



LR 403 Report to the Election Technology Committee

EXECUTIVE SUMMARY

With the passage of the *Help America Vote Act* (HAVA), the federal government made over \$3.2B available to states to upgrade their election administration and systems to prevent another election like 2000. Thirteen years since HAVA, the election equipment purchased by Nebraska with those funds is approaching ten years of use with a life expectancy of 10-20 years. However, county election officials are reporting issues with maintenance, difficulty finding replacement parts, outdated technology, and more frequent technology failures. In short, Nebraska needs to invest in improving its election equipment and technology.

This problem is not unique to Nebraska and several other states have explored options for updating their elections systems. The difficulty lies in the lack precedent for such an investment. Prior to HAVA counties in Nebraska bore all costs associated with elections and current systems were purchase with federal dollars unlikely to be renewed. To address this technology issue, a serious evaluation of current capacity, both at the state and county level, is necessary and a frank discussion on whether the centralized election system that developed under HAVA is the future of Nebraska elections.

In this report Nebraskans for Civic Reform provides background on HAVA, information on other state actions, and recommendations for members of the Election Technology Committee as they evaluate this issue.

Recommendation #1: Grant Secretary of State affirmative power to purchase equipment

Recommendation #2: Explicitly state ownership of and duty to maintain equipment with State

Recommendation #3: Stagger the purchase of replacement equipment

Recommendation #4: Creation of the Election Technology Fund

Recommendation #5: Appropriate current budget request to Election Technology Fund and establish future investment schedule

INTRODUCTION

The equipment was purchased by the Secretary of State between 2004 and 2006 with federal dollars granted to the State of Nebraska pursuant to the federal Help America Vote Act (HAVA) of 2002, Public Law 107-252. The equipment is approaching or past the estimated lifecycle of the equipment. Our studies have looked at other states methods of addressing this problem and include recommendations based on these studies.

A BRIEF HISTORY OF HAVA AND OUR CURRENT STATE

The Election Assistance Commission (EAC) was created by Congress in 2002 to improve the administration of elections for Federal offices through funding, guidance and policy development under the Help America Vote Act of 2002 (HAVA), HAVA funds support State and local voting districts in upgrading systems for casting votes, registering voters in statewide voter registration databases, providing provisional voting options, and implementing other improvements to the administration of Federal elections that include training for election officials and poll workers, polling place accessibility improvements, and information on how and where to vote. In order to receive these funds, Nebraska amended the Voter Registration Fund to meet the federal requirements, establishing under new guidelines the Election Administration Fund.¹

Through September 30, 2015, a total of \$3,247,294,645 has been made available to the 50 States, American Samoa, the District of Columbia, Guam, the Commonwealth of Puerto Rico and the United States Virgin Islands under HAVA. By 2015, several states had spent approximately 90% of Section 251 funds granted.² By comparison, the State of Nebraska has spent all of the Section 251 funds that were received plus interest accrued. Other states that received similar funding amounts to Nebraska have made additional investments in updating outdated election systems. For example, Rhode Island has spent \$9.3M, approximately an additional 70% of the initial amount allocated. On the higher end, New Mexico expended upwards of 80% of initial amount allocated.

¹ Laws 2003, LB 14. Introduced by Senator DiAnna Schimek, Approved by the Governor February 20, 2003. LB 14 included a directive to the State Treasurer to transfer the balance of the Voter Registration Fund to the newly created Election Administration Fund. The statutory language controlling the Election Administration Fund has been amended once since its passage in 2003. LB 661, creating the online voter registration system, amended the directive language to remove “by mail” to allow the Secretary of State to use the Fund to cover the expenses associated with implementing online voter registration, implementing provisional voting, providing information to voters in the polling place, developing and implementing a statewide voter registration list, and identifying voters.

A recent study published by the Brennan Center showed that voting machines purchased since HAVA have an estimated 10-20 year lifespan and for most machines it is probably closer to 10 than 20.³ Nearly every state is using some machines that are no longer manufactured and struggle to find replacement parts. Failure to resolve this issue will result in increased failures and crashes of election equipment, leading to longer lines, lost votes, and possible litigation where broken machines result in inaccessibility of a protected class. Furthermore, older machines can have serious security and reliability flaws. The state of Virginia recently decertified a voting system after finding that external parties could access the machine's wireless feature to "record a vote or inject malicious data".⁴

Finally, as machines grow older the machines are susceptible to being poorly calibrated, and in some cases voters have reported "flipped votes" shaking voter confidence.⁵ These findings are troubling but with the advancement of technology in the past decade, new machines have become more reliable, more usable, and less expensive, restoring the confidence in the security and accuracy of our elections. However, until the equipment is replaced, the problems of aging equipment will continue to plague county election officials, shake voter confidence that our elections are fair and accessible, and open the state to litigation for violation of the Help America Vote Act.

FUNDING RESEARCH

- **Virginia:** Governor Terry McAuliffe proposed that Virginia spend \$28 million to replace aging voting machines, despite bipartisan support lawmakers stripped the funding for the new machines from the budget and suggested that paying for the machines was a local prerogative. As a result, the largest and wealthiest counties replaced their equipment and the smaller and poorer counties struggled to find the funds to do so.
- **Rhode Island:** Like Nebraska, Rhode Island spent the \$13.5M in federal funds to a current balance of \$0. Recently, Rhode Island signed a \$9.3 million dollar contract to lease 590 new voting machines and secured an eight-year maintenance agreement with Elections Systems and Software to replace the previous machines that date back to 1997. Additionally, city and

³ Norden, Lawrence, Famighetti, Christopher "America's Voting Machines at Risk" Brennan Center for Justice, Published: 09/15/2016, Last Accessed Online: 12/07/2016 at <https://www.brennancenter.org/publication/americas-voting-machines-risk>

⁴ The state of Virginia decertified the WINVote touchscreen voting machines after having a multitude of technical flaws one of the most significant being the potential for hackers to record a vote or inject malicious data due to its outdated software and insecure network connection.

⁵ [WIRED](#) *Virginia Finally Drops 'America's Worst Voting Machines'* Last accessed: 8/17/2015

⁵ [NPR](#) *Some Machines Are Flipping Votes, But That Doesn't Mean They're Rigged* Last accessed: 10/26/2016

town boards of canvassers will receive ballot on-demand printers that will not only ensure that there is never a shortage of ballots at any polling place, while reducing waste associated with printing too many ballots.⁶

- **Connecticut:** More than \$6.7 million is being earmarked for improvements to voting equipment across Connecticut. The State Bond Commission approved funding for the upgrades in September 2015, which include new voting systems in every polling place for people with disabilities, software upgrades and high-speed scanners to automate the post-election audit process.⁷
- **Arkansas:** Last year, Secretary of State Mark Martin convinced the legislature there to invest up to \$30 million in new voting machines. But during budget negotiations, lawmakers did not set aside money for the appropriation. In lieu of state funds the Secretary of State's office has used some savings to replace technology in 11 of the 75 counties, with plans to pay for more machines as more money becomes available.

ADVANCEMENT AND POTENTIAL USES OF CURRENT TECHNOLOGY

While the current machines could in theory last a few more election cycles, decisions need to be made now on the type of investments the State is willing to make. Federal and state laws set out the legal parameters of accessibility and the minimum effort required to achieve that threshold, but lawmakers in Nebraska can expand accessibility with funds for innovative and expanded technology.

For example, HAVA requires voting machines that allow a voter with disabilities to vote privately and independently, but new technology has made it possible for a machine that would qualify under HAVA to also be programmed in multiple languages. The ExpressVote machine is fully certified as an ADA device and can be used by all voters. Additionally, jurisdictions can request programming for multiple languages. ES&S competitors, Hart InterCivic and Dominion, have developed similar technology. Three counties⁸ in Nebraska are required under the Language Assistance Act of the National Voter

⁶ Lagrace, Nicole. "Secretary Gorbea bringing new voting machines to Rhode Island voters." Rhode Island Secretary of State, Published: 08/03/2016, Last Accessed December 05, 2016

⁷Chaplin, Douglas. "Connecticut Approves \$6.7 Million for Voting Technology Improvements." Election Academy, Published: 09/30/2015, Last Accessed: 12/05/2016

⁸ The most recent evaluation of Section 203 compliance has maintained the need for Colfax, Dakota, and Dawson counties to provide bilingual election materials. Federal Register Notice Vol. 81, No. 233 [Docket Number 110921596-1557-01] [Section 203 Determinations](#) [PDF] published December 4, 2016

Registration Act to provide bilingual election information and resources, including bilingual ballots, however several counties deal with language barriers at the polls.

This past election saw long lines for early voting, some even winding through the parking lot, voters waiting 2-3 hours to cast an early ballot. Newer technology, like electronic poll books, could alleviate this problem, allowing larger counties to have early vote centers in various locations, spreading out the voters and reducing wait times. An additional investment in ballot printing machines would also be needed for early vote centers.

Furthermore, the number of voters choosing to vote early has increased steadily since 2008⁹. For early ballots cast by mail, both the counties and voters bear the brunt of mailing costs that could be reduced through new technology. Recently, Douglas County invested in new vote tabulation machines that can scan folded ballots, an investment that allowed their county to mail ballots with First Class postage, saving the county significant money for the general election, a similar savings was experienced by the voters.¹⁰

THE NEED FOR REINVESTMENT IN NEBRASKA

New technology has the capacity to improve Nebraska elections and the voters' experience. Waiting to replace outdated technology until it becomes absolutely necessary deprives state and county officials the opportunity to explore what is available and debate the evolution of elections in Nebraska. In short, waiting until there is a technology crisis sets up the State to spend millions of dollars for crisis management, instead of investing those dollars in improving our elections for the long-term.

As mentioned previously, election machines used in Nebraska have reached ten years in operation and their life expectancy is quickly approaching. While the machines are technically functional, reports of machines breaking, outdated technology, and unavailable replacement parts are increasing from county election officials across Nebraska. Sarpy County Election Commissioner Wayne Bena has testified numerous times before the Government, Military, and Veterans Affairs Committee that he is

⁹ Note: The State Canvassing Board has varied in the ballot designations reported out, therefore early vote numbers are estimations and not exact numbers of mail ballots. However, these numbers are reflective of the trend of voters opting to cast their ballot prior to Election Day. 2008 General: 174,219, 2010 General: 79,716, 2012 General: 207,575, 2014 General: 117,710, 2016 General: 223,748.

¹⁰ For the 2016 General Election, Douglas County mailed an estimated 86,672 folded ballots at a lower cost than the \$1.42 per ballot it cost Sarpy County. Douglas County indicated that they were able to mail ballots first class postage, which is an estimated savings of \$.91 per ballot, almost \$79,000 for all ballots mailed.

unable to purchase zip drives, the storage device for election machines, direct from a supplier. Instead, he has resorted to scouring the internet including retail sites like e-bay to find used zip drives.¹¹ Just this past election, Douglas County Election Commissioner Brian Kruse pointed to struggling vote tabulation machines as the culprit for late election returns, stating simply that the machines were 10 years old.¹²

Beyond frustrations felt by election administrators, the aging machines could have a significant impact on the accessibility of voters, opening the counties and the State to litigation for violation of state and federal laws. In his budget request, the Secretary of State calls for continued maintenance¹³, stating that failure to update voting systems, like the AutoMARK, could lead to voters with disabilities losing equal access to our elections, a violation of the Help America Vote Act.

In the submitted agency budget request, the Secretary of State expands upon the need for continued statewide election administration resources to ensure consistency, fairness, and reliability. The request accurately projects that if funding is not available at the state level, costs will be shifted down to the counties and voters in those counties would be at the mercy of their current county budgets. This holds true for new technology purchases. For smaller counties, like Cedar, replacing their current number of AutoMARK machines would cost roughly \$65,460 - about \$20,000 more than their overall estimated elections budget.¹⁴ For larger counties like Lancaster and Sarpy, the cost to replace these machines is hundreds of thousands and would result in a significant increase in their budget.¹⁵ Upgrading election equipment in Nebraska could cost between \$14M - \$17M¹⁶. To put into perspective the impact this could have on counties, in 2012, all 93 counties *combined* reported election-related expenses of \$5,677,730.55.

Reinvesting at the state level offers a multitude of benefits including uniformity, assurance of compliance, cost-savings, and expanded accessibility across Nebraska. Due to the unique circumstances that led to their initial purchase, and the unlikelihood of similar federal funds becoming available,

¹¹ Government, Military, and Veterans Affairs Committee hearing on interim study LR 335, November 4th, 2015, Hearing Transcript, page 39-40.

¹² “Problems with 2 machines, heavy turnout at polls contribute to slow vote counting in Douglas County”, Christopher Burbach, Omaha World Herald, printed 11/10/2016, last visited online 12/7/16.

¹³ State Agency Budget Request - Secretary of State, Narrative page 55.

¹⁴ In response to a survey sent to select county officials in spring of 2015, Cedar County official reported an elections budget of \$45,000 and 12 AutoMARK machines in use in the county. A recent sales pricing document from ES&S, Nebraska’s current vendor, sells the AutoMARK 200 for \$5,455 per unit.

¹⁵ In response to a survey sent to select county officials in spring of 2015 Lancaster County has 175 machines, an estimated \$954,625 to replace with an elections budget of \$1.06M. Sarpy County has 80 machines, an estimated \$436,400 with an elections budget of \$559,374.

¹⁶ Appendix A

Nebraska is left without any precedent on how it should proceed moving forward. Prior to HAVA, counties carried the financial burden of the election system, resulting in disparities across the state. Once HAVA was enacted, it shifted our election system from a patchwork to a centralized system and a state negotiated contract allowed for discounted prices, interchangeable equipment between counties, and uniform educational programs for county election officials. However, while this is how our election administration evolved under HAVA, there exists no affirmative requirement that the State provide and maintain election equipment.

As mentioned earlier, several states have grappled with the issue, some leaving the counties to burden the cost, others creating cost-share agreements, and some states using the state purchasing power and then leasing the machines to the county. For Nebraska, given the current structure of our election systems and the realities of the state and county budgets, the best course of action for Nebraska is to codify the state-level structure and take on the cost burden at the state level. In the agency budget request, the Secretary of State echoes the benefits of such a centralized structure, noting that having the state own and repair election equipment ensures that consistency is maintained.¹⁷ Nebraskans for Civic Reform has provided suggestions for how this structure could be constructed, they are included below.

STRUCTURE FOR A STATE-LEVEL REINVESTMENT IN ELECTION TECHNOLOGY

1. Statute Clarifying Uniformity Requirement, State Responsibility

Current Statute

- i. §32-203: Powers of Secretary of State
- ii. §32-1041: Sets out permissive use of voting and counting methods by the counties, affirming the required approval by the Secretary of State prior to use, and granting the Secretary of State the power to promulgate rules and regulations to establish different procedures and locations for voting and counting.
- iii. §32-1042: Provides counties the authority to acquire voting systems approved by the Secretary of State and sets up some parameters for funding mechanisms used in acquisition

¹⁷ State Agency Budget Request - Secretary of State, Narrative page 54.

- iv. §32-1043: Allows counties that have procured voting systems to enter into contracts with political subdivisions within the county for the rental of such systems.

Uniformity Recommendations

Current statutes are permissive enough to allow for local control by counties where they feel it necessary, while ensuring consistency and some level of uniformity across the state. However, lacking is an affirmative duty of the State to purchase replacement machines and cover the cost of their continued maintenance. As noted in the Secretary of State's budget, failure to fund maintenance at the state level will shift the cost burden to the counties. Moving forward with a statewide solution, in the absence of federal dollars, additional language should be added to Chapter 32 to affirmatively tie the state to the purchase, ownership, and maintenance of the next generation of election equipment.

Recommendation #1 Grant Secretary of State affirmative power to purchase equipment

Amend §32-203 to give Secretary of State affirmative power to purchase election equipment, and amend §32-202 requiring the Secretary of State to purchase and maintain equipment as one of the duties of the office

Recommendation #2 Explicitly state ownership of and duty to maintain equipment falls to the State.

Amend §32-1041 to have two subsections, one granting the permission to counties to purchase their own equipment, the second allowing the county to accept the state-owned equipment and reiterating the affirmative duty of the state to maintain such equipment

2. Replacement Plan

A quick estimation based on the number of AutoMARK machines purchased in 2006, estimates the cost of replacing these machines to be roughly \$7,451,530. *See Appendix A.* Adding an additional investment for vote tabulators, based on Nebraska's initial purchase, raises the overall cost to approximately \$17M. In pushing back on the idea of purchasing new equipment,

the Secretary of State's office has pointed to a possible shift to all-mail elections, and thus, a reduced need in the number of AutoMARK machines. However, even with the shift to all-mail elections, an investment in vote tabulators will be needed.

Recommendation #3 Stagger the purchase of replacement equipment.

By staggering the purchase of replacement equipment, the State will spread the \$17M estimated cost across several budget cycles, allowing flexibility for the amount invested in the upcoming budget while reducing the likelihood and negative budgetary impact of a one-time \$17M expenditure. Furthermore, by staggering their purchase, the State also staggers the wear and tear of the machines, reducing the possibility that the all machines will need to be replaced at one time when their life expectancy expires 10-15 years down the road. Finally, a staggered approach gives the Secretary of State the flexibility to adjust the purchase of replacement machines to meet any change in election procedure, like moving to all-mail elections, prior to making the substantial expenditure estimated.

3. Creation of the Election Technology Fund

Given the substantial amount estimated to replace current technology, creation of a designated fund to hold monies appropriated for the purpose of replacing equipment, as well as future funds for their maintenance and upgrades, is needed to protect the money from being reallocated, ensure continued statewide election administration, and protect counties that accept the state machines from falling victim to unfunded mandates. Currently a cash fund exists within the control of the Secretary of State's office, the Election Administration Fund. This fund was originally the Voter Registration Fund, used to cover the costs associated with administering voter registration, and was amended in 2003 to meet the requirements to receive HAVA funds, renaming it the Election Administration Fund (EAF).¹⁸ Current funds allocated to the EAF include candidate filing fees and voter file sale receipts. The Secretary of

¹⁸ Neb.Rev.Stat. 32-204; This statute creates the fund, lists available funding resources, including federal and state funds, and outlines acceptable expenditures from the cash fund. Allowable expenditures include “*fund for voting systems, provisional voting, computerized statewide voter registration lists, voter registration, training or informational materials related to elections, and any other costs related to elections*”.

State's current agency budget request asks the Legislature to revert funds from the cash fund to the General Fund, to be re-allocated to the Secretary of State.

Recommendation #4 Creation of the Election Technology Fund

Amend §32-204 to expand the Election Administration Fund and rename it Election Technology Fund. Current language in §32-204 provides for the use of funds for voting systems, but clarifying language could be added to designate this fund as the holder of appropriations to replace current technology and funds for continued maintenance of hardware and software upgrades. Until the funds were depleted, the Secretary of State used remaining HAVA funds to reimburse counties for maintenance on election equipment and, through a federal grant, provided funds or resources to make polling places ADA accessible. Expanding the EAF controlling statute has occurred before. In 2014, LB 661 included an amendment adding the language "computerized statewide voter registration lists" to allow the Secretary of State to use EAF funds to cover the cost of implementing online voter registration.

Nebraskans for Civic Reform recommends broad language be added to expand the use of the funds to "modernize election systems". This language should expand to hardware and software updates, online or new electronic resources for voters and election officials to address changes in our election procedures, and grants to state agencies to offset the costs of modernizing their data collection to ease data transfer and voter registration information.

4. Funding Mechanism

Given the financial realities of this upcoming budget cycle, realistic and modest appropriations are in order and the bulk of the efforts taken should be in constructing the framework and structure necessary to move forward. Creating the Election Technology Fund as a mechanism for funding and establishing the State's affirmative duty to purchase and maintain replacement election equipment is key to moving the ball forward and ensuring that future investments are made. That being said, creating a fund with no seed money does nothing to advance the goal nor give directive to future legislators who most certainly will have to appropriate funds for new technology.

Recommendation #5 Appropriate current budget request to Election Technology Fund and establish future investment schedule

The Secretary of State makes specific requests associated with election equipment including a \$1,069,631 request to cover current contracts with election vendors and additional requests for election software and hardware maintenance and support, \$273,439 and \$78,804 for FY18 and FY19 respectively. Nebraskans for Civic Reform recommends that these budget requests be granted but instead of going into the general fund for Program 45 of the Secretary of State's budget, they be appropriated to the Election Administration Fund (propose Election Technology Fund).

Nebraskans for Civic Reform recommend the Secretary of State's request that current funds in the EAF be reverted to General Fund be rejected and that money stay in the EAF. It is also recommended that a modest investment of \$1M be made into the fund as seed money for future election equipment purchase, to cover the cost of any immediate need, and subsequent appropriations of \$5M per biennium budget be made starting in 2019. This will allow the State to begin replacing machines in earnest starting in 2019 with the entire fleet replaced by 2023, approximately 17 years after the initial purchase. A long-term funding mechanism and source will need to be discussed and implemented to ensure funds are available beyond the scheduled appropriations. Current designated funds, candidate filing fees and voter file sales receipts, amass \$20,000 - \$40,000, depending on the election cycle.

Estimates for replacement are based on current number of machines and current prices offered by ES&S for comparable items and can be found in Appendix A. Estimates include a replacement of equipment necessary for the current election procedures in Nebraska, estimates if Nebraska were to adopt an all-mail system and retain the similar vote tabulators, and estimates if Nebraska were to adopt an all-mail system and invest in vote tabulators to handle the increased ballot number that allow for the scanning of folded ballots.

APPENDIX A - Estimated Investment Dollars Needed

Initial Investment as of 2006 with HAVA dollars:

Quantity	Description	Price per unit	Total Cost
172	Model 100 Scanner	\$4,631.28	\$796,580.16
69	Model 650 High Speed Central Scanner	\$55,250.00	\$3,812,250.00
1366	ES&S AutoMARK	\$4,115.00	\$5,621,090.00
			\$10,229,920

Investment Option 1: Maintain Current Election Structure and Comparable Equipment

Quantity	Description	Price per unit	Total Cost
172	DS200	\$7,747.00	\$1,332,484.00
69	DS850	\$120,850.00	\$8,338,650.00
1366	ES&S AutoMARK	\$5,455.00	\$7,451,530.00
		Total Cost	\$17,122,664.00

Investment Option 2: All-mail Election Equipment Needs¹⁹

	Suggested number of DS850 Machines	Estimated Total Cost
Counties with registered voting populations less than 40,000	90	\$10,876,500.00
Counties with registered voting populations more than 40,000	Douglas: 7 Lancaster: 5 Sarpy: 3 Total: 15	\$1,812,750.00
	Vote Tabulators Total Cost	\$12,689,250.00

¹⁹ Given the higher turnout seen in all-mail precincts and all-mail states, the State should consider upgrading current vote tabulators to new models with higher capacity to handle the increase in ballots. To avoid a financial strain on counties from the influx of ballots, the State should, if it does make the change to all-mail elections, purchase higher performing vote tabulators. The estimates in this table are not an approximate estimation of what that would cost, but instead are a reasonable estimation of what that investment could look like.

ES&S AutoMARK (avg. 3 per county)	279	\$1,521,945
	Total Cost	\$14,211,195