



Vendors are Undermining the Structure of U.S. Elections

A VotersUnite report on the current situation and
how to reclaim elections — in 2008 and beyond.

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In warfare during the Middle Ages, a “mine” was a tunnel dug to bring down castles and other fortifications. The technique was used when the fortification was not built on solid rock, and was developed as a response to stone built castles that could not be burned like earlier-style wooden forts. A tunnel would be excavated under the outer defenses either to provide access into the fortification or to collapse the walls.

These tunnels would normally be supported by temporary wooden props as the digging progressed. Once the excavation was complete, the wall or tower being undermined would be collapsed by filling the excavation with combustible material that, when lit, would burn away the props leaving the structure above unsupported and thus liable to collapse.¹

¹ [http://en.wikipedia.org/wiki/Mining_\(military\)](http://en.wikipedia.org/wiki/Mining_(military))

Executive Summary

As we approach the 2008 general election, the structure of elections in the United States — once reliant on local representatives accountable to the public — has become almost wholly dependent on large corporations, which are not accountable to the public. Most local officials charged with running elections are now unable to administer elections without the equipment, services, and trade-secret software of a small number of corporations.²

If the vendors withdrew their support for elections now, our election structure would collapse.

However, some states and localities are recognizing the threat that vendor-dependency poses to elections. They are using ingenuity and determination to begin reversing the direction.

This report examines the situation, how we got here, and steps we can take to limit corporate control of our elections in 2008 and reduce it even further in the future.

Case studies presented in this report give examples of the pervasive control voting system vendors now have over election administration in almost every state, and the consequences some jurisdictions are already experiencing. Such dependency has allowed vendors to:

- ◆ Coerce election officials into risk-riddled agreements, as occurred in Angelina County, Texas in May 2008.
- ◆ Endanger election officials' ability to comply with federal court orders, as occurred in Nassau County, New York in July 2008.
- ◆ Escape criminal penalties for knowingly violating state laws and causing election debacles, as occurred in San Diego, California in 2004.

Analysis of the impact of laws and decisions at all levels of government demonstrates that lawmakers and officials have facilitated the dependence of local elections on private corporations. This report explores:

- ◆ How the mandates of the Help America Vote Act of 2002 (HAVA) and the inaction of the federal government left the states and localities with nowhere to turn but to the vendors.
- ◆ How state laws, passed by ill-informed representatives, limited the options of local officials to the voting systems developed by big corporations.

Voting system vendors' contracts, communications, and histories explored in this report reveal that vendors exploit the local jurisdictions' dependency by charging exorbitant fees, violating laws and ethics, exerting proprietary control over the machinery of elections, and disclaiming unaccountability.

However, even in the current vendor-dependent environment, some jurisdictions are resisting vendor control and finding ways to decrease their dependency and build an independent foundation for their election structure. See page 40 for case studies that point to the power state and local election officials have to reclaim control of elections.

- ◆ More than many local election officials realize, they have the legal authority to oversee vendors and limit vendor dependency, as is occurring in Luzerne County, Pennsylvania.

² Primarily four: Election Systems and Software (ES&S), Hart InterCivic, Sequoia Voting Systems, and Premier Election Systems (formerly Diebold), though a few other corporations have a very small share of the market.

- ◆ States can “kick the vendor out of the state” or at least stop further vendor infiltration into their elections by following the lead of Oklahoma and Oregon.
- ◆ Paper ballots allow local officials, like those in Curry County, New Mexico, to ultimately rely on their own devices and their own citizens, rather than on the high-tech devices sold by vendors. In the words of the deputy county clerk:

“If necessary, we can always hand count them.”

The final section of this report recommends practical, concrete actions for reducing vendor dependence. Even in time for the November 2008 general election, local officials and citizens can take positive steps to oversee the vendors’ goods and services and mitigate vendor control.

Citizens – both private and public – are beginning to realize that they can and must re-assert their ownership of elections and demand transparent citizen oversight of elections.

“The core mechanics of the American election process should rest with the people charged with administering elections; it should never be wholesaled to election-system vendors.”

~ Leonard Piazza, Election Director, Luzerne County, Pennsylvania

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About This Report

Method of Study

The case studies and incidents described in this report are only a handful of hundreds of similar incidents that tell the same story. The author presented the incidents in this report, not as a comprehensive study, but merely as examples of the state of our election structure as we approach the 2008 general election.

This report is based on information from the following sources:

- ◆ The federal Help America Vote Act of 2002, enacted on October 29, 2002.
- ◆ Reports from the federal Election Assistance Commission to Congress.
- ◆ Studies conducted by government officials, consultants, and individual researchers.
- ◆ Interviews with state and local election officials.
- ◆ Transcripts of county commissioners' meetings.
- ◆ Contracts between local jurisdictions and their voting system vendors.
- ◆ Voting system certification documents.
- ◆ Five years of media reports of election-related incidents from across the country.
- ◆ Public records received through open records requests.

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The author could not have conducted this study or produced this report without the efforts and impact of hundreds of citizens who, through dedication and hard work, have brought to light the information on which much of this report rests. In particular, the author thanks Bev Harris, Executive Director of Black Box Voting, for her diligent work and journeys into unexplored territories and for posting her findings openly for others to use.

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- Douglas Kellner**, Co-Chair of the New York State Board of Elections
- Gene Newton**, HAVA Program Officer, Oregon
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Michael Clingman, Secretary of the Board of Elections, Oklahoma

Gene Newton, HAVA Program Officer, Oregon

Leonard Piazza, Election Director, Luzerne County, Pennsylvania

Bob Babson, 2006 Maui Election Observer, Hawaii

About the Author

Ellen Theisen is the founder, Co-Director, and Managing Editor of VotersUnite! In her 22-year career as a software technical writer, she has written hundreds of user manuals, functional and design specifications, online help systems, and programmer guides. In April of 2004 Ellen created and still maintains the VotersUnite! website, developing most of the informational resources available on the site.

Early in 2004, Ellen wrote “Myth Breakers for Election Officials” to dispel myths about HAVA and inform decision-makers of important, under-publicized facts about electronic voting issues. The document has been distributed to thousands of federal, state, and local decision-makers and has been included as testimony in at least three court cases regarding electronic voting issues.

Ellen’s work in the voting integrity movement led directly to the development of the Vote-PAD as an accessible alternative to computerized voting devices. During much of 2006, she focused her attention on providing that alternative, and has now resumed developing the resources available at VotersUnite!

Introduction

Historically, the structure of elections in the United States has been grounded in the work of thousands of local officials, representing and accountable to hundreds of thousands of voters. This was not a rigid and fixed foundation, but a solid support formed by the involvement of a multitude of citizens, each during their own time in history holding up their own small part — some with integrity, some corrupt, some efficient, some incompetent, some responsible, some complacent. Overall, U.S. elections were built on the solid ground of the vast breadth and diversity of the people who held and upheld them.

That is no longer the case.

Voting system vendors³ have undermined that broad, diverse foundation and replaced it with their own costly support. They promise speedy results to time-sensitive broadcast media; relief to burdened election administrators; assistance to voters; progress to those enamored of high-tech; and fraud-proof elections to those who would buy their products.

But study after study shows their products to be seriously flawed. Their products and services often cause election problems for which they disclaim accountability. And cash-strapped localities struggle to pay the vendors' unexpectedly high maintenance and support fees.

Our dependence on vendor support has left our election structure vulnerable to corporate decisions that are not in the public interest, corporate profiteering, and claims of trade-secret for information that is essential to public oversight of elections.

Vendors now provide:

- ◆ Equipment to run elections
- ◆ Software to run the equipment
- ◆ Installation of the equipment
- ◆ Training on the equipment
- ◆ Ballots – printed and on screen
- ◆ Ballot programming
- ◆ Pre-Election and even acceptance testing of their equipment
- ◆ Maintenance, upgrades, and repairs of the equipment
- ◆ Election-Day assistance for election workers and administrators
- ◆ Results retrieval, especially when something goes wrong
- ◆ Troubleshooting and investigation into the cause of problems
- ◆ Recounts – with all the same support



³ Primarily four: Election Systems and Software (ES&S), Hart InterCivic, Sequoia Voting Systems, and Premier Election Systems (formerly Diebold), though a few other corporations have a very small share of the market.

Meanwhile, states pass laws requiring high-tech equipment based on the technology currently offered by vendors. Members of Congress periodically introduce bills that would require higher-tech equipment that isn't yet invented, give legal priority to vendors' claims of trade secrecy over citizens' rights to observe their elections, and even invite the vendors to sit at the table where standards for voting systems are developed.⁴

Vendors exploit these opportunities to increase their profits and expand their control, and with each extension of vendors' reach into election management, more reach becomes possible.

If they withdrew their support now, our election structure would collapse.

The case studies and incidents described in this report give evidence that the vendors are using the threat of withdrawing support to dictate conditions of their support and to charge unexpected increases in fees.

Control vs. Accountability

Local officials remain legally accountable to the people to run elections and comply with state and federal laws, but vendors fall outside the chain of command. Even though vendors are now in practical control of elections – supplying equipment and supplies to run elections, providing ballot programming for counting the votes, and even in many cases retrieving results – vendors are not held legally accountable when these goods or services fail.

While vendors are in control, election officials are accountable.

In an April 2006 lawsuit filed by the State of Oregon against a voting system vendor for breach of contract, the plaintiff makes this untenable situation very clear:

“The breach did not relieve plaintiff of its obligation to provide HAVA-compliant voting systems for the May 2006 primary election.”⁵

But some states and localities are recognizing the danger of vendor-dependence and taking steps to rebuild their election structures on a more vendor-independent foundation. Election officials and private citizens alike can participate in the re-construction by taking actions that the laws currently allow – even in 2008 – to oversee vendors' equipment and services and regain ownership of U.S. elections.

⁴ <http://www.govtrack.us/congress/billtext.xpd?bill=s110-3212>

⁵ **State of Oregon v. Election Systems & Software, Inc. Complaint for Breach of Contract.** Case No. 06C13803. April 19, 2006. http://www.votetrustusa.org/pdfs/Oregon/Oregon_ESSComplaint_041906.pdf, page 4.

Undermining Elections: Case Studies

Case Study of Angelina County, Texas.

The county's dependence on ES&S for all phases of election administration undermines the county's election structure. By threatening to withdraw support, ES&S is able to dictate conditions that increase the county's dependence.

The Angelina County incident started when a technician from ES&S, the county's voting system vendor, assisted with the March 2008 election by retrieving results, but he tallied the votes incorrectly. The error was noticed by Thelma "Midget" Sherman, Angelina County tax assessor-collector/election administrator and Jim Wark, Angelina County's Democratic Party chairman. Together, they petitioned a judge to allow a recount. Mr. Wark also attempted to hold the vendor accountable: ⁶

Wark sent a four-page letter to the secretary of state's election leader, the state Democratic Party chair and the president of the company that sent the site support, Election Systems & Software based in Omaha, Neb.

"The letter requests that action be taken by the secretary of state and the democratic party chair against ES&S for sending an unqualified person down here to tally the votes," Wark said. "His actions created a dark cloud over this election, both parties and the tax collector."

The judge granted the petition, so the county proceeded to plan the date and the recount process. But correspondence between Ms. Sherman and ES&S show that Ms. Sherman encountered a severe obstacle: ES&S threatened to withdraw the support necessary for the recount and all future elections unless Ms. Sherman agreed to certain conditions — conditions she could only meet with timely support from ES&S.

On June 13, 2008, Black Box Voting (www.blackboxvoting.org) sent an open records request to Ms. Sherman, requesting correspondence and invoices related to the miscount and subsequent related events.⁷ The county's response illuminates the way in which ES&S has undermined Angelina County's election structure and then further eroded the structure when the company's COO threatened to withdraw the election support on which the county had become wholly dependent. The records reveal [numbers in square brackets in the following text reference the pages in the pdf file⁸ containing the county's response to BBV]:

- ◆ On April 28, ES&S Sheri Menges denied — without explanation — Ms. Sherman's request for on-site support for the November 2008 general election and referred her to Mr. Gary Crump for further discussion. [45]
- ◆ On May 15, two days after the judge ordered a recount of the March election, Mr. Gary Crump, Chief Operating Officer of ES&S, left Ms. Sherman a voice mail telling her that she "would be allowed" site support for the recount, but only if she signed and returned a letter he had mailed to her. [8] (This is the recount made necessary by ES&S' technician's error.)

⁶ **When does your vote not count? When it isn't counted: Angelina County officials upset with technician, but say glitch won't change election results.** The Lufkin Daily News, April 19, 2008. By BRITTONY LUND. Archived at: <http://www.votersunite.org/article.asp?id=7672>

⁷ <http://www.bbvforgums.org/forums/messages/171/75764.html?1215618531>

⁸ <http://www.bbvdcs.org/TX/angelina/2008-Jun-TX-Angelina-PRRresp.pdf>

- ◆ Mr. Crump’s letter said that the conditions applied to all elections “going forward” (thus, the November 2008 election as well). His letter [48] and her response [49] also reveal that Mr. Crump coerced Ms. Sherman to agree to actions that it was not within her power to complete. Her office would be unable to fulfill them without timely cooperation and support from ES&S.
- ◆ Mr. Crump’s final sentence of the letter is: “ES&S will not provide Angelina County with site support until this letter is received.”

To understand the implications of this threat, it is necessary to understand that Angelina County was, at that point, wholly dependent on ES&S on-site support to conduct the recount, as well as any future election.

- ◆ Email exchanges between Ms. Sherman and Zachary Austrew of ES&S, regarding the April 8th run-off election [2-5] and invoices from ES&S to Angelina County [15-40] show that Angelina County depended on ES&S for:
 - providing the equipment and supplies for the election,
 - designing and printing the paper ballots,
 - marking the paper test ballots for pre-election testing,
 - programming the ballots for the iVotronics,
 - setting up the audio for the iVotronics designated as accessible for people with disabilities,
 - burning the memory cards for the M100 optical scanners,
 - burning the flashcards and memory cartridges for the iVotronics
 - setting up the Election Reporting Manager program, and
 - providing election-day support, including retrieving results and reporting outcomes.

Note: Invoices also reveal that ES&S charged Angelina County \$3900.00 for the work of the technician who caused the miscount, and the county approved payment [20]. As of June 12, 2008, no record indicates that ES&S was going to compensate the county for any of the recount costs. Ms. Sherman could not be reached by phone for an update.

- ◆ **ES&S set the date for the recount.** In email negotiations with Ms. Sherman, ES&S’ Mark Allison said, “we will set it up for the 4th.”[9] She responded that she would try to set June 4th as the date for the recount, but she wasn’t sure if all the necessary county people would be available.[9] Note: The recount did end up being held on June 4th.

Without ES&S’s on-site support for the recount on the date set by ES&S, the recount simply wouldn’t happen. Neither Ms. Sherman nor her staff knew how to operate the Election Reporting Manager (ERM) program required to re-collect the votes from the memory cards, and operating the ERM was essential to the recount process.[49]

When Ms. Sherman received Mr. Crump’s threat letter, ES&S had already set the recount date for two weeks away, and the judge’s deadline for the recount was only 3½ weeks away.

While ES&S refusal to provide on-site support would be the direct cause of the court order violation, Ms. Sherman – not ES&S – was accountable to meet the deadline.

As Ms. Sherman explained to ES&S Mark Allison [43]:

I have a Court Ordered Recount that I need site support on because of the errors that were completely out of my control. Mr. Crump did say I needed to sign the letter and return it to him but he stated a couple of things in the letter that I think the County Attorney needs to address, so I guess you can say my hands are tied at this time as well as yours. We may all have to go back [sic] the District Court to explain why I can’t meet the deadline.

Nevertheless, Ms. Sherman did return the letter, signed, with a supplemental letter of her own dated May 20, 2008. [48, 49] It would be difficult to overstate the significance of her decision to sign the letter even though the County Attorney was “out of town for a week.” [43] Her supplemental letter [49] provides more insight into how ES&S used the threat of a recount collapse, to take control – in two specific ways – over whether or not the county’s November 2008 election collapses.

1. In order to receive the support she needed to comply with a court order to complete the recount within 30 days, she officially agreed to run the Election Reporting Manager (ERM) herself in all future elections.

Ironically, the reason she needed support for the recount was that ES&S technicians had always retrieved election results using the ERM system, as she said in her response letter, “as if it were their’s [sic] to do, so we allowed it, consequently this is why we aren’t educated well enough to run it ourselves at this time.”

But using the ERM system was essential to the recount process. So, **because** she didn’t know how to run the ERM for the recount (which was only two weeks away), she was coerced by ES&S into agreeing to run the ERM in all future elections. Both she and Mr. Crump knew that she was also dependent on ES&S to provide the training she would need. He even pointed it out in his letter to her.

While it is certainly advisable for the county election administrator to run the election, the way in which that change came about reveals much about the danger of vendor control. By threatening to remove the only support propping up the county’s recount, ES&S extorted Ms. Sherman to agree to something over which ES&S, **not Ms. Sherman**, had control. If ES&S is unable or unwilling to schedule the training she needs before November, Ms. Sherman will be unable to run the election and will have broken her agreement. Based on her inability to run the election herself, ES&S could refuse to supply site support for the November election. The election would collapse.

2. Mr. Crump also threatened Ms. Sherman into agreeing to complete all pre-election testing before Early Voting, yet both parties knew that she was completely dependent on ES&S to provide the materials necessary for pre-election testing. Furthermore, as she pointed out in her supplemental letter, the company had failed to provide those materials in a timely manner in the past.

So, Ms. Sherman officially agreed to two items she and Mr. Crump both knew she would be unable to fulfill without support from ES&S, a company that had failed her in the past. And this was on the heels of ES&S’ unexplained threat to withdraw support for the recount and the November 2008 election.

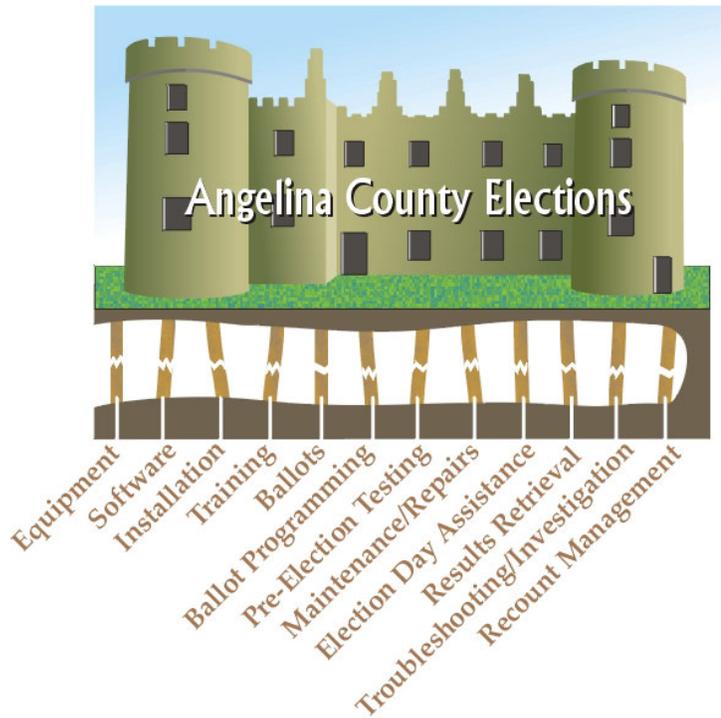
By ES&S’ unexplained refusal to provide support for a recount made necessary because its own technician botched the initial count, ES&S has demonstrated its willingness to withdraw the support propping up Angelina County’s election structure.

ES&S has thoroughly undermined Angelina County's election structure, which is now propped up only by fragile support from ES&S. ES&S has failed the county in the past, invoiced for its failures, threatened to withdraw support without explanation, and forced Ms. Sherman to be wholly dependent on ES&S' support in the future in order for her to fulfill her official agreement with them.

The county is so dependent on ES&S that Ms. Sherman **cannot** hold elections without support from ES&S. Using that dependence like a club over her, ES&S bullied her into signing an agreement that she cannot keep without support from ES&S.

Unfortunately, Ms. Sherman is not alone. News reports and statements from election officials in other states attest to the fact that this type of support from ES&S is all too common. For example, on March 3, 2007, the *Texarkana Gazette* reported that Miller County Arkansas Election Administrator Robby Selph resigned from his job saying this about Election Systems and Software:⁹

The reason I am leaving is the provider of the IvoTronics [sic] and related software lacks competency to make their equipment work timely and effectively. They ... make a difficult job impossible to do. They can't spell, meet deadlines, send documents to the right address or code elections correctly. They leave races off the ballot for us to correct, they can't program their software to work and you have to hand add the results. And they don't return phone calls. The ES&S people in Arkansas are capable but the people I have dealt with in the home office in Omaha prevent them from being effective. They are also mean-spirited when you try to get them to correct the numerous and recurring errors.



⁹ <http://www.bradblog.com/?p=4218>

Case Study of Nassau County, New York.

To comply with a federal court order, Nassau County purchases ballot-marking devices from Sequoia Voting Systems. Of the first 240 devices delivered, 85% are too defective to be usable, placing the county in jeopardy of violating the court order.

The federal Help America Vote Act of 2002 (HAVA) spells out certain requirements for voting systems and sets a deadline by which all states must comply with those requirements. Among HAVA's mandates is the requirement for one accessible device in each polling place for use by people with disabilities. New York State missed the deadline, and the U.S. Department of Justice filed a Motion to Enforce.

Relevant to this case study is the "Supplemental Court Order" that U.S. District Judge Gary L. Sharpe signed on January 16, 2008. Judge Sharpe granted the Motion to Enforce and ordered, in part, that by the September 2008 primary elections, all counties in the state must provide, per HAVA, one ballot-marking device (BMD) in each polling place:¹⁰

... the deployment of ballot marking devices accessible to person with disabilities in every polling place in the State for use in the fall 2008 federal primary and general elections... shall be implemented in full by the Defendants.

By this point, time was short and New York State law requires that accessible voting equipment be capable of being equipped with a pneumatic switch voting attachment, such as a "sip-and-puff" attachment, for use by people with physical disabilities.¹¹ So, the county's choices were limited to a few high-tech systems currently manufactured by voting system vendors. In this manner, the combination of federal law and state decisions compelled New York counties to use an existing vendor's voting equipment, thus facilitating the dependence of New York State's election structure on voting system vendors.

In order to comply with the court order, Nassau County contracted with Sequoia Voting Systems, Inc. to purchase 450 ImageCast optical scanners, which also serve as ballot-marking devices and include the "sip-and-puff" attachment required by the New York legislature. Kim Zetter describes the machine in a subsequent news article about the county:¹²

The ImageCast machines are special optical-scan machines that include an LCD screen, a printer and a ballot-marking device that allows disabled voters to use them. Disabled voters view the ballot on screen or hear it read to them through headphones, then make their selection using special attachments (a device with buttons or a sipping straw), after which the machine prints out a paper ballot that gets read by the optical scanner component.

Thus, Nassau County (as well as dozens of other New York counties that contracted to purchase the ImageCast) became wholly dependent on Sequoia in order to comply with U.S. District Judge Sharpe's order. Without Sequoia's timely support in providing well-functioning equipment, Nassau County would be in violation of the federal court order.

¹⁰ <http://www.nyv.org/newdoc/doj/DOJvNYOrder011608.pdf>

¹¹ State of New York 2008 Election Law. § 7-202.2.c.

<http://www.elections.state.ny.us/NYSBOE/download/law/2008NYElectionLaw.pdf>, page 234.

¹² **NY: 50 Percent of Sequoia Voting Machines Flawed.** Wired Blog Network. July 14, 2008 By Kim Zetter.

<http://blog.wired.com/27bstroke6/2008/07/ny-50-percent-o.html>

Sequoia's severely flawed performance put the county at risk.

By June 26, 2008, Nassau County had received 156 of the BMDs from Sequoia. **133 (85%) of the ballot-marking devices were so defective they were unusable.** The county legislature and board of elections wrote a joint letter to Judge Sharpe informing him of the problem and alerting him to the fact that the situation "threatens compliance with the Court's Order." In that letter they point out specific problems with the equipment received from Sequoia.¹³

29 were rejected immediately when they were unloaded from the truck because of obvious physical defects or damages, such as a broken side of the printer. 62 failed diagnostic testing because of problems with the USB cord and the printer. And 42 failed Nassau's acceptance testing for a variety of reasons, such as nonresponsive key pads and battery failure. Out of a total of 156 BMDs, only 23 can be used by voters in the condition they were received in.

On July 1, the county legislature and board of elections wrote another letter to Judge Sharpe, telling him that they had received two additional shipments, with similar percentages of "unusable" equipment in the new shipments. Then they describe the status of Sequoia's support:¹⁴

Despite the County's demands, Sequoia has failed to fix a single broken BMD or to give any indication when the BMDs will be repaired.

They end the letter with a concise summary of how the "control vs accountability" inequity is impacting their county:

We believe this matter is extremely urgent because the defective BMD's jeopardize the implementation of this Court's January 16, 2008 Order. ... Without swift action, Nassau County, through no fault of its own, may be unable to provide functioning BMDs in the majority of polling places in the fall 2008 elections.

By this time, the county had received 240 machines, with a continuing defective rate of 85%. A news article by Kim Zetter¹⁵ relates that, "The problems include printers jamming, broken monitors and wheels, machines that wouldn't boot up, and misaligned printer covers that prevented the covers from closing completely, creating security concerns." The article continues:

Another 112 machines produced a "printer failure" error message. Biamonte [William Biamonte, the Democratic elections commissioner for Nassau County] says this was the result of a change Sequoia made to its firmware. He said that when he received his first batch of machines about a month ago, the machines had "horrific paper jams." To fix the problem, Sequoia loaded new firmware on the systems to speed up the printer, but in doing so disabled the USB port on machines, resulting in the "printer failure" error messages.

...

Biamonte... said a state worker told him he should instruct election workers to just ignore the error message.

...

"How is that acceptable?" Biamonte asked. "Say you buy a brand new car and it works

¹³ http://www.nyvv.org/newdoc/2008/letter_re_BMD_problems_06272008.pdf

¹⁴ <http://www.nyvv.org/newdoc/2008/NassauLetterUSCourt07012008.pdf>

¹⁵ **NY: 50 Percent of Sequoia Voting Machines Flawed.** Wired Blog Network. July 14, 2008 By Kim Zetter. <http://blog.wired.com/27bstroke6/2008/07/ny-50-percent-o.html>

good but the oil gauge isn't working. They tell you, Just drive it anyway. These are brand new machines. \$12,000 each. We cannot in confidence send (them) out to a polling place knowing they have this printer error. How do we know if we really do have a printer failure?"

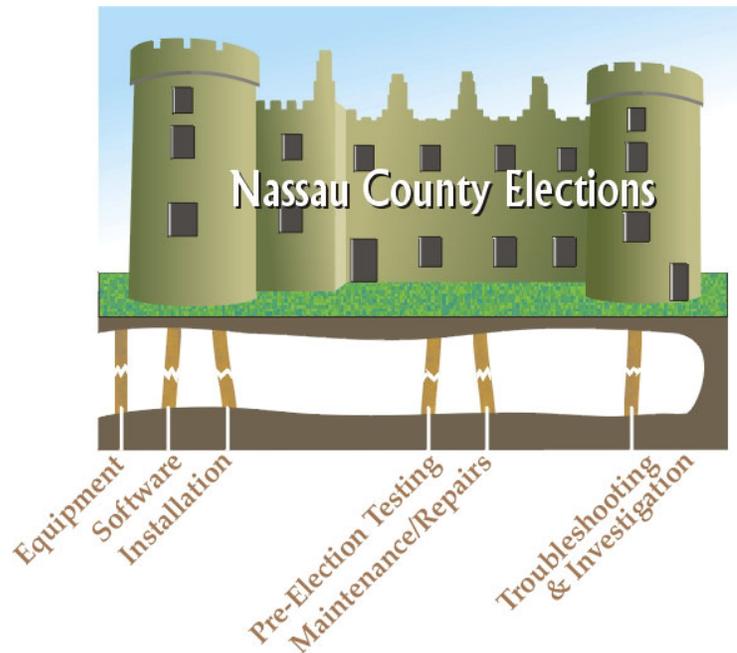
...

A Sequoia spokeswoman would say only that the company is working with state officials "to identify and resolve any voting equipment concerns they may have."

Ironically, while Nassau County purchased these machines from Sequoia for the sole purpose of printing ballots marked by voters with disabilities (the scanner function will not be used), it was the printing function that failed in nearly half of the machines they received.

In August, Mr. Biamonte told the author that Sequoia had been repairing the equipment and most of the machines appeared to be working, though some worked intermittently. But, because the diagnostic function of the machines does not work properly with the newly installed firmware, the diagnostic function will be disabled while the machines are in use. He likened it to driving a car with the dashboard controls disabled.

Undermined by the county's dependence on Sequoia, Nassau County's ability to hold a legal election in 2008 now rests on Sequoia's broken support.



Unfortunately, Nassau County is not alone. As of mid-July, counties in the state of New York had received about 1500 BMDs from Sequoia. **Half** the machines were too defective to use for the purpose for which they were intended.

While Sequoia had repaired most of them by the date of this report, 514 had not yet been delivered by July 31, 2008, the court-ordered delivery deadline. Sequoia promised to deliver the rest by August 15, but even if they fulfill the promise, the delay further shortens the already tight timetable faced by the counties to prepare for the primary and general elections.¹⁶

The words of Douglas Kellner, co-chair of the New York State Board of Elections, demonstrate the logical result of vendors having control with no accountability.¹⁷

There's no way the vendor could be adequately reviewing the machines and having so many problems ... What it tells us is that the vendor just throws this stuff over the transom and does not do any alpha- or beta-testing of their own before they apply for certification testing. Then they expect that we'll identify technical glitches and then they'll correct those glitches. But correction of those glitches is an extraordinarily time-consuming process. And its [sic] very disappointing that this equipment is not ready for prime time.

¹⁶ Email from Douglas Kellner.

¹⁷ **NY: 50 Percent of Sequoia Voting Machines Flawed.** Wired Blog Network. July 14, 2008 By Kim Zetter. <http://blog.wired.com/27bstroke6/2008/07/ny-50-percent-o.html>

Case Study of San Diego, California.

Diebold's unauthorized and illegal installation of voting equipment and software causes an election debacle.

On November 10, 2003, the California Voting Systems and Procedures Panel (VSPP) initiated an audit of the 17 California counties using Diebold voting systems.

The audit discovered that Diebold had, in fact, installed uncertified [by the state] software in *all* its client counties without notifying the Secretary of State as required by law, and that the software was not federally qualified in three client counties. Diebold eventually acknowledged that it had failed to notify the Secretary of State of its proposed system modifications, and that its failure to obtain certification for those modifications violated state law.¹⁸

The staff report states further that Diebold had marketed, sold, and installed its new touch screen machines (TSx) in San Diego County (as well as three others) “prior to full testing, prior to federal qualification, and without complying with the state certification requirements.”

Diebold illegally installed a voting system with touch screen machines and tabulation software that had neither been certified by the state nor federally qualified, even though state law required both. In fact, Diebold sold and installed the system in San Diego County (and three others) before the company even applied for state certification.

The counties insisted there was insufficient time to replace their voting systems before the primary. Less than a month before the primary election, independent testers gave limited approval to use the TSx system installed in San Diego County, on a one-time basis, but only if certain software “patches” were used. So, with this limited approval:

Shortly before the election, Diebold engaged in a crash project to install the patches on its California voting machines.

However, as the Secretary of State learned later, Diebold neglected to install the patch on 24 of San Diego’s machines. On those machines, according to Diebold’s Bob Urosevich, “there were changes to the Cross-Over reporting.”¹⁹ Mr. Urosevich then claims that these votes were corrected before they were sent to the Secretary as part of the official statement of vote.²⁰

A near repeat of the TSx story occurred with Diebold’s Precinct Control Module (PCM), which Diebold claimed was essential to the operation of San Diego’s TSx system. The PCM writes data to the Voter Access Cards, which voters insert into the touch screens in order to cast votes. The staff report says:

As with the TSx, Diebold sought certification of the PCM less than two months before the election, without having completed federal testing and with counties asserting the election could not be conducted without PCM approval. After limited testing, the ITAs [Independent Testing Authorities] approved the units for *one time use only*, while stating a number of concerns regarding its performance.

¹⁸ **Staff Report on the Investigation of Diebold Election Systems, Inc.** April 20,2004. Presented to Secretary of State Kevin Shelley and the Voting Systems and Procedures Panel. Page 2.

¹⁹ Votes of unaffiliated voters in partisan contests for which such “cross-over voting” is allowed by the party.

²⁰ **Staff Report on the Investigation of Diebold Election Systems, Inc.** Appendix A.

The unqualified, uncertified systems that Diebold illegally installed in San Diego County caused severe and varied problems during the election — even with the one-time-only patch installed on most of the units:

- ◆ **The tabulation software switched 2,747 Democratic presidential primary votes for U.S. Sen. John Kerry to U.S. Rep. Dick Gephardt.**

Diebold's latest explanation says its vote-tabulation software apparently could not handle results from multiple optical-scanning machines, processing ballots with large numbers of candidates and precincts.²¹

- ◆ **Ten votes were inexplicably lost on the touch screen machines at one polling place alone.**

John Pilch, a retired insurance agent who worked as a polling place inspector in San Carlos, said that when polls closed at 8 p.m. Tuesday, the number of people who signed the voter log differed from the number of ballots counted by computers.

"We lost 10 votes, and the Diebold technician who was there had no explanation," said Pilch, who registered complaints with elections officials, his county supervisor and several others. "She kept looking at the tapes."²²

- ◆ **The machines allowed voters to unknowingly cast multiple ballots.**

In Carmel Valley, one voter said she was allowed to cast a second ballot after the computer spit out her activation card while she was weighing her choices. She later said the card showed that her original vote had been counted.²³

- ◆ **The malfunctioning machines disenfranchised untold numbers of voters.**

Hundreds of voters, perhaps even thousands, were turned away from their polling place because the machines were not operating as planned.²⁴

- ◆ **In San Diego and Alameda Counties, one-fourth of the PCMs, reluctantly approved for one time use only, failed.**

Poll workers saw unfamiliar Windows screens, frozen screens, strange error messages and login boxes none of which they'd been trained to expect.

A report released Monday by Diebold Election Systems shows that 186 of 763 devices known as voter-card encoders failed on election day because of hardware or software problems or both, with only a minority of problems attributable to poll worker training.²⁵

Contrary to Diebold's promise to the California Secretary of State, the company never obtained, nor even pursued, federal qualification for the voting system that malfunctioned so badly in San Diego's March 2004 primary election.

²¹ **Diebold reports multiple problems: Registrar wants reason for e-voting.** TriValley Herald. April 13, 2004. By Ian Hoffman, Staff Writer. Archived at <http://www.votersunite.org/article.asp?id=2390>

²² **Poll workers, voters cite tied-up hotline, poor training, confusion.** Union Tribune; March 7, 2004; By Jeff McDonald and Luis Monteagudo Jr. <http://www.signonsandiego.com/news/politics/20040307-9999-1n7vote.html> Archived at <http://www.votersunite.org/article.asp?id=1454>

²³ **Poll workers, voters cite tied-up hotline, poor training, confusion.**

²⁴ **Poll workers, voters cite tied-up hotline, poor training, confusion.**

²⁵ **Diebold reports multiple problems: Registrar wants reason for e-voting.**

In April 2004, California Secretary of State Kevin Shelley called on the state's attorney general to bring criminal charges against Diebold for fraud.²⁶ But in September, **Attorney General Bill Lockyer announced he would not pursue criminal charges against Diebold.**

Instead, Lockyer eventually joined Alameda County and two election activists, Bev Harris and Jim March, in pursuing and winning a monetary false claims judgment against Diebold.²⁷

But the monetary damages were small in comparison to Diebold's income from the election equipment it sold in California.

Since public officials do not hold voting system vendors criminally liable for deliberate, illegal actions that result in disenfranchised voters and botched elections, there is little to deter vendors from continuing to undermine elections.



Diebold is still marketing, selling, and installing its voting systems in jurisdictions throughout the United States – now under the name “Premier Election Systems.”

²⁶ **California Bans E-Vote Machines.** Wired News. April 30, 2004. By Kim Zetter.
<http://www.wired.com/news/evote/0,2645,63298,00.html>

²⁷ **State joins lawsuit against Diebold.** Tri-Valley Herald. September 8, 2004. By Ian Hoffman, Staff Writer.
<http://www.trivalleyherald.com/Stories/0,1413,86~10671~2387400,00.html>.
Archived at <http://www.votersunite.org/article.asp?id=2733>

Case Study of Hawaii.

State officials have handed elections to voting system vendors. Now the state cannot run elections without a vendor.

In 2004, two vendors programmed the elections, tallied the votes, and counted the turnout. The vendors' poor performance didn't deter the state from continuing this practice.

- ◆ An error in Hart InterCivic's ballot programming allowed voters to vote a straight-party Green ticket, even though no Green candidates were running. The official response shows the state's plan to continue depending on the vendor for this service:²⁸

State elections officials said the computerized voting machines provided by Hart Intercivic allowed voters to "click on" a political party, even though there weren't any candidates running from that party on their island.

So a couple of dozen Green Party ballots were recorded, even though there were no candidates.

"We brought that up to the vendor already. They will change that for the next election," [elections spokesman Rex] Quidilla said.

- ◆ When the two vendors made errors, described as "**counting turnout differently**," Mr. Quidilla's response to the vendors shows that the vendors were not held accountable:

Elections officials said they made a mistake in calculating the primary turnout totals, but the results of individual races did not change. State elections officials have revised their primary election turnout figures upward. They now say 252,630 people voted in Saturday's election. Their preliminary count was 4,000 votes fewer than that.

For the first time, there were two election-counting vendors this year. One company counted the paper ballots and another company tallied electronic votes on computers used mostly by those with disabilities. The companies counted turnout differently, resulting in the discrepancy.

"We found this and we made proper adjustments," elections spokesman Rex Quidilla said. "These are routine corrections after each election."

The 2006 elections saw vendors running every aspect of the Hawaii elections again. Bob Babson, an election observer on Maui during that election, wrote to the author:

In 2006, Hart InterCivic and ES&S did just about everything in administering the elections. Hawaii gave them the names of the candidates and they did the rest. They printed the ballots, wrote the software, designed the hardware. Hawaii volunteers ran the precincts but as soon as the memory cards arrived at the county count centers, they were simply handed to ES&S and Hart representatives who "read" them into their tabulator which was connected to a telephone line. They [ES&S and Hart] had 100% control of all Hawaii votes in their computers at the State count center at the end of election day when they tabulated the final results. They then printed the final results in pdf format. So I believe you could say they conducted our elections "turn key."

²⁸ **Primary Election Runs Into Problems.** HITV 4. The Hawaii Channel. September 24, 2004.

<http://www.thehawaiichannel.com/news/3760175/detail.html> Archived at

<http://www.votersunite.org/article.asp?id=2926>

In 2008, a single vendor will run the elections. The contract for Hawaii elections through 2016 (with an option for 2018) was awarded to Hart InterCivic. ES&S, which also bid on the contract, challenged the state's decision, claiming Hart's proposal was unreasonably high. By state procurement law, ES&S' challenge automatically triggered a stay on the contract. Subsequent events demonstrate the state's complete dependence on a vendor to administer elections.²⁹

- ◆ In May 2008, Aaron Fujioka, the state procurement officer, initially refused to lift the stay, but relented when Kevin Cronin, the chief election officer, argued that time was running out to have a voting system in place for the September primary election.
- ◆ In June, the administrative hearings officer who reviewed the ES&S challenge reversed the decision, stopping work again. But on June 30, Fujioka said that the delay "places at great risk the voters' right to an efficient and effective statewide election." He found that there was a substantial state interest – conducting the elections – that justified lifting the stay.

The Hawaii 67AM KPUA News summarized the situation (highlighting added):³⁰

The contract with Hart InterCivic for paper eScan and electronic eSlate voting machines will proceed because **the September primary election and November general election could be in jeopardy if Hawaii doesn't have a company in place to administer them.**

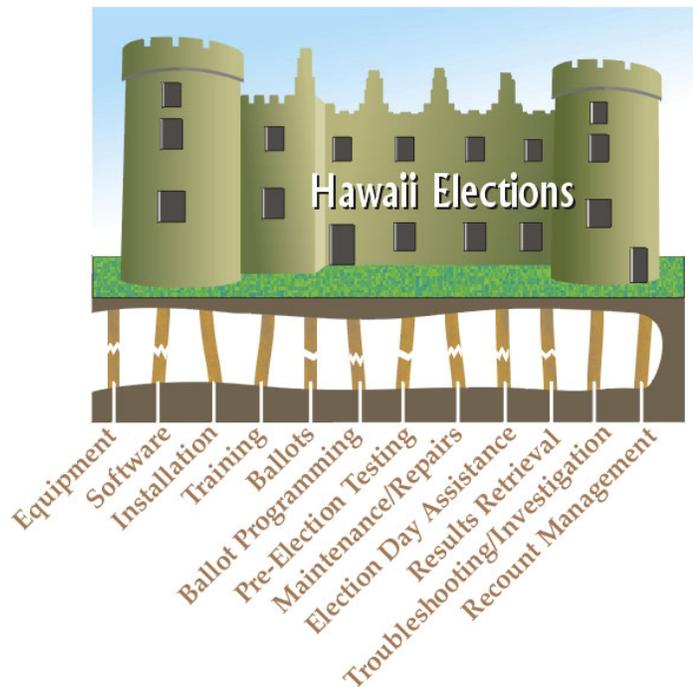
- ◆ But on August 7, Craig Uyehara, an administrative hearings officer for the state Department of Commerce and Consumer Affairs, ruled that the contract was awarded in bad faith and should be canceled. However, he also determined that it was too late to cancel it for 2008.³¹

Hawaii is now so dependent on a vendor to run elections that an officer of the state believes delaying cancellation of an invalid contract with a vendor is necessary to ensure that the 2008 elections can be held.

Scott Nago, Hawaii's Counting Center Section Head, confirmed this absolute dependency.

When asked by the author if the vendor did everything for the elections: equipment maintenance, ballot programming, retrieving results, and all the rest, Mr. Nago said:

Correct.



²⁹ **Vote preparations resume. State gearing up to use new ballot machines despite bid dispute.**

Honolulu Advertiser. July 2, 2008. By Derrick DePledge, Advertiser Government Writer.

Archived at <http://www.votersunite.org/article.asp?id=7791>

³⁰ **Disputed voting machines go ahead.** Hawaii News, July 3, 2008; <http://www.kpua.net/news.php?id=15262>

Archived at: <http://www.votersunite.org/article.asp?id=7810>

³¹ **Voting-machine deal in jeopardy.** HonoluluAdvertiser.com. August 10, 2008. By Derrick DePledge

<http://www.honoluluadvertiser.com/apps/pbcs.dll/article?AID=/20080810/NEWS01/808100378/1001/LOCALNEWSFRONT>

Archive at: <http://www.votersunite.org/article.asp?id=7836>

Unfortunately, Hawaii is not alone in its dependence on Hart InterCivic. In the company's marketing documents, Hart touts the full service election management it provides to customers.

Hart's "**Installations and Letters of Reference**"³² – provided to Boulder County, Colorado, during their 2003 negotiations – shows the extent to which Hart controls all phases of the elections for many of its clients. For example:

For Arapahoe County, Colorado, Hart InterCivic controlled these phases of the 2002 primary and general elections (page 4):

- ◆ Formatting absentee ballots
- ◆ Printing absentee ballots,
- ◆ Scanning absentee ballots and resolving ballots marked as having a "Damaged Contest"
- ◆ Tabulating absentee results
- ◆ Reporting absentee results
- ◆ Configuring and deploying the eSlate e-voting machines in Early Voting
- ◆ Comprehensive precinct level reporting
- ◆ Integration of election results from the county's old Sequoia system used for Election Day with the new Hart systems used for Early Voting and absentee voting.

For Philadelphia, Hart InterCivic controlled these phases of the 2002 general election (page 8):

- ◆ Formatting absentee ballots
- ◆ Printing absentee ballots
- ◆ Scanning absentee ballots and resolving ballots marked as having a "Damaged Contest"
- ◆ Tabulating absentee results
- ◆ Reporting absentee results
- ◆ Exporting absentee results to Danaher software to consolidate with polling place results.

Philadelphia's continuing implementation plan **also** includes:

- ◆ Installation of additional equipment,
- ◆ Training city election staff, and
- ◆ Providing pre-election and Election Day support.

Hart InterCivic's proposal to Boulder County, Colorado offers all this control and more, **including performing the county's acceptance testing of the equipment Hart InterCivic was proposing to sell to the county.**³³

Many jurisdictions whose elections depend on Hart InterCivic are experiencing the impact of the company's undermining. In the 2006 mid-term elections, two counties surrounding Austin, Texas (Travis and Hays) and the only three Virginia cities using Hart's equipment found that their electronic voting machines truncated the names of candidates on the review screen.³⁴ Travis County Clerk Dana DeBeauvoir said the cutoff of names is frustrating.

"I don't like it. We've been asking the vendor to address this issue for a couple of years now," she said.³⁵

³² <http://www.bbvddocs.org/hart/Attach15.pdf>

³³ <http://www.bbvdocs.org/hart/Sec3.pdf>, page 7

³⁴ <http://www.votersunite.org/electionproblems.asp?sort=date&selectvendor=Hart+InterCivic>

³⁵ **Voting machines chop off candidates' names.** Computer glitch affects eSlate machines used in Travis, Hays counties; error cannot be fixed by Nov. 7. AUSTIN AMERICAN-STATESMAN. October 26, 2006. By Tara Copp. <http://www.statesman.com/news/content/news/stories/local/10/26/26glitch.html>. Archive: <http://www.votersunite.org/article.asp?id=6677>

Government Facilitation of Vendor-Dependency

Federal "Help America Vote Act of 2002": a Vendor's Dream Come True Congress sets the stage for increased vendor dependency.

In October of 2002, Congress passed the Help America Vote Act of 2002 (HAVA), which was purported to improve election systems nationwide. However, HAVA set the stage for voting system vendors to significantly increase not only their sales, but also their control over elections.

The federal law did this by:

- ◆ Requiring, nationwide, enhancements to voting systems for every polling place.
- ◆ Suggesting specific high-tech products produced and planned by the major vendors.
- ◆ Providing over \$3 billion to be disbursed to the states to fulfill these and other requirements.
- ◆ Setting a deadline that allowed three years for the requirements to be implemented.

In an attempt to receive the federal grant money under HAVA's time table, the states replaced or enhanced their existing voting systems with systems that vendors claimed were in compliance with HAVA.

The voting system vendors sold billions of dollars of equipment to the states, asserting that it was what the states needed to comply with federal law. And since the equipment was so high-tech, so complex, and so far beyond the average election administrator's range of expertise, the vendors are now charging steep fees for maintenance, election support, and other services the jurisdictions depend on.

Congress set the stage, and the vendors collected a heavy flow of federal funds that paid for much of the cost of the equipment and installation. But HAVA doesn't pay for subsequent years of maintenance, support, and assistance. Now that the local jurisdictions have become dependent on high-tech devices to administer elections, they are being crushed under the invoices from the vendors that maintain and support those devices.

Disturbingly, many of these devices are not auditable as required by HAVA, are not accessible as required by HAVA,³⁶ and do not report votes accurately as required by HAVA.³⁷

Furthermore, the use of these devices increases vendor-dependency not only because of the localities' dependence on the goods and services of the vendors, but also because the American people are forced to depend on the vendors' inherently unobservable software, rendering the public unable to oversee and verify public elections.

³⁶ **Accessibility Review Report for California Top-to-Bottom Voting Systems Review.** Noel Runyan and Jim Tobias. July 26, 2007. http://www.sos.ca.gov/elections/voting_systems/ttbr/accessibility_review_report_california_ttb_absolute_final_version16.pdf. and

Improving Access To Voting: A Report on the Technology for Accessible Voting Systems. February 2007 By Noel H. Runyan. http://www.voteraction.org/reports/nrreport/Improving_Access_to_Voting_.pdf.

³⁷ <http://www.votersunite.org/info/AccuracyIgnored.asp>

Federal Violations of Federal Law Leave States in a Double Bind.

The federal government fails to meet its HAVA deadlines for giving guidance to the states on how to comply with HAVA, yet states are held accountable to comply.³⁸

On October 29, 2002, the President signed HAVA into law. As of February 27, 2003 and continuing until the end of December of 2003, the federal government was in violation of that law. Repercussions of the violation are described below.

HAVA established the federal Election Assistance Commission (EAC) and required the EAC to develop voting systems standards by January 1, 2004. The standards were intended to guide the states as they upgraded their election equipment to meet the HAVA requirements by the January 1, 2006 deadline.

In violation of HAVA, the Congress and the President delayed the appointment of the members of the EAC for more than nine months after the HAVA deadline – two weeks before the statutory deadline for providing the voting system standards. Furthermore, although HAVA authorized up to \$10 million for each year from 2003 to 2005 for the EAC to carry out its duties, Congress appropriated only \$2 million for 2003 and the EAC was not formed in time to use the funds. Only \$1.2 million was appropriated for 2004.³⁹

On April 30, 2004, the EAC reported its concern about this situation to Congress, listing nine of the Commission's missed deadlines caused by the delay in its establishment and the lack of funding. Following the list, the EAC correctly predicts the impact of these delays on the states. The EAC reported:⁴⁰

The implications of these delays are likely to include continued problems with election equipment; other unresolved election administration issues such as voter verifiable paper audit; and the likely inability of States and local election jurisdictions to meet HAVA requirements by statutory deadlines.

As of the end of Fiscal Year 2004, only \$1.2 million (4% of the \$30 million authorized by HAVA) had been made available by the federal government to support the work of the EAC in developing guidance needed by the states to implement HAVA requirements. In contrast, \$1.3 **billion** had been disbursed to the States to pour into the purchase of voting systems without the benefit of the guidance and assistance mandated by HAVA.⁴¹

In January of 2005, the EAC again voiced its concern that states were expected to meet HAVA requirements without benefit of the prerequisite guidance mandated by HAVA:⁴²

Perhaps the most serious implication of the delayed EAC startup is the impact it will have on State procurement of new election equipment and the ability of some States and local election jurisdictions to meet HAVA requirements by statutory deadlines.

³⁸ Adapted from: **Is HAVA Being Abused? Part II: Good for the Goose; Why Not for the Gander?** by Ellen Theisen, June 4, 2005. <http://www.votersunite.org/info/hava-abuse2.asp>.

³⁹ **U.S. Election Assistance Commission. Annual Report. Fiscal Year 2003.** April, 2004. Page 11. http://www.eac.gov/about/report/docs/2003annualreport.pdf/attachment_download/file

U.S. Election Assistance Commission. Fiscal Year 2004 Annual Report. January 2005. Page 3. http://www.eac.gov/about/report/docs/annualreportfy04.pdf/attachment_download/file

⁴⁰ **EAC 2003 Annual Report.** Page 2.

⁴¹ **EAC 2004 Annual Report.** Page 13

⁴² **EAC 2004 Annual Report.** Page 5

In the final section of the report, which discusses the activities planned for 2005, the EAC acknowledges that it cannot provide guidance to the States in time to help them make wise choices as they procure voting systems to comply with HAVA. The Commissioners point out that they can only provide that guidance **after** the states have their new systems in place.⁴³

Many States are directing efforts to meeting the January 2006 deadline ... the Agency expects to receive initial recommendations for voting system standards from the TGDC and NIST for use in voting system procurements, laying the groundwork for future technical assistance to the States.

Nevertheless, on May 10, 2005, in a response to a question from the Louisiana Secretary of State, the U.S. Department of Justice declared that HAVA “unambiguously requires” the states to have their compliant voting systems in place and ready for use in time to meet the “absolute” deadline of January 1, 2006.⁴⁴

Congress, too, was complicit in this decision to force states to meet requirements that were, as yet, undefined by the agency tasked with defining them. The National Association of Counties (NACo), VotersUnite, and other organizations attempted to convince Congress to remove this double bind by extending the states’ deadlines, but those attempts were unsuccessful.⁴⁵

With no federal guidance on how to meet the requirements of HAVA, the states began purchasing new systems, relying almost wholly on the voting system vendors’ assurance that their systems were HAVA-compliant. It wasn’t until July 20, 2005 – **less than six months before the states’ new, HAVA-compliant systems had to be in place and ready for use** – that the EAC provided, in the form of a 4-page advisory, minimal guidance on how to determine if a voting system meets the HAVA requirements.⁴⁶

The massive breakdowns and other problems that occurred in the 2006 primary elections across the country demonstrate the result of the federal government’s insistence on requiring the cart before the horse.⁴⁷

⁴³ EAC 2004 Annual Report. Page 30

⁴⁴ <http://www.usdoj.gov/crt/voting/hava/lavotsyst.htm>

⁴⁵ Letter to U.S. Senate and House Committees on Appropriations.

<http://www.votersunite.org/info/HAVADeadlineLetter.pdf>

⁴⁶ EAC Advisory 2005-004: How to determine if a voting system is compliant with Section 301(a) – a gap analysis between 2002 Voting System Standards and the requirements of Section 301(a).

http://www.eac.gov/election/docs/eac-20advisory-2005-004301a.pdf/attachment_download/file

⁴⁷ <http://www.votersunite.org/info/trainwreck.asp>

States Escalate Dependence on Vendors.

Mandates and decisions of state and local legislators and election officials facilitate the vendors' ability to undermine elections.

Legislators and election officials – motivated by the need to quickly comply with federal law, concerned about losing millions in federal grants, threatened by lawsuits from advocates for people with disabilities, and informed in large part by voting system vendors – took actions that facilitated the vendors' undermining of elections.

After HAVA was enacted, every state had over three years until the deadline for compliance. Any state (or a collaboration of states) might have commissioned experts to develop a secure, accessible, reliable voting system for all jurisdictions in the state to use. Such a system would have been fully owned by the people without any licensing fees and could have been maintained by technicians accountable to the state.

Such a system would have cost a fraction of what states have paid for insecure, inaccessible, unreliable voting systems that have forced jurisdictions to depend on voting system vendors for costly maintenance, support, and upgrades.

Such a system would not have been subject to illegal installations, contract violations, or deliveries of broken equipment the vendor was slow to repair. Nor would counties using such a system be at the mercy of vendors holding them hostage for the support on which the counties depend.

But no state used the time and funding provided by HAVA to commission the development of an independent, state-owned voting system.

Instead, they took action as if they were dependent on the big voting system corporations for turn-key products to run elections. And by those actions, the states made it so.

Though Congress set the stage for increased dependency on vendors, lower levels of government are also responsible, in a variety of ways, for facilitating the vendors' undermining of our election structure.

State legislatures

As if electronic equipment manufactured by the voting system corporations was their only option for HAVA-compliance, state legislatures passed laws that made such equipment the only realistic option for local jurisdictions. For example:

- ◆ New York state law requires voting systems to include specific features of systems currently manufactured by the big corporations.

§ 7-202. Voting machine or system; requirements of.

... f. be provided with a "protective counter" which records the number of times the machine or system has been operated since it was built and a "public counter" which records separate election;⁴⁸

This provision (one of many similarly specific provisions in New York election law) prevents innovative solutions that might provide a better, or even a different, way of accomplishing the goals of "protective counters" and "public counters."

⁴⁸ <http://www.elections.state.ny.us/NYSBOE/download/law/2006NYElectionLaw.pdf>. page 203 (pdf page 231)

- ◆ Maryland law disallows independent development of a government-owned voting system:

(a) In general.- Acquisition of a voting system shall be by purchase, lease, or rental and shall be exempt from State, county, or municipal taxation.⁴⁹

In an attempt to ensure the reliability of electronic voting equipment, most states passed laws requiring that their voting systems meet federal standards and/or be certified by the Election Assistance Commission (EAC). For example:

- ◆ Washington State law requires (with some exceptions) that voting systems be tested and approved by a test lab authorized by the EAC.

No voting device shall be approved by the secretary of state unless it:
...(6) Except for functions or capabilities unique to this state, has been tested and certified by an independent testing authority designated by the United States election assistance commission.⁵⁰

- ◆ Idaho law requires approval by a test lab authorized by either NASED or the EAC:

(1) ... In order for any voting machine or vote tally system to be certified in Idaho it must meet the federal election commission standards and be approved for use by an independent testing authority sanctioned by the national association of state election directors (NASED) or be certified by the federal election assistance commission.⁵¹

Because of the high fees charged by the independent testers that determine compliance, such laws, in practice, prohibit the use of any voting systems other than those manufactured by corporations large enough to afford the expense.

State and Local Election Officials

Many state and local officials dismiss evidence of defective services provided by vendors and continue to turn to the vendors for those services. For example:

- ◆ Ballot programming, which provides the means by which marks on a ballot or touches on a screen are translated into votes, is done separately for every election and is never subjected to independent testing. Even if the underlying software were error free, an error in ballot programming could pervert the results or even reverse the outcome of an election.

And it has.⁵² In election after election, ballot programming errors cause inaccurate results. Dozens of such errors by ES&S alone have been reported in the news, yet hundreds of jurisdictions continue to pay ES&S to program their elections.

Many election officials also dismiss voting system studies conducted by respected experts, consultants, and universities when those studies discredit the voting systems. These officials choose, instead, to rely on the assurances and claims of voting system vendors, despite the perennial and well-known tendency of vendors in general to present biased information about their products in order to make a sale and protect their reputations. For example:

⁴⁹ § 9-105. Acquisition of voting systems.

<http://www.michie.com/maryland/lpext.dll?f=templates&fn=main-h.htm&2.0>

⁵⁰ RCW 29A.12.080. Requirements for approval. <http://apps.leg.wa.gov/RCW/default.aspx?cite=29A.12.080>

⁵¹ 34-2409. Examination Of Machines By Secretary Of State Prior To Adoption.

<http://www3.state.id.us/cgi-bin/newidst?sctid=340240009.K>

⁵² Vote-Switching Software Provided by Vendors – A Partial List Reported in the News. Compiled by VotersUnite. <http://www.votersunite.org/info/Vote-Switchinginthenews.pdf>

- ◆ **Maryland State Board of Elections, 2003-2004.** The State of Maryland purchased Diebold touch screen systems for \$55.6 million dollars, even after two expert studies – one of them commissioned by Maryland – declared the system to be unsuitable for use in elections.

In July of 2003, four scientists from Johns Hopkins and Rice Universities studied the source code of the software used for Diebold’s tabulation equipment. Their report states:

We conclude that this voting system is unsuitable for use in a general election.⁵³

Diebold responded that the researchers didn’t consider how elections officials use the machines in actual elections.⁵⁴

In August of 2003, Maryland was considering the purchase of Diebold’s touch screen voting system and hired a consulting firm (SAIC – Science Applications International Corporation) to analyze Diebold’s system. The firm’s report recommended 17 “mitigation strategies” for defects the team found. The executive summary states:

The system, as implemented in policy, procedure, and technology, is at high risk of compromise.⁵⁵

Diebold claimed that the report didn’t find much fault with the equipment or software, but that most of the criticism addressed how election workers set up and monitored the machines.⁵⁶

Despite the severe defects identified in the Johns Hopkins/Rice and SAIC reports, Maryland finalized the \$55.6 million dollar purchase from Diebold.⁵⁷

A subsequent study by RABA Technologies (commissioned by Maryland in January 2004) also found severe defects in the Diebold system. The computer science experts who tested the system gave it a failing grade.⁵⁸

However, the press release from Diebold President Bob Urosevich said:

The findings in the SAIC and RABA reports both confirm the accuracy and security of Maryland’s voting procedures and our voting systems as they exist today.⁵⁹

The Maryland Board of Elections accepted Diebold’s claims and announced:

The findings in the SAIC and RABA reports both confirm the accuracy and security of Maryland’s voting system and procedures as they exist today.⁶⁰

⁵³ **Analysis of an Electronic Voting System.** July 23, 2003; By Tadayoshi Kohno, Adam Stubblefield, Aviel D. Rubin, and Dan S. Wallach. <http://avirubin.com/vote/analysis/index.html>

⁵⁴ **Touch-Screen Voting Gets State OK, With Security Fixes.** FoxNews.com. September 25, 2003. By Michael Duck. <http://www.foxnews.com/story/0,2933,98248,00.html>. Archived: <http://www.votersunite.org/article.asp?id=633>

⁵⁵ **Risk Assessment Report: Diebold AccuVote-TS Voting System and Processes.** September 2, 2003; by SAIC. http://www.elections.state.md.us/pdf/risk_assessment_report.pdf

⁵⁶ **Report critical of Diebold system. Independent study for Maryland finds voting machines have high-risk weaknesses.** Sep. 27, 2003. Beacon Journal. By John Russell and Erika D. Smith. Archived at: <http://www.votersunite.org/article.asp?id=629>

⁵⁷ **New voting machines to be reviewed: General Assembly asks for its own analysis of possible vulnerability.** Baltimore Sun. October 21, 2003. By David Nitkin. Archived: <http://www.votersunite.org/article.asp?id=813>

⁵⁸ **E-Vote Still Flawed, Experts Say.** Wired News. January 29, 2004. By Kim Zetter <http://www.wired.com/politics/security/news/2004/01/62109>

⁵⁹ **Maryland Approves Electronic Voting Machines Despite Security Flaws.** The Sentinel. By Nia Davis, Staff Writer. <http://www.thesentinel.com/286696744072607.php>

⁶⁰ **Response to: Department of Legislative Services Trusted Agent Report on Diebold AccuVote-TS Voting System.** Linda H. Lamone, Administrator, Maryland State Board of Elections. January 29, 2004. http://mlis.state.md.us/Other/voting_system/sbe_response.pdf

Since the time the three reports were published, NASED has continued to approve Diebold's touch screen systems, states have continued to certify them for use, and jurisdictions have continued to buy them – **without Diebold's ever fixing the most egregious defects identified in the 2004 RABA report.**⁶¹

- ◆ **County Commissioners, Emery County, Utah, 2006.** Lt. Gov. Herbert and the county commissioners defended Diebold and the use of the vendor's defective equipment and dismissed the election director whose computer expert exposed the defects.

Emery County Elections Director Bruce Funk had concerns about memory discrepancies he noticed in his newly-delivered Diebold TSx (touch screen) voting system. At the suggestion of Black Box Voting, he invited Finnish security expert Harri Hursti to examine the voting machines. Mr. Hursti found several ways in which the machines were vulnerable to vote-manipulation – one of them particularly hazardous. He stated in his report that:

One of them, however, seems to enable a malicious person to compromise the equipment even years before actually using the exploit, possibly leaving the voting terminal incurably compromised.⁶²

This flaw in the machines' software is so severe that Dr. David Dill, Dr. Doug Jones, and Dr. Barbara Simons – three nationally respected computer experts who had been investigating such systems for years – responded with:

We must ask, how did software containing such an outrageous violation come to be certified, and what other flaws, yet to be uncovered, lurk in other certified systems?⁶³

These scientists also noted that the defects Mr. Hursti found had been “documented in analysis, commissioned by Maryland and conducted by RABA Technologies,” and they pointed out that:

For over two years, Diebold has chosen not to fix the security holes, and Maryland has chosen not to alert other states or national officials about these problems.

But the officials didn't thank Mr. Funk for exposing a defect that could collapse elections in Emery County, as well all of Utah. Nor did they demand that Diebold fix the defects or return the money. Nor did they sue Diebold for breach of contract or false claims.

Instead, Lt. Gov. Herbert and the Emery County commissioners met behind closed doors with Diebold representatives, sided with Diebold's criticism of Mr. Funk for testing the equipment, insisted on keeping and using the Diebold machines, and ultimately released Mr. Funk from his position.⁶⁴

⁶¹ **The Diebold Bombshell.** OpEd News. July 23, 2006. by David Dill, Doug Jones and Barbara Simons. http://www.opednews.com/articles/opedne_david_di_060723_the_diebold_bombshel.htm

⁶² **Diebold TSx Evaluation. SECURITY ALERT:** May 11, 2006. A Black Box Voting Project. Prepared by: Harri Hursti. <http://www.blackboxvoting.org/BBVtsxstudy.pdf>, page 2.

⁶³ **The Diebold Bombshell.**

⁶⁴ **County clerk refuses to conduct election with Diebold machines.** Emery County Progress. March 2006. By PATSY STODDARD, Editor. http://www.ecprogress.com/print.php?tier=1&article_id=3932 and <http://www.bbvforums.org/cgi-bin/forums/board-profile.cgi?action=rate&topic=1954&page=27634&post=21457>

Unaccountable, Untrustworthy, Overcharging, Bullying for Control

Unaccountable

Vendors' contracts contain blanket disclaimers, essentially saying "We don't warrant that our voting systems or services are fit for the purpose of holding elections."

Remarkably similar standard language in the contracts of the four major voting system vendors disclaim all accountability for the equipment, software, and services for counting votes. However, despite this contractual language, the question remains to be decided by the courts whether these companies are vulnerable to breach of contract claims for marketing defective products and services.

Hart InterCivic. The following words in Hart InterCivic's 2006 contract with Yolo County, California are typical of the warranty terms in Hart InterCivic contracts. This same disclaimer appears in Hart's proposed 2005 contract with the State of Texas.

5. Warranty Terms: ... HART DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, TITLE AND NONINFRINGEMENT FOR ALL EQUIPMENT, SOFTWARE, AND SERVICES. THE EXPRESS WARRANTIES EXTEND SOLELY TO CLIENT. SOME STATES (OR JURISDICTIONS) DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES, SO THE ABOVE LIMITATION MAY NOT APPLY TO CLIENT.⁶⁵

Diebold. The 2006 contract between Diebold Election Systems, Inc. (DESI, now "Premier") and Larimer County, Colorado gives an example of Diebold's disclaimer.

8.5. No Other Warranties. DESI DISCLAIMS ALL OTHER REPRESENTATIONS AND WARRANTIES, WHETHER WRITTEN, ORAL, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY BASED ON A COURSE OF DEALING, COURSE OF PERFORMANCE OR USAGE OF TRADE.⁶⁶

Sequoia. The company's 2001 contract with Palm Beach, Florida contains language representative of its contracts, which essentially claims "we aren't accountable for anything, even breach of this contract."

B. Other Warranties. ... SEQUOIA EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, NOT SPECIFICALLY SET FORTH HEREIN, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WHATSOEVER SHALL SEQUOIA BE LIABLE FOR INDIRECT, SPECIAL OR INCONSEQUENTIAL DAMAGES AS A RESULT OF ITS BREACH OF ANY OF THE PROVISIONS OF THIS AGREEMENT.⁶⁷

⁶⁵ http://www.window.state.tx.us/procurement/cat_page/578-N1HarteSlateStandardAgreement.pdf, page 4.

Also http://accurate-voting.org/contracts/CA/Yolo/CA_yolo_la_2006.pdf, page 3

⁶⁶ http://accurate-voting.org/contracts/CO/Larimer/CO_larimer_2006.pdf, page 3

⁶⁷ http://accurate-voting.org/contracts/FL/Palm_Beach/FL_palmbeach_2001.pdf, p 20,21

At the end of the contract with Palm Beach, Sequoia's software license and warranty warrants the ROM (the hardware chip that holds the software). So, if the chip turns out to be unreadable, the company will furnish another ROM with the same software.

Then, reiterating and even strengthening its previous disclaimer, Sequoia disclaims accountability for everything else, even the documentation, functionality, operation, and accuracy of the software.

1.2 LIMITED WARRANTY

Licensor warrants to Licensee the ROM(s) on which the Program is furnished will be free from defect in materials and workmanship under normal use and conditions for the period of the Warranty Agreement specified in the Purchase Agreement from the date of delivery of this software package to you as evidenced by a copy of your receipt.

EXCEPT AS STATED ABOVE IN THIS SECTION, THE PROGRAM AND DOCUMENTATION ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR [sic] MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. LICENSOR DOES NOT WARRANT THE FUNCTIONS CONTAINED IN THE PROGRAM WILL MEET YOUR REQUIREMENTS OR THAT THE OPERATION OF THE PROGRAM WILL BE UNINTERRUPTED OR ERROR-FREE.⁶⁸

ES&S. In its 2001 contract with Sarasota County, Florida, ES&S included this disclaimer of accountability in its "Miscellaneous" article.

Article 3: Miscellaneous. e. Exclusive Remedies. ... ES&S EXPRESSLY DISCLAIMS ALL WARRANTIES, WHETHER EXPRESS OR IMPLIED, WHICH ARE NOT SPECIFICALLY SET FORTH IN THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY.⁶⁹

By 2005, ES&S had joined with the other vendors by also disclaiming "fitness for a particular purpose" as shown in its contract with Jefferson County, Washington.

Article 3: Miscellaneous. e. Exclusive Remedies. ... ES&S EXPRESSLY DISCLAIMS ALL WARRANTIES, WHETHER EXPRESS OR IMPLIED, WHICH ARE NOT SPECIFICALLY SET FORTH IN THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.⁷⁰

⁶⁸ http://accurate-voting.org/contracts/FL/Palm_Beach/FL_palmbeach_2001.pdf, pg 163

⁶⁹ http://accurate-voting.org/contracts/FL/Sarasota/FL_sarasota_2001.pdf, page 7,8

⁷⁰ http://accurate-voting.org/contracts/WA/Jefferson/WA_jefferson_2005.pdf, page 5.

Untrustworthy.

The corporations controlling our elections have long histories of unethical, deceitful, and even illegal behavior.

Gary L. Greenhalgh, who served with the Federal Election Commission from 1975 to 1985 as director of the FEC clearinghouse on election administration and the office of information, said:

Voting machines are different from other things bought by a government.

In purchasing voting equipment, election officials must rely heavily on the integrity, honesty and reliability of the vendor selling them this equipment.⁷¹

Entrusting our elections – and thus our democracy – to private corporations would be reckless, even if those corporations had proven track records of competence, integrity, and ethical behavior. But information easily within reach in the public domain shows that corporations controlling our elections have long histories of unethical, deceitful, and even illegal behavior.

Entrusting our elections to untrustworthy corporations is beyond reckless.

In a 2007 investigation into how well the voting system vendors attempting to sell equipment to New York State (Diebold, ES&S, and Sequoia) complied with the state's requirements for "responsible contractors," the author found that none of the vendors met the criteria.⁷² The information that follows summarizes a **small sampling of the findings** that are explained in more detail in that report and includes findings about Hart InterCivic as well as Microvote, a company with a smaller market share.

Diebold Election Systems, Inc.

Formal Complaints. December 13, 2005. A Securities Fraud Class Action suit was filed against Diebold, Inc. naming eight top executive officers in the company as co-defendants. The suit was filed by plaintiff Janice Konkol, alleging securities fraud against the North Canton, Ohio-based manufacturer of voting systems and ATM machines on behalf of investors who owned shares of Diebold stock and lost money due to an alleged fraudulent scheme by the company and its executives to deceive shareholders during the "class period" of October 22, 2003 through September 21, 2005.⁷³

In the first quarter of 2006, the Securities and Exchange Commission began an informal investigation and converted it to a formal investigation in the second quarter. As of March 31, 2006, there were 10 outstanding lawsuits against Diebold, charging SEC violations.⁷⁴ On October 20, 2006, several pending lawsuits were consolidated.⁷⁵

⁷¹ **FBI Talks to Ex-Shoup Exec; Voting Machine Testimony Resumes.** July 11, 1990. BY: Terry Keeter; The Commercial Appeal. Archived at: <http://www.madcowprod.com/shoupsoupadupe.htm>.

⁷² **Voting System Companies Fail to Meet New York State's Requirements for "Responsible Contractors."** July 10, 2007. by Ellen Theisen, VotersUnite.Org. <http://www.votersunite.org/info/IrresponsibleVendors.pdf>.

Note: Liberty Election Systems was included in the 2007 study, but is not mentioned in this one since none of its equipment is currently installed in the United States. See also two letters to New York State officials from Andi Novick, Esq. <http://www.votersunite.org/info/VendorsProhibited.pdf> and <http://www.votersunite.org/info/UpdatedVendorIrresponsibility807.pdf>

⁷³ http://securities.stanford.edu/1035/DBD05_01/20051213_f01c_052873.pdf

⁷⁴ <http://www.sec.gov/Archives/edgar/data/28823/000095015206004170/119791ae10vq.htm#111>

⁷⁵ http://www.milbergweiss.com/files/tbl_s47Details%5CFileUpload265%5C228%5CDieboldLPDecision.pdf

Civil Fines and Injunctions Imposed by Governmental Agencies. Alameda County, California. March, 2005. Diebold paid \$2.6 million to settle a false claims lawsuit filed by private citizens, Alameda County, and the California Attorney General.

A Qui Tam false claims lawsuit was filed against Diebold Election Systems on behalf of Alameda County, California by Bev Harris, Executive Director of Black Box Voting, and Jim March, a board member of Black Box Voting.

In September, 2004, California's Attorney General Bill Lockyer joined in the false claims suit, saying that he was suing Diebold over fraudulent claims he believes the company has made with regards to their electronic voting machines. In November 2004, Diebold announced its intent to settle, and the case was formally settled in March 2005, calling for Diebold to pay a total of \$2.6 million.⁷⁶

Hiring Key Personnel With Criminal Convictions. Seattle, Washington. December 2003.

Investigative journalist Bev Harris announced her discovery that a Diebold programmer, Jeffrey Dean, had been convicted of stealing money by tampering with computer records. According to a public court document released before Diebold hired him, Dean served time in a Washington state correctional facility for stealing money and tampering with computer files in a scheme that "involved a high degree of sophistication and planning."⁷⁷

Less than Satisfactory Performance. 1998 through July 2008. Failures of hundreds of Diebold machines were reported in the news across the United States. A partial list includes such problems as tabulation errors, vote-switching on electronic voting machines, malfunctioning voter access cards, breakdowns on election day, paper jams, data transfer failures, and excessively high undervotes (ballots failing to register a vote).⁷⁸

Election Systems & Software (ES&S)

Violations of State Laws, Civil Fines and Injunctions, Ethical Violations. March, 2004.

Indiana. The election commission discovered that ES&S had installed an uncertified version of firmware in the iVotronic electronic voting machines in four counties. When confronted, representatives agreed to reinstall the certified version. Then the commission learned that the certified version didn't tabulate the votes correctly, so they allowed the use of the uncertified version but required ES&S to put up a \$10 million bond to insure against problems and lawsuits. Election Commissioner Brian Burdick, said:⁷⁹

I just think I was absolutely lied to by your CEO and I'm more than on the slow burn about it. I sat in this room and you all lied to me.

In April of 2004, specifically in response to this unethical behavior of ES&S, the Indiana State legislature passed a law providing penalties for voting machine vendors who act on their own initiative without the permission of the state.⁸⁰

⁷⁶ **Attorney General Lockyer Announces \$2.6 Million Settlement with Diebold in Electronic Voting Lawsuit.**

Attorney General's November 10, 2004 Press Release. <http://ag.ca.gov/newsalerts/release.php?id=843>

⁷⁷ **Con Job at Diebold Subsidiary.** Wired News. December 17, 2003. by AP.

http://www.wired.com/news/evote/0,2645,61640,00.html?tw=wn_tophead_3

⁷⁸ **Diebold in the News – A Partial List of Documented Failures.** Compiled by VotersUnite.

<http://www.votersunite.org/info/Dieboldinthenews.pdf> and the online problem log, maintained by VotersUnite.

<http://www.votersunite.org/electionproblems.asp>

⁷⁹ **Election Commission Bails Out Voting Machine Maker In Time for May Primary.** March 11, 2004;

<http://www.verifiedvotingfoundation.org/article.php?id=1529>

⁸⁰ **Penalties Established for Voting Machine Companies That Don't Deliver.** April 14, 2004;

<http://www.verifiedvotingfoundation.org/article.php?id=1846>

In August of 2005, Indiana imposed severe economic penalties on ES&S when the company, once again, installed uncertified software in Marion County's voting systems. ES&S paid the county \$1.2 million to settle a lawsuit.⁸¹

Breach of Contract. April, 2006. Oregon. Secretary of State Bradbury sued ES&S for breach of contract and nullified the contract. Secretary Bradbury said:⁸²

We will not leave our elections in the hands of companies that do not follow through on their obligations, and we will not be coerced into altering our contracts.

The suit was settled out of court, with ES&S compensating the state in tabulating equipment.⁸³ (See page 48 for the alternative Oregon developed.)

Formal Complaints Filed by Governmental Agencies. May 2006. West Virginia. Secretary of State Betty Ireland filed a formal complaint against ES&S regarding its poor performance. The state's press release said, in part:⁸⁴

ES&S's delays in programming ballots for the new electronic voting machines placed great hardship on state and county election officials in getting ready for the May 9th Primary Election.

Less than Satisfactory Performance. 1996 through July 2008. Dozens of reports of ES&S equipment failures were in the news across the United States. A partial list (over 100 reports) includes such problems as ballot programming errors that affected outcomes, vote-flipping on selection screens and review screens, breakdowns on election day, battery failures, vote counts that reached 32,000 and began decreasing, malfunctioning vote data cartridges, contests that failed to appear on computer ballots, screen freezes, data transfer failures, electronic ballots irretrievably lost, excessive and unexplainable undervote rates.⁸⁵

Sequoia Voting Systems

Criminal Indictments/ Convictions of Key Personnel. David Philpot, Sequoia's exclusive agent in Louisiana, was convicted of bribery in a 1999 kickback scandal. Phil Foster, a Sequoia salesman indicted in 2001 by a grand jury for related crimes, had been granted immunity for his testimony in the scandal and was not tried. Foster has since risen in the company and at present is serving as the Vice President Administration & Strategies.⁸⁶ He served on the Palm Beach County Election Technology Advisory Committee, from September 2005 through May 2006 and continues to advise the county's elections supervisor.⁸⁷

⁸¹ **Team 4 Investigates Electronic Voting.** WTAE-TV. February 17, 2006.

<http://www.thepittsburghchannel.com/news/7161565/detail.html>, and

County struggles with voting quandary. Daily Journal News. May 14th, 2004. By Bryan Corbin.

<http://www.verifiedvotingfoundation.org/article.php?id=2095>

⁸² <http://www.sos.state.or.us/executive/pressreleases/2006/0420.html> (press release)

http://www.votetrustusa.org/pdfs/Oregon/Oregon_ESSComplaint_041906.pdf (lawsuit)

⁸³ Related to the author by Gene Newton, Oregon's HAVA program director.

⁸⁴ <http://www.wvsos.com/pressoffice/historical/051006essproblems.pdf> (Press Release)

Ireland Files Complaint Over Voting Machines: Vendor ES&S blamed for causing hardships for counties. State Journal. May 10, 2006. By Jack Kane. <http://www.statejournal.com/story.cfm?func=viewstory&storyid=10786>

⁸⁵ **ES&S in the News – A Partial List of Documented Failures.** Compiled by VotersUnite.

<http://www.votersunite.org/info/ES&Sinthenews.pdf> and the online problem log, maintained by VotersUnite.

<http://www.votersunite.org/electionproblems.asp>

⁸⁶ **Exec's indictment hits Oakland vote firm.** San Francisco Business Times. November 16, 2001. John Rhine.

<http://sanfrancisco.bizjournals.com/sanfrancisco/stories/2001/11/19/story4.html>

⁸⁷ **Palm Beach County Election Technology Advisory Committee Meeting Minutes.** September 15, 2005

http://www.votersunite.org/info/PBC_ETAC_Meeting_Minutes.pdf and

Ethical Violations. November 2002. Bernalillo County, New Mexico. Vice President Howard Cramer failed to inform New Mexico officials of a known software bug that tabulated votes incorrectly. The Albuquerque Tribune reported:⁸⁸

Although about 48,000 people had voted early on 212 Sequoia-supplied touch-screen computers at six sites in the county, the initial figures given to the commissioners indicated that no race - not even for governor - showed a total of more than about 36,000 votes.

Sequoia admitted that the same error had been encountered in Clark County, Nevada, several weeks earlier, but Sequoia had not informed the election officials in Bernalillo County.

Ethical Violations. November 2006. Denver. After Sequoia's electronic pollbook system caused chaos in the general election, Sequoia's Vice President Howard Cramer lied to the mayor's panel in an attempt to blame the election commissioners for Sequoia's failure.

Cramer attempted to convince the mayor's panel that the software Sequoia developed for Denver was not intended as an electronic pollbook, but documents proved that Sequoia had been commissioned to build software precisely for that purpose.⁸⁹

Less than Satisfactory Performance. 1996 through July 2008. Dozens of reports of Sequoia equipment failures were reported in the news across the United States. A partial list includes such problems as votes dropped on touch screen systems, screen freezes, tabulation errors, vote-switching on electronic voting machines, breakdowns on election day, contests failing to appear on computer ballots, paper jams, data transfer failures, malfunctioning vote data cartridges, battery failures, and software that lost votes during tabulation.⁹⁰

Hart InterCivic

Hart InterCivic was not mentioned in the 2007 study, since it was not actively marketing in New York State at the time. However, evidence shows that it, too, falls short of accepted criteria for "responsible contractors."

Ethical Violations. In mid-2004, William Singer, a former technical specialist with Hart InterCivic, wrote letters to the Texas and Ohio Secretaries of State, warning them of fraudulent claims and misrepresentations committed by Hart InterCivic.

Palm Beach County Election Technology Advisory Committee Final Report. August 23, 2006.

http://www.votersunite.org/info/PBC_ETAC_finalreport.pdf, and

County commissioner calls for inquiry into 'mishaps and irregularities in vote tabulation',

South Florida Sun-Sentinel, July 3, 2008, by Josh Hafenbrack

<http://www.sun-sentinel.com/news/local/palmbeach/sfl-0703countyvotes,0,6840356.story>,

Archived at: <http://www.votersunite.org/article.asp?id=7813>

⁸⁸ **Election results certified after software blamed.** Albuquerque Tribune; November 19, 2002; By Frank Zoretich, Tribune Reporter. http://www.abqtrib.com/archives/news02/111902_news_vote.shtml

⁸⁹ **City asked for pollbook software; Documents refute vendor.** December 1, 2006. Denver Post. By George Merritt. http://www.denverpost.com/extremes/ci_4752696. Archived at <http://www.votersunite.org/article.asp?id=6922>

⁹⁰ **Sequoia in the News – A Partial List of Documented Failures.** Compiled by VotersUnite.

<http://www.votersunite.org/info/Sequoiaintheneeds.pdf> and online problem log, maintained by VotersUnite.

<http://www.votersunite.org/electionproblems.asp>

When neither Secretary responded, Mr. Singer wrote to them again, and again they did not respond. So, in 2006, Mr. Singer filed a federal false claims lawsuit (Qui Tam), "...to recover penalties and damages arising from false statements Hart made regarding the accuracy, testing, reliability, and security of its voting system,..."⁹¹

The lawsuit remained sealed until March 2008, when the U.S. Attorney's office decided it would not join Singer in the litigation. In July 2008, the U.S. Supreme Court decision in "Rockwell Intl Corp. v. U.S." made it financially prohibitive for Mr. Singer and his law firm (Levin Papantonio Thomas Mitchell Echsner & Proctor, P.A) to continue the suit.⁹²

Less than Satisfactory Performance. 1996 through July 2008. Dozens of reports of Hart InterCivic's equipment failures were reported in the news across the United States. A partial list includes problems such as machine breakdowns causing thousands of voters to be disenfranchised, ballots accepted by the machine before the voter voted, machines presenting choices for parties with no candidates, machines failing to present all the candidates on the screen, candidates' names truncated on the screen, vote-switching, screen freezes, default selection for President, failure to read paper ballots, paper ballots scanned incorrectly, inability to handle high volume of write-in votes, ballot programming errors, and one machine that began literally smoking during an election.⁹³

Microvote

Microvote has only a minor share of the voting machine industry. However, it is notable that the history of this vendor is replete with instances of untrustworthy behavior.

Civil Fines. Montgomery County, Pennsylvania sued Microvote after the machines malfunctioned in elections in 1994 and 1995. The attorney's press release gives more details.

The County contended that the voting system malfunctioned after the voting machines shut down randomly and unpredictably as a result of their microcomputer chips sensing internal power surges emitted by the motors that scrolled the ballot pages. This resulted in long lines, in voters leaving polling stations before they voted, and in lost votes. In addition, after the polls closed, the software malfunctioned when counting the votes, causing Microvote employees to report the wrong results to the media.⁹⁴

The press release also states that the jury returned a verdict against Microvote and Westchester Fire Insurance Company in excess of \$1,048,500. An appellate court upheld the verdict.

Violations of State Laws. In July 2007, Microvote was fined \$350,000 in civil penalties and investigative costs for 198 violations of Indiana election law after it was discovered that MicroVote sold and installed uncertified equipment without functions required by Indiana State election law.⁹⁵

⁹¹ http://www.bradblog.com/Docs/Singer_v_HartInterCivic_OriginalComplaint.pdf

⁹² **Whistleblower: Voting Machine Company Lied to Election Officials About Reliability of Machines.** Wired Blog Network. March 27, 2008. By Kim Zetter. <http://blog.wired.com/27bstroke6/2008/03/whistleblower-v.html> and <http://www.bradblog.com/?p=2544> and <http://www.bradblog.com/?cat=364>

⁹³ **Hart InterCivic in the News – A Partial List of Documented Failures.** Compiled by VotersUnite. <http://www.votersunite.org/info/Hartinthenews.pdf> and online problem log, maintained by VotersUnite. <http://www.votersunite.org/electionproblems.asp>

⁹⁴ **Elliott Greenleaf Wins in U.S. Court of Appeals, Affirming Multi-Million Dollar Settlement and Jury Verdict.** Law Offices of Elliott Reihner & Siedzickowski, P.C. July 20, 2003. <http://www.elliottreihner.com/July2003-1.html>

⁹⁵ **Company fined for election violations.** IndyStar.com. July 27, 2007. By Mary Beth Schneider <http://www.votersunite.org/article.asp?id=7182>

In spring of 2004, WISH TV in Indianapolis conducted an interview with executives from Microvote, whose voting systems were used in Pennsylvania, Indiana, and North Carolina. Information from that interview reveals more about the untrustworthiness of the company's executives and other personnel.⁹⁶

Criminal Indictments/ Convictions of Key Personnel.

I-Team: Tell us about Mecklenberg County, North Carolina, a federal investigation and federal indictments against the county's election administrator and MicroVote salesman Ed O'Day. He was convicted of bribery and kickbacks made over a seven-year period, according to stories in the Charlotte Observer.

Ries Jr. [President of MicroVote]: Ed O'Day was an independent agent of MicroVote – not a direct employee but a manufacturer's representative for our product in North and South Carolina. He was convicted of bribing a public official, something we had no knowledge of, nor did we have any input. Unfortunately he's still out selling equipment to election officials, which surprised us all.

Ethical Violations.

I-Team: What about Gary Greenhalgh, a former Federal Election Commission official who was your national sales director. You sued him in 1997. Why?

Ries Jr.: Gary Greenhalgh, on the other hand, was a direct employee. Trade secret violations there. Probably the most damaging, he was actually selling the equipment being released from Montgomery County to our customers on the side. And it violated his working contract with us that he was selling outside of MicroVote's jurisdiction.

Note: As of September, 2004 Gary Greenhalgh became Vice President of ES&S.⁹⁷

Less than Satisfactory Performance. 1994 through July 2008. In addition to breakdowns and malfunctions, newspapers reported that Microvote equipment **failed to tabulate votes correctly** in these eleven counties:⁹⁸

Montgomery County, Pennsylvania (1995, 1996)	Pender County, North Carolina (2004)
Putnam County, Tennessee (2002)	Sumner County, Tennessee (2005)
Boone County, Indiana (2003)	Grant County, Indiana (2006)
Grant County, Indiana (2004)	Delaware County, Indiana (2006)
Jasper County, South Carolina (2004)	Lake County, Indiana (2006, 2007)
Mecklenburg County, North Carolina (2004)	

⁹⁶ **An I-Team 8 Investigation: Excerpts from Interviews with MicroVote Executives**, WISH TV 8 I-Team, By Rick Dawson and Loni Smith McKown, March 2004. <http://www.wishtv.com/Global/story.asp?S=1647598>
Archived at: <http://www.votersunite.org/article.asp?id=7814>

⁹⁷ <http://www.cabellcounty.org/minutes/2004/MIN%209-9-04.htm>

⁹⁸ **Microvote in the News – A Partial List of Documented Failures.** Compiled by VotersUnite.
<http://www.votersunite.org/info/MicroVoteinthenews.pdf> and online problem log, maintained by VotersUnite.
<http://www.votersunite.org/electionproblems.asp>

Gouging Made Easy: “they already bought the system.”

As local elections become more dependent on vendor support, the vendors charge exorbitant prices.

While HAVA paid for much of the initial cost of new voting systems, local governments are left on their own to pay for annual license fees, maintenance agreements, services, and upgrades required for the systems they already bought.

Diebold Internal Communications.

A normally unstated policy that appears to be adopted by all the voting system vendors is clearly, if offensively, expressed in a January 3, 2003 internal Diebold email sent by Ken Clark, principal engineer for Diebold Election Systems (now “Premier”) and later made publicly available on the Internet. Mr. Clark was responding to a then-recent University of Maryland study of the Diebold equipment and the idea of adding voter-verifiable paper record (“receipt”) printers to each Diebold machine in Maryland.⁹⁹

Mr. Clark’s initial internal email read (highlighting in the original):

There is an important point that seems to be missed by all these articles: *they already bought the system*. At this point they are just closing the barn door. Let’s just hope that as a company we are smart enough to charge out the yin if they try to change the rules now and legislate voter receipts.

When asked to clarify the meaning of “out the yin”, Mr. Clark wrote further:

Short for ‘out the yin-yang’. ...

Any after-sale changes should be prohibitively expensive. Much more expensive than, for example, a university research grant.

Webster County, Iowa.

On-going fees charged by ES&S have doubled the cost of elections. In 2005, the county budgeted \$49,000 for elections, but in 2007 the cost skyrocketed to \$110,700 for only 29 precincts and 25,300 registered voters. According to County Auditor Carol Messerly the **increase was primarily because of the maintenance contracts** for the new optical scanners and ballot-marking devices.¹⁰⁰ At this point, the county saw no realistic alternative to paying the exorbitant costs of maintenance since they had already bought the system.

⁹⁹ ‘Gouging’ memo leaves Diebold red-faced: Paper trail? Sure, that’ll be \$1200 for a printer

The Register. December 16, 2003. By Andrew Orłowski in San Francisco.

http://www.theregister.co.uk/2003/12/16/gouging_memo_leaves_diebold_redfaced/, and

E-mail stolen from Diebold is a call to gouge Maryland.

The Gazette. December 10, 2003 by Steven T. Dennis, Staff Writer.

<http://www.gazette.net/200350/princegeorgescty/state/192070-1.html>

Archived at <http://www.votersunite.org/article.asp?id=7803>

The email exchange can be found at:

<http://www.sims.berkeley.edu/~ping/diebold/lists/support.w3archive/200301/msg00015.html>

¹⁰⁰ **Webster County auditor: Election changes coming.** The Messenger. July 16, 2008. By Bill Shea.

<http://www.messengernews.net/page/content.detail/id/507428.html?nav=5010>.

Article archived at <http://www.votersunite.org/article.asp?id=7790>.

Precinct information at <http://www.sos.state.ia.us/pdfs/elections/CoVoteSystem.pdf>

Ohio.

In early 2006, after 47 counties in Ohio had already bought the system from Diebold Election Systems, Inc., Diebold offered to sell service coverage for the AccuVote touch-screen machines the counties had purchased.

In March 2006, the Columbus Dispatch reported that, “**The cost of service contracts for new touch screen voting machines has left county elections officials across Ohio in sticker shock.**” The state had a five-year warranty contract for the equipment itself. The service contract at issues was additional – for technical service and support only.¹⁰¹

The table below gives the examples the newspaper quoted for a **one-year** service warranty offered by Diebold Election Systems to service its touch-screen voting machines. The table also shows the number of registered voters in each county and the turnout in the November 2006 election.¹⁰² The cost per registered voter for the full service contract for just one year is a cost that must be added onto the cost of administering an election:

<u>County</u>	<u>Full</u>	<u>Partial-1</u>	<u>Partial-2</u>	<u>Reg Voters</u>	<u>'06 Turnout</u>	<u>Cost/Voter</u>
Holmes	\$50,000	\$35,000	\$15,000	18,206	8,639	\$2.74
Perry	\$50,000	\$35,000	\$15,000	21,260	13,368	\$2.35
Fairfield	\$90,000	\$60,000	\$21,000	96,593	55,657	\$0.93
Montgomery	\$110,000			375,610	219,153	\$0.29

“It just about blew our minds away,” said Alice Nicolita, director of the [Fairfield] county Board of Elections.

In Perry County, the Diebold service contract would cost two and a half times as much per voter as in Fairfield County.

“We just do not have the money,” said Janie DePinto, elections board director.

Holmes County officials, too, were in shock.

“This completely blind-sided the county,” said Ray Feikert, a Holmes County commissioner in northeastern Ohio. “It’s kind of a back-door expense that no one saw coming.”

Steven Harsman, president of the Ohio Association of Election Officials and director of the Montgomery County Board of Elections, understood the difficulty of running an election on new, complicated, unfamiliar electronic equipment. He pointed out how Diebold now had the counties over a barrel:

“The irony is that the small counties will have a bigger need for these contracts, but they won’t have the money to pay for them,” Harsman said. “Elections boards are going to county commissioners, and commissioners are kicking and screaming. It’s not a pretty situation at all. But when the dust settles, a high percentage of counties are going to need this, and county commissioners are going to have to find the funding.”

¹⁰¹ **Voting machine support costly. Elections boards and counties stunned by expense; state aid for training ends after primary.** THE COLUMBUS DISPATCH. March 05, 2006. By Mary Beth Lane.

<http://www.columbusdispatch.com/live/contentbe/dispatch/2006/03/05/20060305-C1-00.html>

Archived at <http://www.votersunite.org/article.asp?id=6560>

¹⁰² Voter Turnout and Registration for the November 2006 election are from:

<http://www.sos.state.oh.us/SOS/elections/electResultsMain/2006ElectionsResults/06-1107turnout.aspx>

Our Way or the Highway.

When threatened, vendors exert claims of proprietary control to bring independent election officials back into line.

Although voting system vendors control many aspects of public elections, they are not obligated to respond to open records requests. Insisting that their systems are protected by trade secret laws, they aggressively resist independent investigations, relenting only when state laws require it. In Florida, three vendors cooperated in using HAVA deadlines to gain control over an election official who defied them and independently tested one of their systems.

Leon County, Florida, 2005. Ion Sancho, Supervisor of Elections, authorized two computer experts to test the county's Diebold equipment. The tests were arranged by Black Box Voting and conducted by Florida computer scientist Dr. Herbert Thompson and Finnish security expert Harri Hursti. Both tests showed that the system could easily be manipulated to report inaccurate results, without detection:¹⁰³ Mr. Sancho said, in part:

Granted the same access as an employee of our office, it was possible to enter the computer, alter election results, and exit the system without leaving any physical record of this action. ... It was also demonstrated that false information or instructions could be placed on a memory card ... and create false results or election reports.¹⁰⁴

Mr. Sancho began to look elsewhere for the voting equipment his county needed to comply with the HAVA's accessibility requirement, but the only other vendors (ES&S and Sequoia) with equipment certified for use in Florida refused to do business with Leon County. The county was required by federal law to purchase accessible equipment immediately.

Diebold was the only option remaining. In a February 27 meeting held by the county commissioners with Diebold and without Mr. Sancho, Diebold refused to sell any more equipment to Leon County because of the "unauthorized testing" Mr. Sancho had conducted.¹⁰⁵

In March, Florida's then-Attorney General Charlie Crist promised to investigate possible anti-trust violations by the three vendors, but failed to carry through on the investigation.

Also in March, Mr. Sancho proposed to agree that he would not test any Diebold equipment unless Diebold "gave permission" and could participate in the testing.¹⁰⁶ Diebold agreed. In April, the county signed a contract to purchase Diebold's DREs. The contract explicitly prevents Mr. Sancho from hiring experts to conduct independent investigation of the system.

4.5 Customer will not allow third parties who are not employees of Customer, or authorized DESI Technicians access to the System for purposes of inspection, testing, review or evaluation.¹⁰⁷

¹⁰³ **Florida: Ion Sancho Fights Back.** March 08, 2006. By Susan Pynchon, Florida Fair Elections Coalition. http://votetrustusa.org/index.php?option=com_content&task=view&id=1015&Itemid=113, and <http://www.bbvforums.org/cgi-bin/forums/board-auth.cgi?file=/1954/15595.html>, and the video at <http://www.youtube.com/watch?v=PiiaBqwqkXs>, from 1:15 to 5:42.

¹⁰⁴ **Rep. McKinney (D-GA) Discusses Hack as Diebold Attacks Elections Official.** By: Matthew Cardinale. YubaNet. Jun 27, 2005. Archived at <http://www.votersunite.org/article.asp?id=5611>

¹⁰⁵ Board of [Leon] County Commissioners. Tuesday, February 28, 2006 Meeting - Follow-Up Memo <http://www.leoncountyfl.gov/ADMIN/Agenda/all.asp?id=309>

¹⁰⁶ Board of [Leon] County Commissioners. Tuesday, March 28, 2006 Meeting - Follow-Up Memo <http://www.leoncountyfl.gov/ADMIN/Agenda/all.asp?id=315>, see video at 2:45.

¹⁰⁷ http://accurate-voting.org/contracts/FL/Leon/FL_leon_2006.pdf, page 3.

What Can be Done

Case Study of Luzerne County, Pennsylvania.

With training and knowledge, and despite ES&S's repeated attempts to undermine the election structure, the election director oversees the goods and services of the vendor.

In January, 2006, Luzerne County received an ultimatum from the state: upgrade the voting system before the May 16 primary election or lose the \$3 million in federal funding the county needs to comply with HAVA.¹⁰⁸ The county election board immediately and unanimously decided to purchase new voting systems from ES&S – before the final purchase price was even negotiated.¹⁰⁹

Negotiations began and ES&S agreed to deliver 750 voting machines and the training needed to use them, but in mid-March, just two months before the May 16 primary, ES&S abruptly backed out of the agreement.¹¹⁰

Talks stumbled when Piazza [the county election director] began to push the company for details about the cost of extended warranties and service arrangements, among other issues.

“When I asked about it, I was told we could talk about that later,” Piazza said, adding he had a bad gut feeling there was an attempt to “keep information from our county.”

“It wasn’t something that I wanted to talk about later. It was something that I wanted to talk about now.”

Given the exorbitant costs ES&S was known to charge for warranties, service, and maintenance, Mr. Piazza attempted to settle the costs ahead of time. But ES&S had other intentions.

With the ultimatum from the state and the \$3 million that hung in the balance, the county was in a time crunch. Eventually, “after letters from the county’s attorneys,” ES&S agreed to provide 316 machines in time for the May 16 election – more than 400 short of the order.¹¹¹

The \$2.4 million contract included 750 iVotronic voting machines (the rest to be delivered in time for the November 2006 election), the training needed to operate them, and a one-year warranty for the equipment. But ES&S representatives repeatedly refused to discuss warranty arrangements for future years.

A year after the original purchase, once the warranty had expired, ES&S insisted that the county was contractually obligated to purchase a three-year extended warranty for a total cost of around \$300,000. Mr. Piazza balked. On July 19, 2007, he wrote a letter to the Secretary of the Commonwealth and the State Bureau of Commissions, Elections and Legislation. In the letter,

¹⁰⁸ **County gets vote machine ultimatum: Federal funds will be lost if electronic models not ready for May primary, state says.** Knight Ridder/Tribune Business News. January 25, 2006.
<http://news.manta.com/articles/description/2006010018000531-0304>

¹⁰⁹ **County election board unanimous on selection of electronic voting machine.** CitizensVoice.com February 1, 2006. BY James Conny Staff Writer. Archived at <http://www.votersunite.org/article.asp?id=7794>.

¹¹⁰ **Voting machine talks break down.** The Citizen’s Voice. March 15, 2006 By Tom Long.
<http://www.votersunite.org/article.asp?id=6552>

¹¹¹ **Luzerne County gets ready for electronic voting.** CitizensVoice.com. March 31, 2006. By Tom Long Staff Writer.
<http://www.votersunite.org/article.asp?id=7793>

Mr. Piazza requested financial aid to pay for the maintenance that ES&S claimed he was obligated to purchase.

Mr. Piazza wrote that his county had been “at the zero hour” for delivery and ES&S was still refusing to discuss future costs. It appears that ES&S used a deadline to its advantage and later misled the county into believing it was obligated to purchase an extended warranty when, in fact, it was not. Mr. Piazza also pointed out that these tactics, which ES&S uses to mine the taxpayers, are not unique to Luzerne County. He wrote, in part (highlighting added):

Our county’s five-year plan for economic stability and continued growth unfortunately holds no room for the kind of expense that ES&S is all but demanding we pay. Further, the encumbrance of \$300,000 is not one that the county had any opportunity to consider at the time of the mandated switch to electronic voting. That is not to say, however, we did not try. We asked for ... the details of an extended warranty as early as the State of Ohio in March of 2006. We were told by the vendors at that time, especially ES&S, that there would be sufficient time to talk about warranty arrangements after the system was in place. We were at the zero-hour when the system was finally delivered and were again told that the warranty coverage could be negotiated by the county when time permitted. Today, however, that is not the case. The fact is, ES&S refuses to lower the pricing structure, is unwilling to restructure the coverage plan to meet the needs of the counties and **ES&S has not answered our repeated requests for the exact terms and conditions of the extended warranty plan.** As it turns out, ES&S misleads its customers in the Commonwealth, and judging from conversations with other election directors at a recent election officials’ conference in Portland, Oregon – other jurisdictions as well.

In addition to not being able to meet the financial burden that ES&S is asking us to meet, we cannot individually deal with such a large, multi-national corporation and the **mix of deception this company promulgates** and respectfully ask the Commonwealth, specifically, the Department of State, for its leadership in insuring that the voting-system vendors doing business here do not have the opportunity to threaten a democratic process with **such unsavory business practices that vendors, such as ES&S, seemingly have a deep commitment to employing.**¹¹²

In a July 2008 interview with Mr. Piazza, the author learned that subsequently, he discovered that the contract he signed with ES&S – as opposed to the new contract ES&S was asking him to sign – did NOT obligate the county to purchase any extended warranty at all. This left Mr. Piazza free to decide how much support he wanted to purchase from ES&S and how much of the maintenance and support he and his staff would provide.

Mr. Piazza decided to purchase minimal support. Instead of paying ES&S over \$100,000 a year to do what he and his staff can do with greater expertise, Mr. Piazza has a contract to pay ES&S \$17,300 a year for two maintenance/support services:¹¹³

- ◆ Hardware maintenance for the M-650 optical scanners used to tabulate absentee ballots. This includes such mechanical tasks as cleaning, calibrating, ensuring the sensors are working correctly and the speed is correct.
- ◆ Software technical support, which includes consultation over the phone.

¹¹² http://www.votersunite.org/info/LuzerneCountyPA_ESS_LetterToDeptOfState_071907.pdf

¹¹³ **Breaking News: Elections bureau finalizes warranty deal for voting machines.** Citizen’s Voice. October 16, 2007. By Michael P. Buffer, CitizensVoice Staff Writer. Archived at <http://www.votersunite.org/article.asp?id=7335>.

Mr. Piazza's staff performs the same 14-point inspection process on the iVotronic e-voting machines that ES&S would have charged additional high costs to do under the company's expensive "Gold Plan." Thus, Mr. Piazza said he is confident that the work is being performed more carefully and with more knowledge and attention than if it were done by ES&S technicians – and at a much lower cost.

During the interview with the author, Mr. Piazza stated that he would never pay ES&S for firmware maintenance or firmware updates, since updates are only needed when the original firmware is flawed. **He said he would take ES&S to court before he would pay the company to correct its own mistakes.**

He also pointed out a few other ways in which he maintains responsibility for his own election structure, in spite of ES&S's attempts to take control.

- ◆ The assistance of ES&S technicians is not welcome in the elections office, or even in the county, during an election. Mr. Piazza has trained himself and his staff thoroughly, and – after allowing ES&S election-day support in prior elections – he now knows that his personnel are significantly more capable of using the ERM system to retrieve results and of providing troubleshooting in the field than the per diem technicians ES&S hires on contract and quickly trains.
- ◆ Mr. Piazza's staff pre-codes all the ballot definitions, ensuring that the data is correct before sending it to ES&S for the final phase of ballot programming. Then his staff carefully proofs ES&S' work to find any errors that either ES&S or the county may have made. As a result, he feels confident in the ballots and ballot programming because he has not simply handed responsibility over to ES&S. When asked why he sends it to ES&S at all (since he mentioned that he does know how to do the final phase), he said, "because if anything goes wrong, I don't want the company to be able to blame my county, as they have a tendency to do."
- ◆ Though he pays ES&S to create the test deck of ballots for the optical scanner, he and his staff spot-check them and also add some ballots of their own. He said he's happy to pay ES&S to hand-mark the thousands of ballots needed for a test deck rather than have his own staff spend their time on that job.
- ◆ Once the county receives the ballot programming back, they – not ES&S – burn the media for use in the election.
- ◆ After the election, he analyzes the results carefully, with charts and graphs, to see if the individual precinct results make sense – checking for precincts wildly different from previous elections or from what is expected, excessive undervotes, and any other anomalies that would suggest a ballot programming error or counting flaw.

Driven by the need to comply with federal and state law and by the dearth of available solutions, Luzerne County chose to depend on ES&S for equipment and ballot programming to administer elections. But Mr. Piazza has shed additional dependence by training himself and his staff to perform tasks other jurisdictions hand off to their vendors. As a result, Mr. Piazza is using ES&S rather than being used by them.

Because the structure of his elections is not dependent on the vendor's support, he is freer to challenge them when necessary, criticize them when appropriate, and even take them to court if need be.

Case Study of Oklahoma.

The Secretary of the State Board of Elections bought the equipment and kicked the vendor out of the state.

Michael Clingman, Secretary of the Oklahoma Board of Elections, testified at an Election Assistance Commission hearing on June 3, 2004. Excerpts from his testimony describe the system that had been in use for thirteen years (now seventeen years):

In 1990 and 1991 Oklahoma created and implemented the Oklahoma Election Management System.

... It integrates our statewide voter database with voting devices and training of all election personnel, from State and County Election Board Secretaries and staff to local precinct officials. The State Election Board owns and maintains the hardware and software which runs the system and the State maintains all equipment. The system manages election set-up, specifies the number of ballots needed, creates ballot styles, coordinates precinct and county compilation and reporting, and maintains election accounting.

... The Oklahoma Election Management System operates on a legacy system, the DEC VAX 4300. Software is written in Powerhouse, a fourth generation language, and the Optical Scan devices being used are Optech Eagles 3 PE. The devices have proven to be remarkably well-built, with relatively minimal device failures being occurring [sic].

... Oklahoma voters have indicated they have a great deal of confidence in our system. Candidates for office and our local press when investigating the reported results of an election are not normally interested in a machine recount; the request is normally to recount the paper ballots because most believe, it is the best evidence of the voter's intent. Paper ballots are retained for two years so the voters have confidence in the integrity of our elections.¹¹⁴

In 2004, the author spoke with Mr. Clingman about voting systems. He described the Oklahoma system even more simply. He said:

We bought the optical scanners and kicked the vendor out of the state.

It is notable that — in contrast to the multitude of problems in states that have allowed vendors to undermine their elections — Oklahoma has reported virtually no election problems in the years since HAVA:

- ◆ In the five years during which VotersUnite has been tracking media reports of election problems across the country, not one report has been obtained from Oklahoma.¹¹⁵
- ◆ In 2004, the Election Incident Reporting System (EIRS) tracked 75 calls from Oklahoma. Ten calls were from citizens who said the machine in the precinct was broken and they were putting ballots directly into a ballot box. The other 65 were questions about polling places, absentee ballots, and registration.¹¹⁶

¹¹⁴ **Written Testimony of Michael Clingman, Secretary, Oklahoma State Election Board.** June 3, 2004.

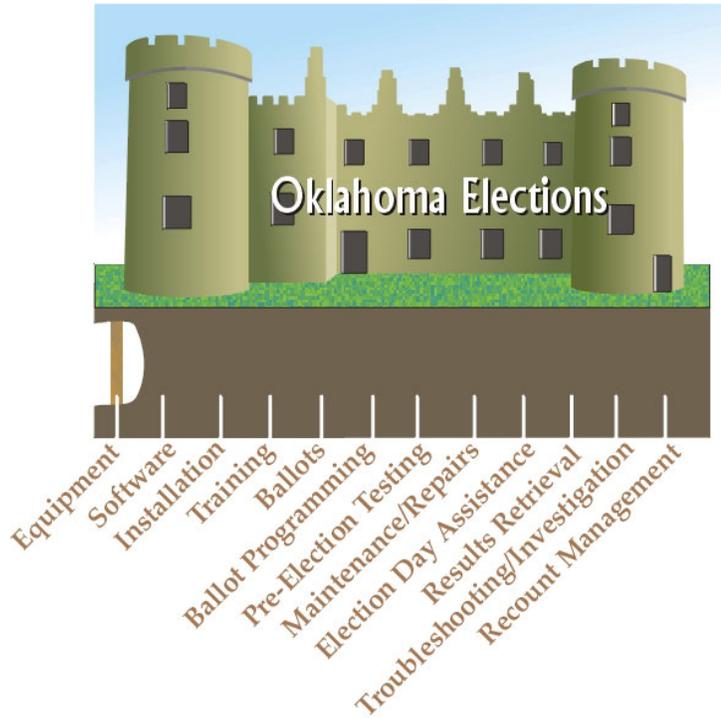
<http://www.eac.gov/News/meetings/060304/pres5-060304>

¹¹⁵ <http://www.votersunite.org/electionproblems.asp?sort=date&selectstate=OK>

¹¹⁶ <http://voteprotect.org/index.php?display=EIRMapState&tab=ALL&state=Oklahoma>

- ◆ In 2006, not one of the 1022 election day malfunctions reported to VotersUnite by the EIRS, Voter Action Hotline, and Pollworkers for Democracy was from Oklahoma.¹¹⁷

By taking responsibility for, and full control of, the elections in Oklahoma, the State Board of Elections has prevented the vendor undermining that threatens the election structure in every other state.



¹¹⁷ **E-Voting Failures in the 2006 Mid-Term Elections.** January 2007. by VotersUnite.Org, VoteTrustUSA, Voter Action, and Pollworkers for Democracy. <http://www.votersunite.org/info/E-VotingIn2006Mid-Term.pdf>. Detailed data: <http://www.votersunite.org/info/2006E-VotingReports.xls>

Case Study of Curry County, New Mexico.

In the midst of vendor dependence facilitated by federal law and state decisions, the elections office maintains a contingency plan: counting the paper ballots by hand.

In 2006, the New Mexico State Legislature passed a bill requiring all ballots to be cast on paper. Before then, 23 of the 33 counties in the state were using some type of electronic voting system. In order to comply with state law, those 23 counties had to replace their electronic machines. In order to comply with the Help America Vote Act of 2002, all the counties had to enhance their systems with some voting method that was accessible to voters with disabilities.

Since a state overhaul was required, state officials decided to purchase the same system statewide for all the counties: ES&S M100 optical scanners to tabulate paper ballots and AutoMark ballot-marking devices for people with disabilities. In October of 2006, the machines were delivered to Curry County, and the other New Mexico counties, for use in the November election.

In a July 23, 2008 interview with Coni Jo Lyman, Deputy Clerk of Curry County, the author learned what happened next – from the perspective of one of the people on the ground who has the responsibility to administer elections.

When the state purchased the equipment, the one-year warranty was equivalent to the ES&S’ “Gold Plan,” which promises full coverage for the machines, software, and support for all the counties. But, according to Ms. Lyman, the promise wasn’t fulfilled. She said that during the first year, ES&S didn’t fix even one broken machine – and there were quite a few sitting in the warehouse waiting for repairs. Further, she said they “held parts in hostage,” refusing to send them to the counties so they could do their own repairs. Mr. Lyman told the author:

ES&S has New Mexico over a barrel. They won’t fix the machines; they won’t train us to fix them; and they say if we open the hood the warranty is nullified.

Don Francisco Trujillo, New Mexico’s Deputy Secretary of State sees the situation somewhat differently. In a July 24, 2008 interview with the author, Mr. Trujillo said that ES&S did fulfill on their first year warranty, though delivery of some parts needed for repairs was delayed because ES&S had them on back order. Mr. Trujillo said that just before the warranty expired in October 2007, technicians inspected every piece of ES&S equipment across the state. Automated Election Services (AES),¹¹⁸ the ES&S contractor for New Mexico, made all the necessary repairs.

Ms. Lyman, however, said that the inspection may not have included every machine. One of Curry County’s AutoMarks failed the 2006 testing and was taken to AES for repairs. Only in July 2008 did the county finally receive a replacement for it.

Once the warranty expired, ES&S offered the counties two maintenance and support plans. Coverage for a year, negotiated between the state purchasing department and ES&S, would cost the counties a total of \$1,106,000 for both contracts:

- 1) **\$306,000 for software and firmware support.** Mr. Trujillo said that the state agreed to pay for the first nine months of the software and firmware support, effective May 1, 2008. After that the counties will be encouraged to pay their share. This support includes “patches” to software or firmware written by ES&S, if flaws are found. (Contrast this policy with MicroSoft, which periodically sends out free patches to millions of Windows customers.)

The support also includes telephone consultation with ES&S and AES.

¹¹⁸ <http://www.electionpeople.com/aes.aspx>

But Ms. Lyman has found ES&S' telephone assistance less than satisfactory. She said:

The call is answered by a Tier 1 person, who transfers you to a Tier 2 person who hears that you have a problem and transfers you to a Tier 3 person, who writes up a trouble ticket. And by the time you get to talk to somebody who might know the software you're having a problem with, you're so angry you're ready to hang up.

Ms. Lyman said they find the software support from AES to be much more satisfactory. In the July 3, 2008 election, the Election Reporting Manager (ERM) incorrectly tabulated the votes it read from the memory cards. According to Curry County Election Coordinator Stephanie Boydston, **as they fed the precinct and absentee totals into the card reader, the totals kept increasing until they were "bigger than the number of eligible voters."**

To solve the problem, instead of using the ERM system to read the memory cards, county officials manually entered the results on the printouts from the individual scanners. A technician from AES took the computer back to the company for evaluation and discovered that some files were corrupted or missing, so AES re-installed the ERM system on the computer.

Since the county was covered by the new ES&S software agreement, Ms. Lyman could have called ES&S telephone support. But she explained why she wouldn't do that:

If we have a real problem, there's little point in calling "1-800-who-gives-a-crap."

According to Mr. Trujillo, there is a more important reason for purchasing ES&S software and firmware support. If some jurisdiction outside New Mexico pays ES&S to develop a firmware upgrade, or if ES&S develops one on their own initiative, ES&S will provide the upgrade free to covered counties.

However, regardless of coverage, ES&S includes the upgrade in all future sales of its equipment. So, if a county needs to purchase new equipment, it will contain the firmware upgrade. If the county hasn't upgraded all its other equipment, the new model may not be compatible with the older models. When asked if a county could purchase a model with the older, compatible firmware, Mr. Trujillo said they could not. ES&S sells only its latest version. If the upgrade is not compatible with the earlier version, an uncovered county would have to either purchase the upgrade for all its existing equipment or turn to another vendor.

- 2) **\$800,000 for hardware maintenance and support**, which includes labor and parts for repairing broken equipment.

Mr. Trujillo said that only two counties, Lee and Sandoval, had purchased the hardware support agreement, and he has been negotiating with ES&S to allow local technicians to be trained to service the county's equipment. Since only five AES technicians are certified by ES&S to repair equipment in New Mexico (352 miles wide by 391 miles long¹¹⁹), even if all the counties purchased the agreement, it would be logistically impossible for the five technicians to provide support to all the counties on election day.

Prior to the state's decision to use only ES&S equipment, local technicians were trained and available in every county. Mr. Trujillo said that arrangement worked well and that New Mexico law says vendors *shall* train local technicians to provide election day support. He said that ES&S was now reconsidering their previous refusal to do so.

¹¹⁹ <http://www.city-data.com/states/New-Mexico-Location-size-and-extent.html>

Curry County has other reasons for not purchasing hardware maintenance and support from ES&S. Ms. Lyman said that after receiving nothing for the original warranty, it made no sense to her county to spend approximately \$30,000 to receive nothing for another year. She added that her county board never buys maintenance contracts for anything, even the copier. If something breaks, they get it repaired or buy a new one, and in the long term the county has saved a lot of money that way. So that's their plan for the ES&S optical scanners and ballot-marking devices.

However, ES&S policy of selling only its latest version of equipment could present Curry County with a dilemma if Curry County needs new equipment and ES&S is selling only an upgraded model:

- ◆ New Mexico Statutes¹²⁰ require that every county provide one voting system in each precinct. So, if one machine breaks and the county has no spare, Curry County would be legally bound to purchase a replacement.
- ◆ The statutes also require that voting systems be approved by the Secretary of State. So, if the New Mexico Secretary of State declines to certify the new model, Curry County would not be legally allowed to purchase either the upgraded equipment or the upgrade for its older models.
- ◆ The statutes also require that voting systems meet federal voting system standards. But the federal standards do not permit the use of different types of equipment that have not been tested and approved as an integrated system. So, unless ES&S chooses to have a system that includes both its older and its latest model tested to federal standards, Curry County could not purchase and use the newer model without upgrading all its equipment – even if the new model appeared to be compatible with the old one.
- ◆ Furthermore, Curry County could not turn to another vendor unless it replaced all its equipment.

But, while it appears that ES&S' has Curry County (and other New Mexico counties) over a barrel, Ms. Lyman is confident in her county's resourcefulness. She ended the interview with the author by explaining the source of that confidence:

The only thing that gets us through these elections and the frustration of dealing with ES&S is the confidence that comes from knowing we have the paper ballots. No matter what happens – whether the equipment works or not, whether we have software problems or not – we have the paper ballots so we can always get the election results. If necessary, we can always hand count them.

Ms. Lyman's words demonstrate that the ability of the New Mexico counties to hold successful elections still rests in their own hands – if they accept the challenge.

¹²⁰ 1-9-5. A. "Requirement to purchase and use voting systems." and 1-9-2. A "Secretary of state; manner of approval." <http://www.conwaygreene.com/nmsu/lpext.dll?f=templates&fn=main-h.htm&2.0>

Case Study of Oregon

For this state, necessity gave birth to invention.

Oregon has developed its own, non-proprietary, citizen-owned method of providing accessibility for the state's voters with disabilities.¹²¹

Gene Newton, Oregon's HAVA Program Officer, has managed the development of an innovative means of providing voting accessibility to people with disabilities who are unable, for whatever reason, to mark a printed ballot. The method is called the Alternate Format Ballot (AFB) and it's used on standard computer stations along with standard assistive technology widely available for people with disabilities.

Mr. Newton first proposed this solution in 2004 after a few brainstorming sessions with his wife, Angel Hale, who is blind. The state did a pilot project in 2005 and the whole concept became the solution of choice in 2006.

"Nothing is proprietary," Mr. Newton said.

The state commissioned a consultant, accountable only to the state, to develop a Conversion Application that accepts as input the election definitions that counties already create for each election. The Conversion Application converts the election definition data to standard html files, thus creating an Alternate Format Ballot for every ballot style. An AFB can be opened in most web browsers, but the Internet itself is not in the picture - just the web browser used to read html files.

The AFB itself only requires that a person have access to a computer, a web browser, and a printer. AFB is designed to work on any platform, such as a Mac or a PC. The computer station is basically a ballot-marking device.

Voters with disabilities can vote at home. Voters who use assistive technology to access information on their home computers can use that technology to access the AFB at home. Such a voter is sent the html file for the correct ballot style, based on information in the voter registration database. The file can be sent to the voter via e mail or on CD or disc. The voter opens the ballot using a web browser and displays it on the computer screen.

Describing the AFB to the author, Mr. Newton said:

In response to the Help America Vote Act, the state needed a voting solution to allow people with disabilities to vote privately and independently in the same manner as other voters. Since Oregon is an all vote by mail state, this meant getting an accessible ballot to voters to allow them to vote at home. The Alternate Format Ballot became that solution.

Or, voters can use one of their county's accessible stations. Voters who do not have access to the needed technology can use one of the county's accessible computer stations. Each county has, at minimum, one permanent desktop station and one portable station that can be taken to independent living centers, hospitals, or even a person's home. The counties' accessible computer stations use off-the-shelf software and are not networked or connected to the Internet.

¹²¹ This section is based wholly on the author's interview with Mr. Newton. Additional information can be found here: <http://www.sos.state.or.us/elections/HAVA/accessibility.shtml>

The state created a custom Overlay that is used with a special keypad, Intellikeys, as a voter interface. The stations also provide screen magnification, a screen reader, and assistive input devices – such as a switch interface, dual switches, trackball, and joystick – that help make the ballot accessible across a wide range of disabilities. The voter can also use a standard keyboard to vote the AFB.

Reviewing the ballot is also fully accessible. After making selections, the voter can review the ballot on a separate review screen to check for errors prior to printing it. The AFB even allows a blind voter to verify the paper ballot. The printed ballot can be scanned into the computer, and using Optical Character Recognition software, the voter can have the ballot read back using a screen reader.

Once completed and printed the ballot is cast using the secrecy envelope and signature verification envelope that each voter receives in the mail along with the printed ballot. County officials duplicate the AFB onto an optical scan ballot for tabulating, and the original ballot is maintained as the official record of the vote.

The AFB has received excellent reviews from voters, many who expressed joy over being able to vote privately and independently for the first time in their life.

Asked about the cost, Mr. Newton said the major cost was for the 96 computer stations for the county. Other costs included approximately \$65,000 for developing the Conversion Application.

“The overall costs for the stations and the development of the conversion application was less than half a million dollars” said Mr. Newton.

And that’s it. No license fees, maintenance fees, support fees for counties to pay to voting system vendors. No dependence on vendors to provide accessibility for voters with disabilities.

State-owned and operated, inexpensive and effective, Oregon’s system may inspire other states to follow suit.

Recommendations for Reversing the Direction in 2008 and Beyond

By re-asserting ownership of elections, local officials and private citizens begin to rebuild the underpinnings of our election structure, even in time for the 2008 general election.

How Local Election Officials Can Take Back Their Power

Burdened by the demands of laws and the complexity of voting systems, local election officials nationwide have become increasingly dependent on their vendors for many phases of election administration. But local election officials in most states have the legal authority to take back much of the control of their own elections and share that responsibility with their constituents.

In the long term, taking these actions — or even a selection of them — is likely to be less costly, both in money and in consequences, than relying on the services provided by the vendors.

Recommendations for 2008 and beyond:

*Knowledge is power*¹²²

- ◆ Demand complete and accurate documentation for all the products purchased.
- ◆ Train the elections staff thoroughly on the equipment so the staff fully understands the operation of the hardware and software, can manage all the preventative maintenance, and can troubleshoot effectively.
- ◆ Improve training for each subsequent election by providing a form for election workers to log problems, so you can identify recurring problems and develop solutions.

Control pre-election testing

- ◆ Train the elections staff, or hire an experienced IT person accountable to the jurisdiction, to design the ballots and generate the ballot definition files for each election.
- ◆ Design and create the test decks of ballots for pre-election testing rather than having the vendor create them. Ideally, follow the guidelines published specifically for that purpose by John Washburn, a professional test engineer.¹²³ Remember that the goal of testing is to find problems, so include complex test cases. Try to break the system by testing ballots outside the normal expectations.
- ◆ Encourage the public to add ballots of their own design to the test decks.
- ◆ Conduct pre-election tests on every machine and encourage public input to, and scrutiny of, the process in order to catch and correct as many problems as possible before election day. The more eyes and minds, the better, so encourage public participation to the extent allowed by law. Investigate every discrepancy and keep the public informed.
- ◆ If complete testing on every machine is not possible, at least test that every machine boots up and counts votes correctly according to a less rigorous test that includes pressing every ballot position and button on every screen to ensure that it works correctly.

¹²² See also: **You Go to Elections with the Voting System You Have: Stop-Gap Mitigations for Deployed Voting Systems.** 2008. J. Alex Halderman, Hovav Shacham, Eric Rescorla, and David Wagner.

<http://www.cs.berkeley.edu/~daw/papers/stopgap-evt08.pdf>

¹²³ **Guidelines for Creating a Deck of Test Ballots.** By John Washburn, Certified Software Quality Engineer. Sept. 8, 2006. <http://www.washburnresearch.org/archive/TestingGuidelines/GuidelinesForCreatingTestBallots.pdf>

Control ballot printing and absentee ballots

- ◆ If possible, contract with a vendor-independent printer to print ballots, and monitor the number of ballots printed and delivered. Better yet, if possible, print the ballots in-house.
- ◆ Use workers in the jurisdiction to prepare absentee ballot envelopes for mailing, rather than using a vendor you cannot oversee. Better yet, if possible, prepare them in-house.
- ◆ If the office uses automated signature comparison software for returned absentee ballot envelopes, set the software to the **most sensitive** level so that the staff's eyes can check all potential discrepancies.

Oversee election day administration

- ◆ Train poll workers thoroughly on equipment operation and troubleshooting procedures in order to reduce the need for vendor technicians at the polling places. If necessary, hire a training specialist to assist.
- ◆ Establish a well-staffed, private hotline for poll workers directly into the elections office, not a direct line to the vendor technicians. Provide a form to log each call to the hotline to help you identify recurring problems, so you can develop solutions for future elections.
- ◆ Provide emergency paper ballots (regular, not provisional) in all precincts where e-voting machines are used.
- ◆ Remove any malfunctioning machine from service for the rest of the day. Educate poll workers on how to manage malfunctioning machines.
- ◆ Train the elections staff thoroughly on the operation of the system, so they can retrieve results and run every kind of report, including audit logs and troubleshooting reports, without intervention from the vendor. If necessary, hire an experienced, independent IT person accountable to the election office. Oversee that technician as carefully as you oversee vendor technicians (see below).

Oversee the performance of the vendor's products

- ◆ Make it easy for citizens to double-check their registration status before the election by advertising Internet pages, phone numbers, and other methods they can use. Encourage them to report errors to the election office and the Secretary of State.
- ◆ Insist that poll workers print and post all precinct results at the precinct. Compare the results printed at each precinct with the results reported for that precinct by the central tabulating system. Investigate every discrepancy and enter a written note into the record to explain each one.
- ◆ If the jurisdiction uses digital scanning technology, turn the "autoresolve" feature **off**, so the staff's eyes can resolve all damaged ballot images.
- ◆ Compare the number of voters signed in at each precinct to the number of ballots cast. Investigate every discrepancy and enter a written note into the record to explain each one.
- ◆ Immediately after each election, conduct public hand counts of as many ballots as the law allows. Compare the results with results reported by the software. Investigate every discrepancy and enter a written note into the record to explain each one.
- ◆ Establish and use an effective method of analyzing results for anomalies. If necessary, hire a demographer and/or statistician to help set up the method and train the staff on using it.

- ◆ Print and study the audit logs from the central tabulator to detect anomalies, track problems, and prevent future problems.
- ◆ Print the audit log for each machine that fails to perform as expected (can't generate a zero tape, won't open, won't close, jams, etc.). Study the audit logs to help you detect anomalies, track problems, and prevent future problems. These logs also provide documentation to support the problem diagnosis and explain and prove it to others if need be.
- ◆ Develop comprehensive, detailed checklists for problem reports. Ensure that all staff and poll workers use them.
- ◆ Log and investigate all equipment and software problems that occur in the field, during transmission of vote data, or in the central office. Attempt to replicate the problem on the same machine when possible. If vendors offer explanations, remember that their company loyalties may make them reluctant to admit to flaws in their products.
- ◆ Send formal reports of confirmed problems to the Election Assistance Commission.

Oversee vendor employees who perform services

- ◆ Insist that at least one staff member be present at all times when a vendor technician is working on hardware or software. Insist that the technician explain all actions and procedures to the staff as they are being done. Make sure the staff runs and examines the event log report before the technician leaves.
- ◆ Insist on credentials and references for all vendor technicians who provide support or service to the jurisdiction, including the extent of training, the length of time working for the vendor, and credible references pertaining to the work the technician is doing. Check references. If the technician appears to be less competent or ethical than expected, demand someone else.
- ◆ If a vendor services a machine, track the technician's name and ID with the machine serial number. Require the technician to print the event log audit report for that machine, so you can inspect and track additional information about the functioning of the machine, what time relevant events occurred, and explain to others if need be.
- ◆ Insist that at least one staff member accompany any equipment (including memory cards) sent to a vendor's location for analysis and remain with the machine as long as it is there.
- ◆ Educate staff and poll workers to recognize authentic badges, uniforms, or other credentials of vendors, what to do if they question a vendor's ID, and what vendors are and are not allowed to do.

Recommendations for gaining even more oversight capabilities in the future:

- ◆ Renegotiate contracts, if possible, and vigorously enforce them. Pursue legal action against vendors who violate laws or ethics.
- ◆ Lobby legislators and/or state election officials. Convince them to:
 - Require a new election when equipment flaws cause suspect outcomes.
 - Allow increased citizen observation of election administration activities.
 - Mandate significant hand counted spot-checks of the software's performance.
 - Add a "no choice" option for each contest on the ballot, especially electronic ballots, to eliminate questions about excessive undervotes.
- ◆ **Lobby to ban the use of equipment whose operation and accuracy the elections office and the public cannot oversee.**

How We, the People Can Participate in Election Oversight

In a democracy, silence implies consent. As is true of local election officials, there are actions that ordinary citizens could take to increase our oversight of our own elections and thus reduce, or at least mitigate, the vendor undermining of elections. What you learn from taking one or more of these actions is likely to guide you as you decide what additional actions to take.

Recommendations for 2008, and then beyond:

Essential first steps

- ◆ Accept responsibility for the health of democracy. Elections are your opportunity to have a voice in your government. Refuse to sit quietly while vendors undermine your voice.
- ◆ Inform your friends and family about vendor undermining and its dangers.
- ◆ Establish a relationship with your local election administrator, based on your mutual interest in accurate elections. Learn about the administration of elections in your jurisdiction and the extent to which vendors have undermined elections in your jurisdiction.
- ◆ Print this document and give it to your local election administrator.

Exercise oversight to the extent allowed by law

- ◆ **Oversee through observation.** Observe as many parts of the election process as you can, for example: ballot programming, ballot printing, preparation for pre-election testing, pre-election testing itself, election day at the precinct, closing the polls at your precinct, the totals printed at your precinct, the process of opening absentee ballots, the election night tally at the central office, the opening of the provisional ballots, the canvassing of the ballots. For more information, ideas, and guidance, see *Black Box Voting's Toolkit 2008*.¹²⁴
- ◆ **Serve as a paid poll worker.** Serving in your precinct on election day allows you not only to observe, but also to ensure that the proper procedures are followed and that vendors do not have unauthorized access to equipment that may malfunction. Most jurisdictions are in need of poll workers and will welcome your offer. Contact your local election office or contact Pollworkers for Democracy¹²⁵ for more information.
- ◆ **Learn how to observe and what to watch for.**

Recommendations for gaining even more oversight capabilities in the future:

- ◆ Lobby legislators and/or state election officials. Convince them, hopefully in coordination with your local election official, to:
 - Require a new election when equipment flaws cause suspect outcomes.
 - Allow increased citizen observation of election administration activities.
 - Mandate significant hand counted spot-checks of the software's performance.
 - Add a "no choice" option for each contest on the ballot, especially electronic ballots, to eliminate questions about excessive undervotes.
- ◆ **Lobby to ban the use of equipment whose operation and accuracy the elections office and the public cannot oversee.**

¹²⁴ **Top Five Things You Can Do To Protect Election 2008.** Black Box Voting.

<http://www.blackboxvoting.org/toolkit2008.pdf>

¹²⁵ <http://act.credoaction.com/pollworkers/faq.html>

Conclusion

While our elections are still in jeopardy from the age-old threats of voter registration errors, polling place problems, vote coercion, vote-buying, and the corruption of election officials and partisans, in 2008 we are also confronted with a more recent, high-tech danger. The very structure of our elections is threatened by the country's pervasive dependence on the goods and services of a handful of voting system vendors.

The depth of the current dependence is shocking, but even more shocking is the fact that our elections are dependent on vendors whose records reveal their unethical and even unlawful behavior, as well as their incompetence.

But it is within our power to reclaim control of our own elections. The first step is to understand the danger of depending on vendors to administer elections, and then exercise the power we have to provide a solid, citizen-controlled foundation for our election structure.

Even in time for the November 2008 election, election officials and private citizens can take action (see page 48) to oversee the vendors and limit their control. In 2008 and beyond, citizens can and must re-assert their ownership of elections and demand transparent citizen oversight of the elections they rightfully own.