.

- A majority of county board members must meet the demonstration requirement. All board members of the county board of elections should witness a demonstration if possible.

Step 2: Make a preliminary recommendation to the board of county commissioners as to which voting system should be acquired by the county.

- Official action to preliminarily recommend to the board of commissioners can be taken as soon as the same meeting during which the demonstration is conducted, provided the meeting is properly noticed. Alternatively, the meeting to preliminarily recommend a voting system may be noticed prior to the demonstration as long as the meeting is held after the demonstration.
- The Board can document its recommendation by resolution, letter, presentation, or other official action.

Step 3: The county board must either: (1) test the proposed voting system in at least one precinct where the voting system would be used if adopted, or (2) test the proposed voting system in a simulated election.

Option 1: Testing in a Precinct in an Election

- County board staff must notify State Board voting systems staff of its intent to test the recommended voting system.
- The voting systems election management system and the components of the system must undergo Logic & Accuracy testing prior to use in the test election.
- After completing canvass, the county board must determine that the recommended voting system has met the requirements for voting in that county.

Option 2: Testing in a Simulated Election

- County boards may test proposed voting equipment in a simulated election, in accordance with standards established by the State Board.³
- Please refer to the *Standards for Simulated Election* policy, adopted by the State Board on July 31, 2020 (revised March 28, 2023), for more information on how to test the proposed equipment in a simulated election. The policy is attached to this memo.
- State Board staff must be notified of any plans to conduct a simulated election prior to scheduling.

Step 4: Seek State Board approval to replace the current voting system.

- The county board of elections cannot replace any voting system, or any portion thereof, without approval of the State Board.⁴

³ G.S. § 163-165.9(a)(3)(b).

⁴ See G.S. § 163-165.9(b)(3).

- The form to request approval is attached to this memo.

Step 5: Make a final recommendation to the board of county commissioners.

- The board of commissioners can decline to adopt or acquire any voting system recommended by the county board of elections, but it cannot adopt and acquire a voting system that has not been approved by the county board of elections.⁵
- The public contracting and procurement statutes do not apply to the purchase of a certified voting system.
- Along with the final recommendation, the CBE must submit the proposed vendor contract to the State Board of Elections for review and approval.

Requirements After the County Has Adopted and Acquired a Certified Voting System

The county board of elections must conduct acceptance testing when a newly procured voting system (or any newly acquired type of equipment for a voting system) is delivered. Acceptance testing ensures that the system delivered is identical to that which was certified and that it operates in good working condition. This testing is conducted by the county board with the assistance of State Board staff or consultants approved by the State Board.

Additionally, the county board of elections must also comply with any requirements of the State Board regarding training and support of the voting system by completing all of the following:⁶

- The CBE must comply with all of the vendor's specifications for ballot printers. The CBE can contract with noncertified ballot printer vendors as long as that vendor meets all of the specifications and the State Board's quality assurance requirements.
- The CBE must maintain annual software license agreements.
- The CBE must uphold annual maintenance agreements necessary to maintain the warranty of the voting system or employ qualified personnel to maintain a voting system in lieu of entering into maintenance agreements.
- Before entering into any maintenance agreement, the CBE shall ensure the vendor agrees to operate a training program for qualified personnel hired by the CBE.
- The CBE must notify the State Board at the time of every repair, according to State Board guidelines.
- The CBE must continue to comply with the [Voting Systems Vendor Code of Ethics](#).

⁵ See G.S. § 163-165.8.

⁶ See G.S. § 163-165.9A(a).

Frequently Asked Questions

Q: The county board wants to purchase an additional piece of equipment that is part of the voting system the board currently uses. Is the board required to witness a demonstration and is the county board of commissioners required to adopt and acquire the new equipment? Do we need to conduct a simulated election after purchasing the new equipment?

A: The county board does not need to witness a demonstration or seek approval of the county commissioners to adopt and acquire a new component of the county's currently used voting system. Nor does the county need to conduct a simulated election. The county is not adopting a new voting system but rather is purchasing an additional piece of equipment within its currently existing system. With any new purchase of a voting system or any component thereof, the county board needs to conduct acceptance testing to be coordinated with the State Board.

Q: The county board wants to upgrade from ES&S EVS 5.2.4.0 to ES&S EVS 6.3.0.0. Is this considered "adopting and acquiring" a new voting system under the statute?

A: Yes. These are two different voting systems, each of which was required to go through full certification review by the State Board. A county board is "adopting and acquiring" a new voting system if it is upgrading to EVS 6.3.0.0 from any other certified voting system, and the county board needs to complete all required steps for adopting and acquiring a new voting system. On the other hand, a county board is not considered to have adopted and acquired a new voting system if it is upgrading to the most recent certified version of the system, where that more recent certified version was not required to go through full certification review by the State Board (*e.g.*, moving from ES&S Unity 3.0.1.1 to Unity 3.4.1.1, or from Hart InterCivic Verity 2.2 to Verity 2.5). The State Board determines whether a new version of a voting system is a mere modification of an existing certified system or a new voting system entirely, the latter of which requires full certification review and all preapproval procedures by the county before acquiring a new system.

Q: The county board wants to purchase equipment from a newly certified voting system but much of its existing equipment will continue to work and be used. Is this considered adopting a new voting system?

A: Changing from one certified voting system to another certified system is considered adopting and acquiring a new voting system, even though some equipment remains the same, and your county board needs to complete all required steps for adopting and acquiring a new voting system. A "voting system" is the total combination of mechanical, electromechanical, or electronic equipment (including the software, firmware, hardware, and documentation required to program, control, and support the equipment) that is used to define ballots; to cast or tabulate votes; to read election media; to report or display election results; and to maintain and produce

any audit trail information.⁷ Although some hardware, can be configured to work with more than one system, if the county is adopting equipment from a new voting system that underwent separate State certification, it is acquiring a new voting system.

Q: The county board wants to adopt a new voting system, and three members of the current board witnessed demonstrations of that new system and another currently certified voting system in the past. Is the board required to witness demonstrations again?

A: A majority of county board members voting on the recommendation must have witnessed a demonstration, so if a majority of the board has already witnessed a demonstration of the recommended voting system and at least one other certified voting system not currently used in the county, the board is not required to repeat the demonstration. However, all board members of the county board of elections should witness a demonstration if possible. Board members are not required to attend demonstrations on the same day.

Q: Can my county board conduct a simulated election prior to witnessing demonstrations?

A: No. The simulated election must take place after witnessing the demonstration of the proposed voting system and one other certified system not currently in use in the county and after making a preliminary recommendation to the county commissioners as to which system the county should adopt and acquire.

Q: Can the demonstration required in Step 1 be conducted virtually?

A: Yes. If a quorum of board members is present, the demonstration must be publicly noticed as a meeting of the board and the county board of commissioners, county manager, county attorney, and the political parties in the county must be notified of the demonstration. Ideally, a virtual demonstration would be provided live. However, if a vendor is offered the opportunity to present in person and live by virtual means, and the vendor declines, the county board may witness a prerecorded demonstration of that vendor's system.

Q: Can the county board's test of a proposed new voting system occur in all precincts or voting sites?

A: No. Using a proposed new voting system in all voting sites or all precincts circumvents the purpose of testing the voting system before it is acquired and ultimately authorized by a county and the State Board to be used as the county's voting system.

⁷ [Elections Systems Certification Program](#) at page 3-4 (emphasis added).

Accessibility Requirement

The Help America Vote Act mandates that a voting system provide the same opportunity for access and participation to voters with disabilities as it does to voters without disabilities.

Federal law requires that each voting place have an accessible voting option for voters with disabilities to vote independently. A county board may choose to use any of the certified ballot marking devices to meet this requirement, but due to limitations in tabulation software, a county may not acquire voting systems from more than one vendor.

In selecting the voting system that will be used, county boards should be mindful of the requirement that they must make available at each voting place “an adequate quantity of official ballots or equipment.” Similarly, county commissioners shall provide “for each of those voting places sufficient equipment of the approved voting system.”⁸ County boards should consider the expected turnout in their county and each voting place, including One-Stop early voting, central transfer location, and Election Day, future elections, and the need to reduce long lines whenever possible.

⁸ G.S. § 163-165.10.

Request for Replacement of County Voting System

The _____ County Board of Elections (“Board”), having met on _____ hereby seeks the approval of the State Board of Elections to replace its voting system, or a portion thereof. Before approving the adoption and acquisition of any voting system by the board of county commissioners, the county board of elections carried out the following steps, which are documented on this form.

STEP 1: DEMONSTRATION

The county board must witness a demonstration of the recommended voting system plus at least one other certified voting system not currently used in the county. The demonstration can take place in the county, at a site designated by the State Board, or by virtual means.

- The demonstration should be organized as part of a public meeting with invitations sent to the county board of commissioners, the county manager, the county attorney, and the political parties in the county.
- The county board should give public notice of the demonstration and meeting, as it does for all other board meetings.
- A majority of county board members voting on the recommendation must have witnessed a demonstration. All five members of the county board of elections should attend a demonstration if possible.

County Board member 1: _____	Demo Location: _____ Date: _____
Voting Systems Reviewed: <input type="checkbox"/> Hart InterCivic Verity 2.2 <input type="checkbox"/> ES&S EVS 5.2.4.0 <input type="checkbox"/> Hart InterCivic Verity 2.5 <input type="checkbox"/> ES&S EVS 6.3.0.0 <input type="checkbox"/> ES&S Unity 3.4.1.1	
County Board member 2: _____	Demo Location: _____ Date: _____
Voting Systems Reviewed: <input type="checkbox"/> Hart InterCivic Verity 2.2 <input type="checkbox"/> ES&S EVS 5.2.4.0 <input type="checkbox"/> Hart InterCivic Verity 2.5 <input type="checkbox"/> ES&S EVS 6.3.0.0 <input type="checkbox"/> ES&S Unity 3.4.1.1	
County Board member 3: _____	Demo Location: _____ Date: _____
Voting Systems Reviewed: <input type="checkbox"/> Hart InterCivic Verity 2.2 <input type="checkbox"/> ES&S EVS 5.2.4.0 <input type="checkbox"/> Hart InterCivic Verity 2.5 <input type="checkbox"/> ES&S EVS 6.3.0.0 <input type="checkbox"/> ES&S Unity 3.4.1.1	
County Board member 4: _____	Demo Location: _____ Date: _____
Voting Systems Reviewed: <input type="checkbox"/> Hart InterCivic Verity 2.2 <input type="checkbox"/> ES&S EVS 5.2.4.0 <input type="checkbox"/> Hart InterCivic Verity 2.5 <input type="checkbox"/> ES&S EVS 6.3.0.0 <input type="checkbox"/> ES&S Unity 3.4.1.1	
County Board member 5: _____	Demo Location: _____ Date: _____
Voting Systems Reviewed: <input type="checkbox"/> Hart InterCivic Verity 2.2 <input type="checkbox"/> ES&S EVS 5.2.4.0 <input type="checkbox"/> Hart InterCivic Verity 2.5 <input type="checkbox"/> ES&S EVS 6.3.0.0 <input type="checkbox"/> ES&S Unity 3.4.1.1	

STEP 2: PRELIMINARY RECOMMENDATION

The county board must make a preliminary recommendation to the board of county commissioners as to which voting system should be acquired by the county.

- Official action to preliminarily recommend can be taken as soon as the same meeting during which the demonstration is conducted, provided the meeting is properly noticed. Alternatively, the meeting to preliminarily recommend a voting system may be noticed prior to the demonstration as long as the meeting is held after the demonstration.
- The Board can recommend by resolution, letter, presentation, or other official action.

Following the voting system demonstration, the Board recommended:	
<input type="checkbox"/>	by resolution dated _____
<input type="checkbox"/>	by letter dated _____ signed by _____
<input type="checkbox"/>	by presentation given on _____
<input type="checkbox"/>	by nature of an official action taken on _____
that _____ County adopt and acquire the:	
<input type="checkbox"/>	ES&S EVS 6.3.0.0 Voting System
<input type="checkbox"/>	ES&S EVS 5.2.4.0 Voting System
<input type="checkbox"/>	ES&S Unity 3.4.1.1 Voting System
<input type="checkbox"/>	Hart InterCivic Verity 2.5 Voting System

STEP 3: TEST THE PROPOSED VOTING SYSTEM

The county board must either: (1) test the proposed voting system in at least one precinct where the voting system would be used if adopted, or (2) test the proposed voting system in a simulated election.

- County board staff must notify State Board voting systems staff via email (votingsystems.sboe@ncsbe.gov) of its intent to test the recommended voting system.
- The voting systems election management system and the components of the system must undergo Logic & Accuracy testing prior to use in the test election.
- After completing the test election, the county board must determine that the recommended voting system has met the requirements for voting in that county.
- Simulated elections must be conducted in accordance with the [Standards for Simulated Election](#) policy.

<input type="checkbox"/>	On _____, the county board staff notified the State Board of Elections voting systems staff of its intent to test the recommended voting system.
<input type="checkbox"/>	The recommended voting system was tested on _____. The voting systems election management system and all of the components of the system were subject to Logic & Accuracy testing prior to use in the test election.
<input type="checkbox"/>	If tested during a real election, the recommended voting system was tested in _____ one-stop absentee voting site(s) and/or _____ Election Day precinct(s).
<input type="checkbox"/>	The Board, having completed its election (real or simulated) in which the recommended voting system was tested, has determined that the recommended system meets the requirements for voting in the county.

STEP 4: SBE APPROVAL

The county board must obtain the approval of the State Board before replacing any voting system, or any portion thereof.

The County Board seeks the approval of the State Board of Elections to replace its current voting system, or a portion thereof, with the following voting system:

Hart InterCivic Verity 2.5 Voting System ES&S Unity 3.4.1.1 Voting System
 ES&S EVS 6.3.0.0 Voting System ES&S EVS 5.2.4.0 Voting System

The Board proposes to adopt and acquire the voting system’s election management system (EMS) and the following components of the system:

<i>Component Type</i>	Model	Quantity
<i>Precinct Ballot Tabulator (PBT)</i>		
<i>Central Ballot Tabulator (CBT)</i>		
<i>Ballot Marking Device (BMD)</i>		
<i>BMD Printer</i>		
<i>Ballot on Demand (BOD) Printers</i>		

The Board proposes to use the _____ ballot marking device and its accessible peripherals to meet ADA requirements to allow for accessible voting.

Along with this request, the County Board is submitting the proposed vendor contract to permit the State Board of Elections to review and approve the terms of the vendor’s contract.

THE COMPLETION OF THE FORGOING STEPS IS ATTESTED TO AND THE REQUEST FOR APPROVAL OF VOTING SYSTEM REPLACEMENT IS HEREBY MADE BY:

Board Chair: _____ Date: _____

Board Secretary: _____ Date: _____

Board Member: _____ Date: _____

Board Member: _____ Date: _____

Board Member: _____ Date: _____

<i>State Board of Elections use only</i>	
The proposed voting system replacement <input type="checkbox"/> IS <input type="checkbox"/> IS NOT approved.	
Approved by:	Date:

STEP 5: ADOPTION AND ACQUISITION OF NEW VOTING SYSTEM BY BOARD OF COUNTY COMMISSIONERS

Following SBE approval, the County Board understands that it may then proceed to ask its Board of County Commissioners for the approval and funding to acquire the recommended voting system. The board of county commissioners, with the approval of the county board of elections, may adopt and acquire only a voting system of a type, make, and model certified by the State Board for use in some or all voting places in the county at some or all elections. The board of county commissioners may decline to adopt and acquire any voting system recommended by the county board of elections but may not adopt and acquire any voting system that has not been approved by the county board of elections.



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Standards for Simulated Election

Adopted by the State Board of Elections on July 31, 2020

(Amended March 28, 2023)

Authority

G.S. § 163-165.9(a)(3)(b), as amended by Part IV of Session Law 2019-239, authorizes a county board of elections to test new voting equipment “during a simulated election, in accordance with standards established by the State Board.” The simulated election may be conducted in lieu of testing a new voting system during an election in at least one precinct in the county where the voting system would be used if adopted and acquired.

Standards

A county board of elections conducting a simulated election before approving the adoption and acquisition of any voting system shall complete the following procedures:

1. One standard test election shall be coded by precinct with the following additional “administrative polls”: absentee by mail, provisional, election day transfer and at least three one-stop sites. Contests will model actual election contests and include at least the following: federal partisan single-seat contests; state partisan single-seat contests, including unaffiliated candidates and at least one qualified write-in; county partisan single-seat and multi-seat contests; nonpartisan single-seat and multi-seat contests which allow write-ins; and at least one referendum question.
2. If applicable to the voting system being tested, a second sample election will be coded by style with the same criteria listed in paragraph 1.
3. The county board shall use equipment and coding for 10% of all county precincts or 5 precincts, whichever is greater (unless 5 exceeds the maximum number of precincts, in which case, use equipment and coding for the number of actual county precincts). Additionally, the county shall test all administrative polls, including at least one one-stop site per ten precincts up to a maximum of three one-stop sites. A number of ballots necessary to generate a complete nonrepeating test deck, rounded up to the next multiple of ten ballots, shall be printed. The county board will set up all necessary voting equipment, and testing personnel

shall vote simulated election ballots according to standard ballot marking instructions for the purpose of ensuring that the system is operating properly and has been programmed to count votes accurately.

4. After all simulated voting sites have been opened, voted, and closed, the county board will import results into the election management software, print reports, and compare results against the tabulator results tapes.
5. The State Board of Elections will provide the county board of elections at least two sites chosen at random for a hand-eye sample audit. With each chosen site, the highest contest on the simulated election ballot and one other contest selected at random will be audited.
6. County board of elections members and staff may conduct the simulated election. If possible, the county board of elections shall include precinct officials in the simulated election event. The public shall be invited and may observe the simulated election event.
7. All records, ballots, and related documents for the simulated election shall be retained for 5 years after the testing event and in accordance with the Records Retention and Disposition Schedule for County Boards of Elections as issued by the North Carolina Department of Cultural Resources, specifically item 23, "Voting Machine Lists, Testing Records and Certifications."
8. If the county board of elections seeks approval from the State Board to replace the current voting system with the system tested in the simulated election, the following documentation shall be provided with the request as evidence of the simulated election:
 - a. Summary election results report(s);
 - b. By precinct election results report(s); and
 - c. Copies, or a link to digital copies, of tabulator results tapes.