



**The ExpressVote XL
Voting Machine:
Still Bad for New
York's Elections**

November 2023



Common Cause

New York

**COMMON CAUSE NEW YORK IS A
60,000-MEMBER-
STRONG STATEWIDE NONPARTISAN
GOOD GOVERNMENT ORGANIZATION.
WE'RE LEADING THE CHARGE TO
TRANSFORM NEW YORK'S ANTIQUATED
VOTING SYSTEM, HOLD OUR GOVERNMENT
AND ELECTED OFFICIALS ACCOUNTABLE,
AND TIRELESSLY BEAT THE DRUM OF ETHICS
REFORM. WE EMPOWER AND AMPLIFY OUR
GRASSROOTS BASE AS WELL AS THE
VOICES AND COMMUNITIES THAT HAVE
LONG BEEN IGNORED BY TRADITIONAL
POWER STRUCTURES.**

**LEARN MORE:
COMMONCAUSE.ORG/NY
[@COMMONCAUSENY](https://twitter.com/COMMONCAUSENY)**

Americans' faith in our elections has eroded dramatically over the last decade, and they are increasingly worried about the state of our democracy. It is therefore incumbent upon election officials and voting rights organizations to promote systems and policies that strengthen our election infrastructure. **Which is why Common Cause New York (CCNY) was dismayed to see the New York State Board of Elections (NYSBOE) certify the ExpressVote XL voting machine for use in our elections in August despite long standing opposition from election security experts and advocates.**

Common Cause New York has the longstanding position that the ExpressVote XL is bad for New York's elections. In January 2020, we released a report, [The ExpressVote XL Voting Machine: Bad for New York's Elections](#), highlighting the issues identified by election security experts. It's been nearly four years since we released that report and in light of the XL's certification, we have reassessed the XL with new data and actual voter experience. **Our assessment and conclusion remains the same, the ExpressVote XL has no place in New York's elections.**

The ExpressVote XL is an all-in-one voting machine which combines a touchscreen ballot marking device, a ballot printer and a ballot scanner in one machine. It is manufactured by Election Systems & Software (ES&S) which is one of the largest voting machine manufacturers in the country. It also relies on a machine-generated barcode to count votes which voters can not verify. Election security experts have nearly universally panned the use of barcodes and these machines.

These all-in-one machines are designed to replace aging voting machines for voters with disabilities and the traditional voter-marked paper ballot and scanners that most voters use. New York's current system of voting is considered the gold standard in election security which is why the certification of the ExpressVote XL is such an alarming step backwards. Municipalities continue to have issues with these machines, as recently as a few weeks ago, when a county in Pennsylvania experienced problems on election day when printed ballots did not match voters' selections due to a programming error.¹

The ensuing analysis relies on fresh data and insight from the nearly four years that have passed since our first report. Our assessment of the XL reveals:

¹ Votebeat Pennsylvania, [Voting machines in Northampton County printed ballots with errors in two judicial races](#), 11/7/2023.

- **The ExpressVote XL is bad for in-person voters by creating long lines, failing to meet critical needs of voters with disabilities, and relying on an indecipherable bar code to count votes.**
- **The ExpressVote XL is a costly option for local boards of elections.**

Therefore, our position remains unchanged- the ExpressVote XL has no place in our elections and local Boards of Elections must refrain from purchasing the faulty machines. To avoid continuing confusion, the Legislature should pass legislation which guarantees every voter the right to mark their own ballot, either directly or by a marking device which does not also count votes.

THE STATUS QUO

New York's use of the voter-marked ballot is the gold standard in election security.

Most in-person voters handmark their paper ballot in a privacy booth and then insert their ballot into an optical scanner to scan and count their vote. Some voters require additional assistance during the voting process and use ballot marking devices (BMDs) which have features that assist voters in marking their ballots privately and independently. The BMD marks a ballot for the voter and then prints the completed ballot which is identical to the ballot other voters fill out. Voters who use BMDs then use the same optical scanners as everyone else to scan and count their ballot.

Election security experts agree that voter-marked ballots, marked either by hand or BMD, that are tabulated using a free-standing optical scanner are safe and secure. Optical scanners and ballot marking devices, like all technology, have a shelf life and eventually need to be replaced. And while counties around the state will need to replace some of this technology over the next ten years, the ExpressVote XL is not the way to do it.

While the New York State Board of Elections has certified² the ExpressVote XL for use and purchase in counties around the state, counties are not required to buy them. Each county has the ultimate purchasing authority for their elections. However, counties can only buy voting equipment that has been certified by the state for use in New York's elections and there are limited options.³

² The NYSBOE tests voting machines for election law compliance and security issues prior to their approval for use in New York's elections.

³ For a current list of certified voting machines [visit the New York State Board of Elections website.](#)

THE EXPRESSVOTE XL IS BAD FOR VOTERS

The ExpressVote XL has proven to be unreliable for all voters. Since 2018, municipalities that used the XL have seen long lines,⁴ glitchy touchscreens,⁵ ballot jams,⁶ and, in one alarming incident, miscounted votes.⁷

Long lines

The ExpressVote XL is designed to replace hand-marked paper ballots and BMDs in New York. When the Pennsylvania Department of State conducted its own testing on the machine, including a comprehensive usability analysis,⁸ it noted the XL can accommodate 10-12 voters with disabilities per hour or 20-60 voters per hour when used as the primary voting system. They are clear this is a significant decrease from their process at the time, and was similar to New York's, which served 120-180 voters per hour.⁹

Voters in Johnson County, Kansas experienced long lines after machines went down in 2018. There is no doubt that New York can anticipate similar reductions and a corresponding exponential increase in wait times if there are faulty machines and high voter turnout.

Accessibility issues for voters with disabilities

The XL has major usability concerns for voters with disabilities. Recent accessibility testing in Pennsylvania demonstrated that voters with disabilities were unable "to verify their paper ballot on the XL" due to small font size and obstructed views of the ballot summary card from the machine itself.¹⁰ Pennsylvania accessibility testing classified these issues as "show stoppers" which are defined as "problems that could prevent successful independent and private voting, even with good knowledge about how to use the system and accessibility features."¹¹

⁴ In 2018, [Johnson County, Kansas experienced hours-long lines due to ExpressVote XL problems.](#)

⁵ In 2019, [Philadelphia voters experienced frozen or hypersensitive touch screens which disrupted the voting process.](#)

⁶ In 2020, [ballot jams were frequent in Philadelphia during the general election.](#)

⁷ In 2019, [the ExpressVote XL miscounted tens of thousands of votes due to touchscreen issues.](#)

⁸ Usability testing in this context refers to simulating the voter and poll worker experience on election day. A test ballot is created and volunteer voters use the test ballot to simulate the in-person voting experience on a specific voting machine.

⁹ Pennsylvania Department of State, [Examination Results Reporting](#) (p 48), November 30, 2018.

¹⁰ Pennsylvania Department of State, [Examination Results Reporting](#) (p 90), November 30, 2018.

¹¹ Pennsylvania Department of State, [Examination Results Reporting](#) (p 19), November 30, 2018.

The use of barcodes makes quintessential voter verification impossible

New York voters can easily double check their ballot to make sure there are no accidental errors under the current system. The ExpressVote XL makes it virtually impossible for voters to ensure there are no errors on their ballot summary card.

After the voter has made their selections on the XL touchscreen, the ballot summary card is printed with their vote selections in two ways: a written text summary and a barcode that ostensibly reflects the voter's choices. The XL uses the barcode to record and tabulate votes. However, it is impossible for voters to verify that the barcode reflects their vote as barcodes are unreadable to humans.

Common Cause New York, along with election security experts from around the country, have panned the use of barcodes as unnecessary and problematic for voters. The use of barcodes to tabulate votes is so concerning that Colorado went so far as to ban their use in this manner.¹²

THE EXPRESSVOTE XL IS EXPENSIVE

The ExpressVote XL is an expensive step backwards and a waste of taxpayer money. While precise cost estimates vary, in large part due to county size and number of poll sites, the XL is nearly double the cost of other voting machines. The 2023 base price of the machine itself is either \$12,207 per unit¹³ or \$11,491 per unit.¹⁴ This excludes additional costs for maintenance, storage, and other necessary hardware. The machine itself is twice as large as existing equipment - which means it is much more expensive to store and transport. Meanwhile, the 2023 base price of the DS200, the optical scanner in use in many poll sites, is either \$6,430 per unit¹⁵ or \$6,050 per unit.¹⁶

Counties can anticipate spending more money on these machines as they would require an entire poll site to use the XL due to New York election law. State law requires all voters at a poll site use the same ballot type. The ExpressVote XL uses a smaller ballot summary card, not a traditional paper ballot, so to ensure uniformity all voters would be

¹² CNN, [First on CNN: Colorado becomes first state to ban barcodes for counting votes over security concerns](#), September 16, 2019.

¹³ Base price for 1-59 machines purchased. [New York State, Office of General Services- Procurement Services, Contract Award Notification Update, 8/16/2023](#).

¹⁴ Base price for 60+ machines purchased. [New York State, Office of General Services- Procurement Services, Contract Award Notification Update, 8/16/2023](#).

¹⁵ Base price for 1-24 scanners purchased. [New York State, Office of General Services- Procurement Services, Contract Award Notification Update, 8/16/2023](#).

¹⁶ Base price for 25+ scanners purchased. [New York State, Office of General Services- Procurement Services, Contract Award Notification Update, 8/16/2023](#).

required to vote on the XL. As part of the XL's certification process, the NYSBOE mandated a far lower voter to machine ratio than the optical scanner as noted below.

NYSBOE Regulations: Voters per machine at a poll site during in-person voting¹⁷

	<i>Optical Scanner¹⁸</i>	<i>ExpressVote XL¹⁹</i>
<i>Early voting</i>	25,000 voters	2,900 voters
<i>Election day</i>	4,000 voters	450-550 voters

Since the XL can serve far fewer voters, counties must purchase exponentially more to meet the demands of an election thereby dramatically increasing their costs.

THE EXPRESSVOTE XL IS STILL BAD FOR NEW YORK'S ELECTIONS

Voting rights advocates and election security experts alike have raised serious cost, usability and security concerns about the ExpressVote XL based, in part, on the XL's rollout in other parts of the country. Common Cause New York is also concerned about making a major change to our voting systems before the 2024 election cycle.

New Yorkers have strenuously objected to the certification of the ExpressVote XL. Forcing them to vote on the XL would introduce an avoidable level of election distrust that New York has largely avoided into the system which undermines the goal of strengthening the actual and perceived integrity of our elections. Local Boards of Elections must do what is best for our elections and rely on other options to meet their voting machine needs.

¹⁷ Excludes inactive voters

¹⁸ [NYSBOE Regulations](#)

¹⁹ [NYSBOE proposed regulations](#)