

### Opposing the ES&S ExpressVote® XL:

Let's protect our right to use hand-written paper ballots

Bethlehem Morning Voice Huddle bmvhuddle.org

# Why the Bethlehem Morning Voice Huddle opposes the ES&S ExpressVote XL

June 23, 2025

#### The ExpressVote XL prints votes as barcodes, which voters cannot verify.

The fundamental problem with the ES&S ExpressVote XL voting machine is that it prints barcodes on a "ballot summary card" and uses those barcodes to tally votes. Voters cannot verify that these barcodes correctly represent the selections (votes) they made on the touch screen. Voters might look at text printed below the barcodes, and think they are verifying their ballot. But the printed text below the barcodes is not counted by the ES&S voting system.

Verified Voting, a reputable organization that reports on nationwide voting equipment, says this about the ExpressVote XL: "The ExpressVote XL tabulates the paper cards by reading the computerized bar code, not the human-readable text that the voter sees." See

https://verifiedvoting.org/election-system/ess-expressvote-xl/.

The fact that the ExpressVote XL records votes as barcodes is expressly prohibited by NYS Election Law, <u>ELN 7-202</u>, which says:

1. A voting machine or system to be approved by the state board of elections shall:

e. provide the voter an opportunity to privately and independently verify votes selected and the ability to privately and independently change such votes or correct any error before the ballot is cast and counted;

If the voter cannot read the marks (barcodes) on the ballot summary card that indicate their selections, then they cannot "privately and independently verify votes selected," nor can they "correct any error."

Does the printed text on the ballot summary card ever differ from the barcode? Yes! In 2023, in Northampton County, PA, the misconfiguration of ExpressVote XL voting machines in a "judicial retention" election caused errors in printing the text. See "Voting machines in Northampton County printed ballots with errors in two judicial races," by Carter Walker, November 7, 2023,

https://www.votebeat.org/pennsylvania/2023/11/07/northampton-county-voting-machines-errors/

What happens during a voting session? The XL voting machine (Figure 1) offers touch-screen voting. When the voter is done making on-screen selections and taps "Print," the machine prints their selections as a barcode on a specialized "ballot summary card" (Figures 2 and 3). The ballot summary card is presented to the voter in a window to the right of the touch screen (Figure 1). First, the voter cannot pick up the summary card to review it. Instead, it has to be read through the window in a format different from the touch-screen. Second, and most importantly, the voter cannot decipher those barcodes and, therefore, cannot verify that they represent their votes before casting the ballot.

We much prefer a voting system like the one currently in use, where voters mark ballots for themselves, by hand, on durable paper, then insert completed ballots into a ballot scanner. With this system, voters who cannot hand-mark their own ballots can use a ballot-marking device (a.k.a. BMD). Looking at the paper ballots, voters can readily review the marks they made (their votes), before casting the ballots. Paper ballots are also durable and facilitate recounts, if necessary.

Below we explain other problems with the ExpressVote XL.

## Significant risk of voting delays if an XL breaks down during in-person voting.

With voting systems that allow voters to hand-mark paper ballots (as is current practice across much of New York State), if a voting machine (a ballot scanner) breaks down, voters can continue marking their ballots by hand, then insert their completed ballots in a secure emergency ballot box. The voter does not have to wait for the machine to be repaired.

If XLs are used, no in-person voters will have this option. Why? According to NYS Election Law, "All paper ballots of the same kind for the same polling place shall be identical" (see NYS Election Law §§ 7-104 (26) and 7-106 (3)).

First, the "ballot summary card" printed by the XL looks different from hand-marked paper ballots; voters cannot hand-mark a "ballot summary card." There are no ovals to be filled in. See Figures 2 and 3 later in this document.

Second, if even one ExpressVote XL were deployed in a polling place, *every voter in that polling place would be forced to use an ExpressVote XL*, and no hand-marked paper ballots would be allowed.

## Potential high costs to replace existing "privacy stations" (voting booths) and ballot scanners with XLs.

How many ExpressVote XLs would be needed? The NYS BOE has created two requirements to determine how many ExpressVote XLs would have to be purchased if this device is chosen.

The first requirement (number of voters an XL can serve): According to the NYS Board of Elections Resolution 23-27 ("Certification of the ES&S EVS 6.3.0.1 Voting System"), adopted on August 2, 2023, the first XL in a polling place can serve *only the first 450 registered active voters*. If more voters are registered and active, more XLs need to be deployed. The second and subsequent XLs are allowed to handle *550 registered active voters each*.

Here is the relevant language from the NYS BOE resolution approving the XL (not available on the NYS BOE website):

NOW THEREFORE BE IT RESOLVED, that having considered the Usability Test documentation provided by ES&S (attached hereto), the following requirement of usage shall be adopted:

- (a) For Election Day, an ExpressVote XL machine shall not be assigned to serve more than 450 registered voters (excluding voters in inactive status); provided however, if more than one such ExpressVote XL serves the same voters at a poll site, each additional device may be assigned to serve no more than 550 registered voters (excluding voters in inactive status), and
- (b) Notwithstanding (a) herein, if a single ExpressVote XL machine is assigned to a poll site on Election Day and the number of voters served is 450 or less, there must be at least two ExpressVote XL machines if more than two voters have used the Ballot Marking Device at such poll site within the past four years; and

(c) During the Early Voting period, each ExpressVote XL machine shall not be assigned to serve more than 2,900 registered voters (excluding voters in inactive status); provided however, no early voting site shall have less than two ExpressVote XL machines; ...

**The second requirement (wait times for voters):** NYS Codes, Rules and Regulations NYCRR 9 6210.19 (b)(2) "Minimum number of voting machines" (PDF, p. 766) says: "County boards shall deploy sufficient voting equipment, election workers and other resources so that voter waiting time at a poll site does not exceed 30 minutes."

Therefore, if the county decides to purchase ExpressVote XLs, it must: (1) use only XLs in any polling place where they are used; (2) have more than one XL if there are more than 450 registered active voters; and (3) must have enough XLs to be prepared to minimize waits to 30 minutes.

By contrast, in counties that do *not* deploy the ExpressVote XL, according to NYCRR 9 6210.19(b)(2), each ballot scanner can serve up to 4,000 Election Day voters.

Many more ExpressVote XL voting machines would have to be purchased and maintained than the current number of ballot scanners. See <a href="Figure 4">Figure 4</a> for examples of the floor plans for our current voting system (hand-marked paper ballots) compared to what would be needed with ExpressVote XLs.

#### A rough estimate of the high costs of the ExpressVote XL.

Using Albany County as an example, here's a rough estimate of the potential costs of deploying the ExpressVote XL.

Per enrollment figures from the SBOE spreadsheet "2025 Voters Registered by County as of 02/20/2025") the total registered voters in Albany County is 210,000.

Per SBOE RESOLUTION 23–27 passed Aug. 2, 2023 (in part):

For Election Day, an ExpressVote XL machine shall not be assigned to serve more than 450 registered voters (excluding voters in inactive status)

Therefore, Albany County would need 210,000 / 450 = 467 ExpressVote XL machines. Including spares needed in case of breakdowns, typically 10%, would make a total of 513 machines that the county would have to purchase.

Using current prices, these machines cost \$12,610 each. For official prices, see p. 4 of <u>Price List Updates – Election Systems & Software</u>, dated July 09, 2024, at the NYS Office of General Services.

So, if Albany County were to purchase the ExpressVote XL voting machine, the cost would be  $$12,610 \times 513$  machines =  $$6.5 \times 513$  million.

By contrast, using the current traditional hand-marked paper ballots with ballot scanners would cost significantly less. In Nassau County, according to an article published in the *Times Union* on May 25 ("Controversial voting machine gaining use in NY elections," by Emilie Munson):

Albany County explored the machine when it was buying equipment last year, said Rachel Bledi, the county's Republican Board of Elections commissioner. The biggest factor in their decision was cost. ExpressVote XLs were twice the cost of the voting machines the county decided to buy, she said.

Also, if the county bought ExpressVote XLs, it would need more of them than other voting machines, Bledi said. That's because with the ExpressVote XL, voters use the machine to mark their ballot one at a time. With other machines, many voters can complete paper ballots simultaneously in private booths and then feed them into one machine when they are finished.

"In order for it to work on a practical level, you would need triple the machines," Bledi said. She also worries that voters unfamiliar with touchscreen technology would slow voting and create long lines.

The Huddle applauds the decision by the Albany County Board of Elections not to purchase the ExpressVote XL.

### Alternatives to the ExpressVote XL.

The Huddle has heard, via phone conversations with an ES&S representative, that ES&S is submitting a simpler, less-expensive, non-tabulating BMD to New York State for approval. We expect that this device would not have the problems that the ExpressVote XL has. Existing ES&S AutoMARK BMDs could be replaced with this new, non-tabulating BMD.

# There are other voting systems that New York counties could consider.

Four vendors offer voting systems currently approved for use in New York state: Clear Ballot, Dominion, ES&S, and Hart InterCivic.

Clear Ballot and Hart InterCivic: In researching the approved voting systems, we have not found any issues with either Clear Ballot (<a href="https://www.clearballot.com">https://www.clearballot.com</a>) or Hart InterCivic (<a href="https://www.hartintercivic.com">https://www.hartintercivic.com</a>). In fact, according to the NYS BOE, <a href="https://www.hartintercivic.com">16 counties</a> have switched to the full suite of Clear Ballot products (Broome, Cayuga, Chenango, Delaware, Jefferson, Livingston, Montgomery, Onondaga, Orleans, Oswego, Rensselaer, Saratoga, Schuyler, Steuben, Tompkins, and Warren), and <a href="https://www.clearballot.com">7 counties</a> have switched to Hart InterCivic (Allegany, Hamilton, Herkimer, Otsego, Ulster, Washington, and Yates).

**Dominion**: Problems with the Dominion voting system are well-documented. In early 2021, political operatives were allowed into the Coffee County, Georgia, elections office, where they copied Dominion's voting system and elections data and published that information on the internet. This uncontrolled distribution has been widely reported; see reporting by Zachary Cohen and Jason Morris at CNN, September 20, 2022: "New footage confirms fake Trump elector spent hours inside Georgia elections office day it was breached."

More recently, on February 8, 2024, Christina Cassidy of the AP reported: "Multiple threats to election systems prompt US cybersecurity agency to boost cooperation with states."

In this increased threat environment, the Huddle has serious doubts about how well the voting system offered by Dominion Voting Systems can resist malicious interference. This interference could originate from well-informed hackers, who may even use supply-chain attacks (where a hacker infiltrates a supplier of products or services and uses that infiltration to get into the target system, for example, the SolarWinds attack of 2020).

**ES&S**: As described above.

No New York county should purchase, or keep, ExpressVote XL voting machines.

## **Figures**

## Figure 1. ExpressVote XL voting machine

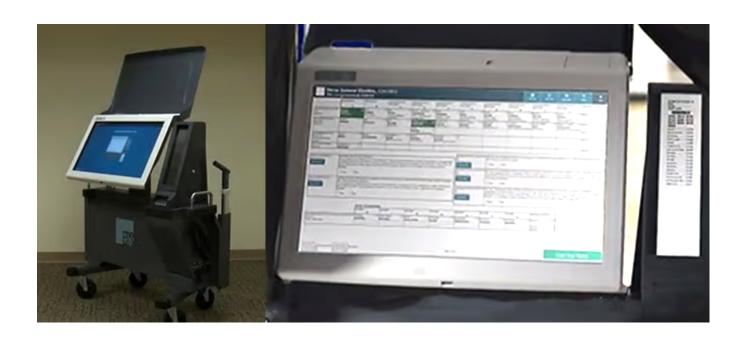
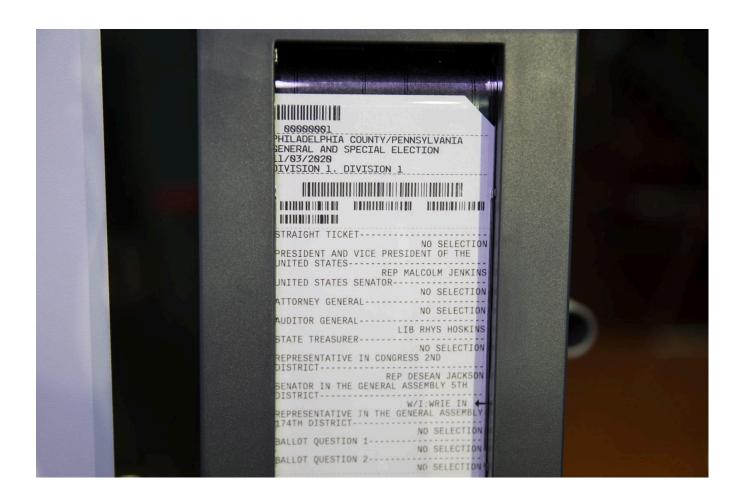


Photo credit: New Brunswick Today

https://newbrunswicktoday.com/2020/02/new-voting-machines-will-make-debut-in-edison-and-woodbridge-on-march-10/

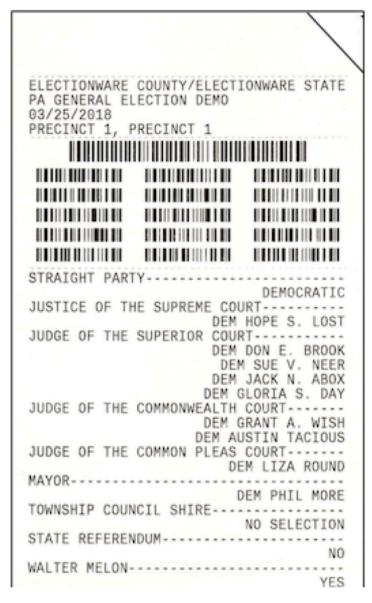
Figure 2. Ballot summary card in window of ExpressVote XL



#### Photo credit:

https://www.witf.org/2019/12/13/suit-filed-in-pa-court-challenges-widely-used-electronic-voting-machine/

Figure 3. Ballot summary card with explanations



Selection barcodes:
These barcodes are tabulated

Candidate names and ballot
propositions (abbreviated):
This text is NOT tabulated

Source of ballot summary card image:

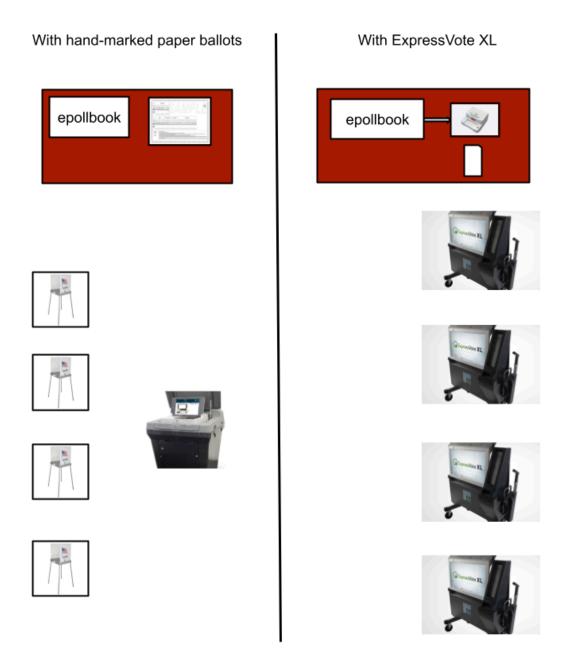
https://securiosa.com/posts/how the expressvote xl could alter ballots.htm

## Figure 4. Sample floor plan of polling place

To be drawn on in and talked through during in-person meetings with decision-makers.

Left side is our current system, where voters hand-marked their paper ballots in inexpensive voting booths.

Right side is the system with ExpressVote XL, where voters must use expensive machines to mark their ballots.



#### **Letters to the Editor**

From Huddle member Marta Gomez, Delmar, NY, published in the Times Union February 26, 2024



#### **LETTER TO THE EDITOR**

## Keep paper ballots

Marta Gomez, Delmar

Given the state Board of Election's certification of the Election Systems & Software ExpressVote XL voting machine, I fear that the Albany County Board of Elections, a customer of ES&S, will purchase this voting machine rather than upgrade the aging ballot scanners.

When I sign in at my polling place, I'm handed a paper ballot and I carry it to one of many private voting booths. I linger over it, I take my time reading the ballot, and I check and recheck the bubbles I filled in. When I'm ready, I walk over to the scanner, I insert my ballot, I watch it being scanned, and I see the ballot count increase by one.

With an ExpressVote XL machine, I would make my selections on a touchscreen. It produces a summary on thermal paper, which falls into a clear box, but I won't be able to hold it in my hand. The machine then retrieves the paper summary and scans the barcodes, which I can't read. Also, because of the cost of the machine (\$11,491 each), the county can only buy a limited number, making it likely that there will be voters waiting behind me to take their turn voting — so much for lingering over my ballot.

Voters need to tell the Albany County Board of Elections that paper ballots work. This machine is expensive and unnecessary and will literally take our ballots out of our hands.

Published Feb. 26, 2024

## From Huddle Member Bob Stromberg, Round Lake, NY, published in the Times Union July 7, 2021

https://www.timesunion.com/opinion/article/Letter-voting-by-hand-last-November-162714 84.php

### Hand-marked ballots are the better way

I remember voting in the general election last November [the General Election in 2020]. In my mind's eye, I can see my choices as I bubbled in the ovals on the paper ballot with the approved pen, and slid the ballot, upside-down, into the scanner. Done! I said to myself. It felt good.

Ballot marking devices (sometimes called "BMDs") are specialized voting machines that mark ballots for voters who are otherwise unable to hand-mark their own ballots. The ADA requires that polling places have at least one BMD per polling place. This is a policy I agree with. However, some voting machine companies are marketing BMDs for use by all voters. [This includes the ExpressVote XL.]

I myself would feel nervous about using a voting machine to mark my ballot. After all, a voting machine is a computer, and is, therefore, hackable. I'm confident that hand-marked paper ballots are kept for later use in case an audit or recount is needed. I am so grateful that Saratoga County does this. It would give me the heebie-jeebies to be forced to use a voting machine instead of marking my own ballot by hand.

Bob Stromberg Round Lake