



# NORTH CAROLINA

## STATE BOARD OF ELECTIONS

*Mailing Address:*  
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Raleigh, NC 27611

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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

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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.

On August 23, 2019, the State Board of Elections voted to certify several new voting systems for use in North Carolina's elections. When seeking to use a new voting system, a county board of elections must follow the same procedures in the county 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.

Vendors must also meet certain requirements during the certification process itself and must continue to meet these requirements for as long as the voting system is certified. A copy of those instructions is attached to [Numbered Memo 2019-04](#) and should be reviewed by the county board of elections.

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 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
  - 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 1.4<sup>1</sup>
  - 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:<sup>2</sup>

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.

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<sup>1</sup> Clear Ballot is not currently used in any county in North Carolina.

<sup>2</sup> 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 can now test proposed voting equipment in a simulated election, in accordance with standards established by the State Board.<sup>3</sup>
- Please refer to the *Standards for Simulated Election* policy, adopted by the State Board on July 31, 2020, for more information on how to test the proposed equipment in a simulated election. The policy is attached to this memo and available [here](#).
- 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.<sup>4</sup>

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<sup>3</sup> G.S. § 163-165.9(a)(3)(b), as amended by Part IV of Session Law 2019-239.

<sup>4</sup> See G.S. § 163-165.9(b)(3).

- The form to request approval is attached to this memo and can be found [here](#).

#### 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.<sup>5</sup>
- 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 comply with any requirements of the State Board regarding training and support of the voting system by completing all of the following:<sup>6</sup>

- 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](#).

### Frequently Asked Questions

Q: The county board currently uses ES&S EVS 5.2.4.0 and wants to purchase a DS450. Is the board required to witness a demonstration and is the county board of commissioners required to adopt and acquire the equipment? Do we need to conduct a simulated election after purchasing the DS450?

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. The county is not adopting a new voting system but rather is purchasing an additional piece

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<sup>5</sup> See G.S. § 163-165.8.

<sup>6</sup> See G.S. § 163-165.9A(a).

of equipment within its currently existing system. The county board will need to satisfy the testing requirement, as the Certification Program requires the vendor to provide the testing county with all voting system equipment, including all components to be used as part of the system in that county. Further, the county board is required to test all functionality of the system that is proposed to be purchased.

Q: The county board wants to upgrade from ES&S Unity 3.0.1.1 to Unity 3.4.1.1. Is this considered “adopting and acquiring” a new voting system under the statute?

A: 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 software, and that software upgrade is included in annual maintenance agreements between the vendor and the county. Upgrading from ES&S Unity Version 3.0.1.1 to Version 3.4.1.1 would not be considered adopting and acquiring a new voting system and a county board would therefore not be required to witness a demonstration and seek approval from the county board of commissioners. The county is still required to meet the testing requirement detailed in Step 3 of this memo.

Q: The county board currently uses ES&S Unity 3.4.1.1 and wants to purchase the ExpressVote as part of the ES&S EVS 5.2.4.0 system. Our DS200s and AutoMARK machines will continue to work with EVS 5.2.4.0. Is this considered a new voting system?

A: Changing from Unity to EVS 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.<sup>7</sup> Although some hardware, (i.e., the DS200, DS850, and AutoMARK) can be configured to work with either system, Unity 3.4.1.1 and EVS 5.2.4.0 are distinct voting systems that underwent separate federal and State certifications. DS200s and AutoMARKs that have been configured to operate as part of the Unity 3.4.1.1 system would not be compatible with an ExpressVote operated as a component of the EVS 5.2.4.0 system.

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<sup>7</sup> [NCSBE Voting Systems Certification Program](#) at page 3-4 (emphasis added).

Q: The county board currently uses ES&S Unity 3.0.1.1 and wishes to adopt and acquire Hart InterCivic Verity Voting 2.2. Three members of the current board witnessed demonstrations of Verity Voting 2.2 and EVS 5.2.2.0 in the fall of 2019. 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. Any virtual demonstration must be conducted live to give the board members an opportunity to interact with the vendors and ask questions.

## 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.”<sup>8</sup> 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.

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<sup>8</sup> G.S. § 163-165.10.



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### Request for Replacement of County Voting System

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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 shall do all of the following:

#### STEP 1: DEMONSTRATION

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



## STEP 2: PRELIMINARY RECOMMENDATION

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 demonstration, the Board recommended:

- ☐ by resolution dated \_\_\_\_\_
- ☐ by letter dated \_\_\_\_\_ signed by \_\_\_\_\_
- ☐ by presentation given on \_\_\_\_\_
- ☐ by nature of an official action taken on \_\_\_\_\_

that \_\_\_\_\_ County adopt and acquire the:

- ☐ ES&S Voting System 5.2.4.0 Voting System
- ☐ ES&S Unity 3.4.1.1 Voting System
- ☐ Hart InterCivic Verity 2.2 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](mailto: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.

<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 of elections cannot replace any voting system, or any portion thereof, without approval of the State Board.

The 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 2.2 Voting System

☐ ES&S Unity 3.4.1.1 Voting System

☐ ES&S Voting System 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:

<b>Component Type</b>	<b>Model</b>	<b>Quantity</b>
<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.

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

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. 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.

**Along with this request, the 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.**

Board Chair

Date

Board Secretary

Date

Board Member

Date

Board Member

Date

Board Member

Date

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



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### Standards for Simulated Election

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

#### 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 25 precincts and 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 as many precincts as exist in the county or 25 precincts, whichever is fewer. 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 minimum of 200 ballots per precinct 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.