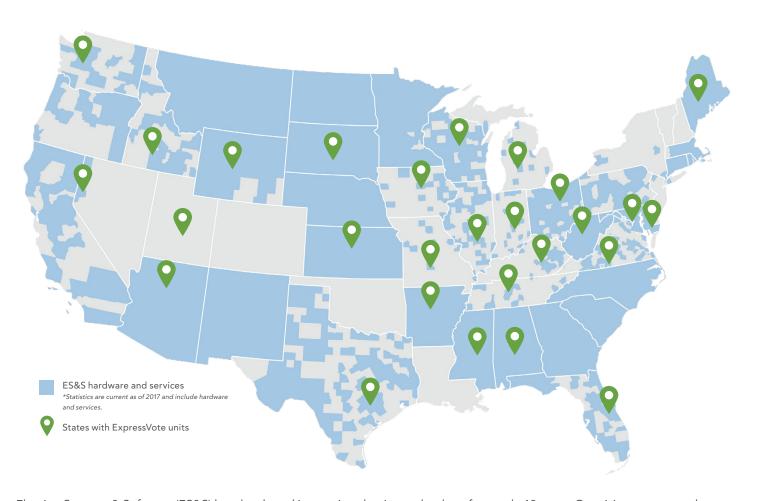


# **EXPRESSVOTE® IN ACTION**



Election Systems & Software (ES&S) has developed innovative election technology for nearly 40 years. Our visionary approach, extensive elections knowledge and expertise have made us the trusted market leader. The ES&S brand means secure, accurate and reliable elections for all citizens.

We are committed to enhancing the voting experience and marketplace by providing integrated voting solutions that are federally certified. Rather than create products we think need to exist, ES&S researches and creates solutions that are flexible enough to meet multiple jurisdictions' needs. As election requirements evolve and voter preferences change, ES&S provides proven solutions that offer flexibility and accountability.



19,405

EXPRESSVOTE UNITS DEPLOYED



27

STATES USE EXPRESSVOTE



450+

ES&S EMPLOYEES
NATIONWIDE



100 M

REGISTERED VOTERS SUPPORTED

# **EXPRESSVOTE®**

# Universal Voting System as a Marker



The ExpressVote® Universal Voting System utilizes touch-screen technology that produces a paper-based record for subsequent tabulation. As a marker, the ExpressVote handles the entire marking process, eliminating marginal marks and the need for voter mark interpretation.



### Touch Screen and Display

Allows voters to easily make vote selections and review their selection.

### Instruction Panel

A visual guide that shows voters how to use the ExpressVote.

### Card Slot

Where the voter inserts their card to activate selections.

### Visual Aids

High contrast and zoom functionality.

### Front Access Panel

Headphone jack, a port for a Sip-and-Puff device or two-position rocker switch, and Audio-Tactile Keypad make the unit ADA friendly.

### Audio-Tactile Keypad

Enables ADA voters to control audio and navigate the ballot.



As a marker, the ExpressVote handles the entire marking process, eliminating marginal marks and the need for voter mark interpretation. Voters utilize the touch screen to mark their vote selections, receiving a verifiable paper vote record upon completion. The ExpressVote is used during early voting or in precincts and vote centers on Election Day to serve every eligible voter, including those with special needs.



### Easy to set up and use

The one-step startup and poll-closing procedure make the ExpressVote an ideal device for poll workers. The intuitive design offers streamlined simplicity for poll workers and election staff. The ExpressVote is also small, lightweight and easy to move.



#### Controlled and Reduced Costs

Traditional ballot printing costs can be significantly reduced by eliminating the need for pre-printed paper ballots. Voters activate their vote session, make their selections and receive a paper record to cast. This process consumes 70 percent less paper than traditional ballots.



#### Verifiable Paper Record

After all selections are made, a human- and machine-readable paper record is produced that includes text and an optical scan barcode. Votes are digitally scanned for tabulation on an ES&S DS200®, DS450® or DS850® device.



### Innovative Design

Voters review a summary page and can make changes before receiving their verifiable paper vote record. The ExpressVote prevents overvotes and undervoting with prompts and on-screen feedback. ExpressVote in marking mode neither stores nor tabulates vote counts. The system produces a verifiable paper record for each voter.



#### Secure

The ExpressVote Universal Voting System utilizes a variety of functions to ensure election data and cast vote records are secure. In its current certification as a marking device, no vote data is stored in the device. Its system functions are only executable during election events, in the manner and order intended by election officials performing their duties.

### **ACTIVATING THE VOTE SESSION:**

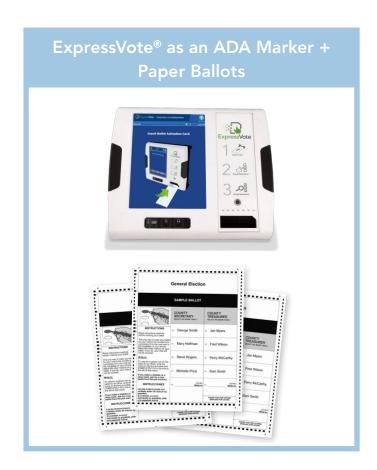
Election officials can configure the ExpressVote to best fit their needs. The voter receives an activation card to begin the process.

- · If only one ballot style is programmed for the election, a blank card activates the vote session.
- · Multiple ballot styles with a blank card prompt poll workers to select the correct ballot style for the voter.
- · A card with an activation barcode displays the correct options for the voter if the election has multiple ballot styles.



# POLL PLACE CONFIGURATIONS





## Multiple ExpressVote $^{\circ}$ as a Marker units + DS200 $^{\circ}$ Scanner & Tabulator



# **EXTRA! EXTRA!**

# READ ALL ABOUT IT

# ES&S DESIGNATED AS STATE OF UTAH VENDOR OF CHOICE



State of Utah Voting Systems Evaluation Committee Identifies ES&S as Best Value to the State

OMAHA, Neb. - Election Systems & Software (ES&S) is honored to announce that the State of Utah has designated ES&S as the state's election management vendor of choice.

After a comprehensive assessment of five different election systems vendors, it is the official opinion of the State of Utah Voting Systems Evaluation Committee that the award of a contract to ES&S provides the best value to the State.

"Through a careful and thorough procurement process, the state of Utah has chosen ES&S to lead Utah into the next generation of voting equipment," said Utah Lieutenant Governor, Spencer J. Cox. "ES&S offers a wide range of voting equipment options and I'm confident their secure and innovative election solutions will fit the needs of each county."

The Evaluation Committee, comprised of representatives from the Lieutenant Governor's Office, various counties across the State of Utah, and a representative for Voters with Disabilities, evaluated proposals from five different vendors in accordance with Part 7 of the Utah Procurement Code.

During the evaluation process, vendors were asked to participate in a public demonstration of their proposed voting system solutions. The follow up survey results revealed that the public felt the ES&S equipment was easy to use and that they had confidence in casting their votes on the proposed system.

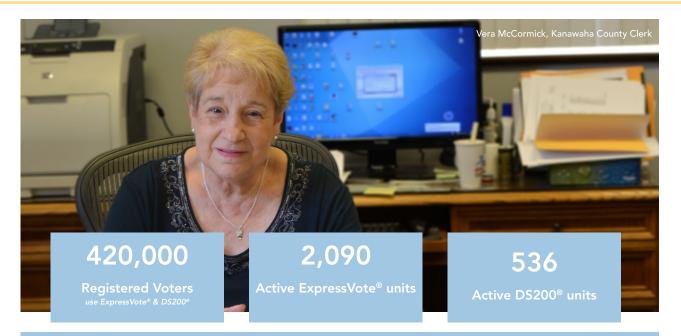
"We are very excited and honored to partner with the State of Utah," said ES&S President & CEO, Tom Burt. "We take great pride in providing high-quality products and services to maintain voter confidence and enhance the voting experience. We look forward to a successful and long-term partnership with the Utah election community.

# HOW WEST VIRGINIA'S ELECTION OFFICIALS ARE REDUCING COSTS

# While Improving the Election Experience for Voters & Poll Workers

Many voters across the U.S. are casting their ballots on a generation of aging, decade-plus old optical scan and direct-recording electronic (DRE) voting machines. Election officials nationwide rushed to embrace new voting technology after Congress passed the Help America Vote Act (HAVA) in 2002, which addressed the way ballots were designed, cast and counted, and led to an overhaul of the U.S. election system and eventually the birth of the DRE and optical scan machines.

Ten plus years later another major overhaul of the U.S. election system is underway, and a number of states are seriously considering a return to paper-based voting systems.



# Counties using the ExpressVote & DS200

Monongalia, Harrison, Ohio, Taylor, Jefferson, Putnam, Kanawha, Fayette, Ritchie & Barbour

As with many states in the early 2000s, West Virginia faced various challenges related to becoming compliant with HAVA. At the close of the 2005 West Virginia Legislative regular session, during which a voter-verified paper trail bill was signed into law, Secretary of State Betty Ireland began her search for a pioneering elections partner that could help West Virginia do three things: 1) meet the requirements of HAVA, 2) reduce the financial burden of becoming compliant off the counties as much as possible, and 3) offer counties quality voting system options.

In August 2005, ES&S was awarded the statewide contract to provide all of West Virginia's counties with voting systems and election services. And in 2006, just over half of West Virginia's 55 counties, whose County Clerks manage elections at the local level, purchased DRE systems while the remaining chose to purchase optical scan voting systems paired with central scanners, creating a dual system environment across the state.

## Why the change?

Fast forward ten more years, similar to many states across the U.S., while their existing voting systems were withstanding the test of time, West Virginia's jurisdictions began the process to find a more modern system that offered a paper-verifiable record.

They were also ready to put away the challenges associated with their aging equipment and find a solution that simplified election management and improved voters' experience at the polls. Much like the avid flip-phone users, whose carriers still supported their phones, and whose flip-phones still made calls — they ultimately realized how much easier and more efficient their life could be if they had a smartphone.

"So much less to worry about and less upkeep. We no longer have to deal with all of the different consumables," said Susan Thomas, Harrison County Clerk. "You plug them in, flip a switch, lift a screen and both are powered up within five minutes. Plus, with ExpressVote and DS200 everything is a lot simpler for us on the backend."

It was important to them that their new equipment made the backend of their elections easier for not only themselves and their teams, but the poll workers as well. Equipment that wasn't hard to haul around, was easier to program and would ease the burden of having to hand count write-in and canvass ballots.



Brian Wood, Putnam County Clerk

"Our equipment was aging. Having partnered with ES&S for ten plus years, we knew they were always developing solutions that made our lives easier and were more efficient, dependable and cost-effective."

"The ExpressVote® was the best of both worlds with the electronic aspect, including improved visibility and ADA compliance, along with the paper verification where the voter can hold their selections in their hands, confirm everything is accurate, and then place it in the DS200® ballot slot."

"Canvass and hand count went very smoothly; the ballot was easy to read and easy to determine the voter's intent. NO OVERVOTES!"

"The ballots marked on the ExpressVote require less storage due to their size, and the leftover blank cardstock can be reused in other elections. We can do satellite voting now, and don't have to carry all of those preprinted ballots with us." **Vera McCormick,** Kanawha County Clerk

The clerks wanted a truly usable summary report of the final results, a more robust in-depth audit report. They wanted to deliver their county's election results before 3 a.m. so the candidates and the people who had worked so hard supporting them could either get their parties started or start picking up campaign signs.

"We live in a fast food world, and people want their results right away"

"The candidates and their supporters have worked for a long time to get there, so they are very anxious to get the results. So is the media ... it's nice to give them what they need, and get them back to work by 10 p.m. instead of 3 a.m."

Brian Wood, Putnam County Clerk

Most importantly, they wanted every one of their voters to have a consistent, simple and secure election experience. This included having only one system to vote on, that was easy to use and that included a verifiable paper record that allowed them to confirm that the selections they marked were what they intended.



"We demo'ed the equipment in several different locations with seniors, many of which who were in their 90s. We didn't really have to explain much to them as far as how to use it, and everyone liked it," said McCormick. "They liked having a piece of paper in their hand that they could hold, so there was no guessing."



"All you have to do is touch your selections, check your printed ballot and put it into the tabulator."

**Georgianna Thompson,** Taylor County Clerk

"Commissioners were not excited about spending the money. I was fully prepared to continue maintaining the old equipment. The ExpressVote convinced them that it will pay dividends in the future."

**Brian Wood,** Putnam County Clerk

# **RESULTS**

- 1. Smoother canvass and hand count
- 2. Reduced number of morning follow up calls
- 3. Success means that results are ready 2-3 hours sooner



Susan Thomas, Harrison County Clerk

# **EXPRESSVOTE GETS PUT TO THE TEST**

## Blindbargains.com Tested Three Modern Voting Machines for Accessibility

Recently the Michigan Bureau of Elections held a Mock Election, allowing testers and poll workers to use voting systems from three different vendors, including our ExpressVote, designed for both voters with disabilities and voters without.

One of the testers, J.J. Meddaugh with Blindbargains.com tested all the offerings, concluding that the ExpressVote was the best choice of the group being the only one he would recommend in its current form.

For more details about each voting system Mr. Meddaugh experienced read a summary of his article below.

## Dominion ImageCast Democracy Suite

The voting system from Dominion included an accessible keypad, touchscreen and a printer for paper ballots. Initial setup of the machine required the use of a digital programming card which included information to load and verify the ballot. While I was able to insert the card, several set-up steps needed to be performed by a poll worker. Among these were choice of language, and the screen privacy guard option, which allows a voter to turn off the visual screen output. It's worth noting that this is the only machine which does not allow the voter to change this setting after initial set-up.

Once speech was finally available, I was presented with initial instructions read by Google's Android text-to-speech voice and an options menu which allowed me to change volume, speech rate and visual display options. Unfortunately, the maximum volume was not loud enough for a noisy room, and the fastest speech rate was less than what is available on Android and too slow for an advanced speech user.

The keypad features buttons in various shapes which can be readily identified. Left and right arrows are on the left side while up and down arrows are on the right. There is a large X in the center which is used for selection. Dedicated buttons to adjust the volume and speech rate are found near the top. All buttons have braille labels near them, though the layout of the keys often made the placement of the braille labels confusing. The design choice to place the two sets of arrows far away from each other is perplexing at best.

The machine was plagued by user interface issues, often requiring the voter to press several key presses to accomplish a simple task. For example, when reviewing a ballot, if the user wanted to change a vote from NO to Yes, no less than 9 key presses were required to accomplish this task. In addition, the function of the right and down arrows are duplicated, as well as the up and left arrows. I was told this was done because of the needs of low vision users, but it made the navigation of the ballot needlessly time-consuming and complicated. Often, help and tutorial messages were spoken before important content, such as when speaking the name of an entered write-in candidate.

Another issue arose when speaking the names of the candidates and ballot proposal language. This information was spoken using the Cepstral text-to-speech engine, with the recordings in a much lower quality and volume than the rest of the speech feedback. Using the same text-to-speech voice throughout the system would be ideal. Care also needs to be taken when speaking the titles of ballot proposals and other items. The word millage, a common election term, was mispronounced.

Help information was given throughout the process, and presented in the manner of screen reader hints. Speech could be easily interrupted if the user chose to not listen to the help information.

While I was able to complete and print my ballot, I'm hardpressed to recommend this system in its current form. That being said, many of the issues identified are software-based and could be fixed using a firmware update.

## Hart InterCivic Verity Touch Writer

Hart InterCivic calls their Verity system "The Future of Elections". To be completely blunt, if this is the case, I'm worried for the state of accessible voting equipment.

Set-up involved the poll worker entering in a code to load the appropriate ballot using the touch-screen. This process did not include speech feedback and was not accessible. Once the ballot was loaded, pre recorded instructions in a male voice were spoken through the headset.

The accessible keypad includes two buttons (Select and Help), and a dial called the Move Wheel which can be turned using the thumb. The dial emulates arrow keys and allows the user to go through menus while the Select button locks in the current choice. The use of only three controls was an intentional design choice, but it quickly became limiting when attempting to efficiently navigate the screen.

The initial screen included a menu to adjust audio settings including volume and speech rate. To adjust the volume, one must select the raise or lower options and then press select for the new volume level to take effect. This is the only machine of the three tested which did not include dedicated volume and

speed controls, which presents a hassle if one wants to make adjustments during the voting process. Only three speech rates were available, with the fastest option still quite slow for advanced users. In addition, since human speech is used throughout the process, the faster speech level resulted in choppiness and audio artifacts which made it more difficult to understand the recorded prompts.

I did not complete my ballot with this machine because of one major reason...HORRENDOUS LAG. Users of electronic devices may often become frustrated when it takes a quarter second or more to hear audio feedback after pressing a button. When using the Move dial on the Verity, it often took 3 or 4 seconds for any feedback to be given after the dial was turned. In addition, after pressing the Help button, it was often difficult or impossible to interrupt the instructional message and return to the previous screen.

After spending about 10 minutes with the machine and still working on my first ballot selection of 23 contests, my frustration level reached a point where I had completely lost interest in completing my ballot.

# ES&S ExpressVote

With my faith in modern voting technology quickly running out, I moved to the last of the machines, The ExpressVote from Election Systems & Software. ES&S purchased the assets of the former AutoMARK system, and the design of this model takes many cues from the previous version, which is a good thing.

I walked up to the machine and inserted my paper ballot into the reader, which immediately caused speech feedback to begin.

No intervention was necessary from the election workers.

The keypad includes a rocker button for Volume labeled VOL in braille and another for voice speed labeled TPO for tempo. To the left of this is a five-way navigation pad with a select button in the center. A button to turn on and off screen input can be found near the top. Beeps are heard when buttons are

pressed, and speech feedback is given within a quarter second. A more modern male voice is used on this model, as opposed to Eloquence speech on the AutoMARK, but it was clear and easily understood.

For those familiar with the AutoMARK, the voting process was nearly identical. Up and down arrows are used to move through ballot choices, and right and left arrows move between contests. For new users, contextual help information is given as hints. Warnings are given if a ballot question is skipped without the appropriate number of votes or if a user attempts to vote for too many candidates in a contest. Overall, I completed my 23-question ballot in about 5 minutes.

# **CONCLUSION**

Of the three systems tested, the ExpressVote is the only one I am comfortable recommending in its current form. Set-up was achieved independently by the voter, prompts were spoken efficiently, and a ballot could be completed using the fewest number of key presses.