

# The County Dilemma

## The Impact of the Help America Vote Act on

### New York State



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On October 27, 2006 the New York State Board of Elections sent a report to the United States Department of Justice outlining the current status regarding the implementation of the Help America Vote Act (HAVA) in New York. The report projects that the security testing of voting systems will not be completed until February 7, 2007. Since Federal law requires that new voting technology be implemented by the 2007 Primary Election, one must wonder how New York State can possibly acquire this new technology and train the voting public in time to meet the Federal standards. Before addressing what New York can do to remedy this situation, we must fully understand the background of this issue and realize why New York State is in this position in the first place.

The Federal Help America Vote Act, which was signed into law by President Bush in October 2002 mandates that every state in the U.S. must implement an electronic style of voting machine system that will allow a voter with any type of disability to vote on the same machine as a voter without a disability. As the New York State Legislature debated this issue, legislation was eventually passed that put the decision of machine selection in the hands of the County Election Commissioners. Since New York State was one of the last to make any progress toward meeting this goal and keeping with the 2006 timetable, a Federal lawsuit was filed against New York with the hopes of moving the project more quickly and meeting the mandated start date. In order to reach an agreement and have the lawsuit dropped, New York State officials negotiated with the Federal Government an implementation plan called "Plan B." "Plan B" is a temporary solution where at least one handicap accessible voting machine would be available per county in New York for the 2006 Primary and General Elections. With "Plan B" currently underway, focus has shifted back to deciding what type of voting machine system New York will implement as a permanent solution. Two distinctly different styles of voting machine systems

have emerged to the forefront of this discussion and have sparked heated debates across New York.

The two styles of voting machine systems employ different technologies to achieve the same goal. One type utilizes an optical scan system where a voter would mark a paper ballot and feed it into a machine which would scan the ballot, read and tally the votes. The other style is a Direct Recording Electronic (DRE) machine where the voter would make their selections on a touch-screen, similar to an ATM machine and the results are recorded electronically as well as on a paper receipt which is automatically inserted into a ballot receptacle. Article 7-202 of the Laws of New York requires there be a Voter Verified Paper Audit Trail. In the case of the DRE a receipt-style piece of paper is printed for the voter to verify that their votes were correctly tallied, with Optical Scanners it will be the ballot itself.

The question remains; which style of voting machine will be the most cost-effective, trustworthy and provide the smoothest transition for New Yorkers as we move to become compliant with the Federal Help America Vote Act?

Before answering that question we must determine how New York State got in this position and what, if anything, was learned from the implementation of “Plan B.” Shortly after HAVA was signed into Federal law, the Federal Government allocated funds to each state to help offset the financial burden that otherwise would be shouldered by the states, counties and municipalities for the purchase of new voting machines. In New York State, a lever-style machine has been in use for decades with few problems. The majority of problems encountered didn’t actually include the lever machines, but involved fraud as it relates to paper ballots used by absentee voters, including alteration and substitution of ballots. It appears that little consideration was given to the idea of keeping the lever machines and adding a handicap

compliant voting machine at each polling location. The state decided to accept the Federal funding because advocacy groups believed that this solution would still segregate the handicapped voting population and not accomplish the HAVA goal of everyone having the right to vote on the same machine. By accepting the federal funding available, New York committed itself to abandoning the lever machines for new, largely unproven style of voting machines. New York's legislature debated the issue from January of 2003 to June of 2005. In July of 2005, the State Board of Elections was given the implementation task, unfortunately, due to public hearing requirements, the State Board of Elections was unable to meet the original timeline required by the Federal Government. The Federal Government then filed a lawsuit against the State of New York in February of 2006 for non-compliance regarding this issue. The result of the lawsuit was ultimately what is now known as "Plan B" and was rushed into implementation for the 2006 Primary Election. Albany County, along with several other counties in New York decided on a machine called the AutoMark Ballot-Marking device. The county purchased one machine which was available for use at the Board of Elections and was used by three voters who declared themselves in need of assistance on Primary Day. Since this was the first implementation of any such device in an election in Albany County, it is reasonable to believe that the number of voters with disabilities using the machine in the following election will increase greatly. The ES&S AutoMark Ballot-Marking device was purchased by Albany County for a price of \$5,648.80 for the hardware, equipment and training and approximately \$16,000 for the software required which was shared by other counties who purchased the same device. Albany County, along with other counties which selected the AutoMark machine, was forced to spend a portion of its federally allocated funding for a voting machine that is only scheduled to be used twice. In reaching an agreement with the State of New York on the implementation of

“Plan B” as a way to prove that New York is on the path to becoming HAVA compliant, the Federal government essentially approved the expenditure of its’ own money on voting machine technology that does not even comply with its own laws and which may never be used again.

In attempting to determine which style of voting machine system would benefit New York State the most in the years to come, we need to address the apparent differences between an Optical Scan system and a DRE machine; the ease with which each can be compromised, the cost associated with the implementation of each system and the ease of implementation by the counties.

An Optical Scan system is relatively simple in theory. A voter obtains a paper ballot from a poll inspector, takes it into a privacy booth and fills in the circles next to the candidate’s name that he/she wishes to vote for, typically with a pen or pencil. The voter then takes the marked ballot (in a sleeve or other protective device to conceal their votes from others) and feeds it into an Optical Scanner which records the votes and maintains a running tally. Supporters of Optical Scanners tend to favor this system because the paper record is created by the voter instead of a machine and cannot be corrupted by the machine. However, Optical Scan systems are not impervious to problems or attacks by hackers. The human element can help prevent against attacks because the voters know what marks they made on the ballot, but it can also inadvertently aid in attacks against the machine as well. Since all humans make mistakes, it is possible for a voter to not fill in the circle entirely or use a pencil that cannot be read by the scanner. Instead of discarding these votes, a hacker can configure the machine to read all partially filled circles as votes for a certain candidate. According to **The Machinery of Democracy: Protecting Elections in an Electronic World**, published by the Brennan Center Task Force on Voting System Security of NYU School of Law, an attacker, if given enough

time, could reconfigure an Optical Scan machine to read partially filled circles in this manner. If the attacker is able to reach enough optical scanners, they could potentially affect thousands of votes.

The Direct Recording Electronic (DRE) machine is a computerized touch-screen, similar to an ATM or an automated check-out machine at the grocery store. After a voter has made their selections, he/she can view them on a receipt-style piece of paper that is secured behind a transparent window, it is then dropped into a ballot box once approved by the voter. Hackers could also attack a DRE machine just as easily as attacking an optical scan machine by replacing the memory card with corrupt software. According to the Brennan Center's findings, "Nothing in our research or analysis has shown that a Trojan Horse or other Software Attack Program would be more difficult against Optical Scan systems than they are against DRE's" (pg. 77). **If a hacker were to try and slip an attack program into any type of voting machine, they would have to either have someone on the inside to do it or break into the manufacturers' facility or the County facility where the machines are being stored and insert the corrupted software.** Since New York State law does not allow voting machines to be equipped with wireless technology or modems of any type, breaking in and physically attacking the machines is the only way a hacker could be successful in their attempt to alter the results of a machine.

The total cost required to implement either system across the county must also be evaluated. At this time, prior to knowing the cost for each system and their capacity, no exact price comparison is possible. However, many proponents of optical scan machines say that they are cheaper than DRE machines and will cost less to implement. This should not be accepted as a given. While the DRE machines may initially cost more than optical scan machines, we must look at the full picture. In order to be in compliance with HAVA regulations the optical scan

machines must be accompanied by a ballot-marking machine for use by the disabled voting population. With an optical scan system, more voters can vote at any given time than with a DRE, however, individual privacy booths must be purchased separately to ensure anonymity. Since optical scanners rely on paper ballots which are estimated to cost between \$.50 and \$1.00 each, ballot boxes must be purchased to transport the ballots as well as protective sleeves to put over the ballot as a voter transfers it from the privacy booth to the optical scanner. Without exact figures from the vendors of these products, it is impossible to say one system is cheaper than the other when taking into account the extra materials needed to implement the optical scan system.

Since both types of voting machines are equally susceptible to attacks from hackers and the monetary difference between the two cannot yet be determined, we should look at the ease of implementation. In Albany County, not all the municipalities have used the same voting machine in the past and each paid their poll inspectors and polling sites different amounts. Section 3-226 of the Election Law of the State of New York mandates that individual County Boards of Elections take responsibility for all aspects of election administration. In addition, to selecting and purchasing new voting equipment, counties assumed ownership of the lever machines in January 2006.

The officials at the Board of Elections are charged with the task of getting all the towns on the same page to make the transition to a unified county-wide election management, as easy as possible. The Albany County Board of Elections must first establish a protocol of how the elections will be run in the future. This means we must find a way to merge the different election methods of the 13 towns and cities and combine them into one uniform system. This will allow the county to devise a schedule for distribution and pick up of the machines and other HAVA/ADA related materials. Counties also have to determine what materials will be needed

to make certain polling sites compliant with standards set by the Americans with Disabilities Act (ADA) as well as secure a storage facility large enough to house all the voting machines, ADA materials and any other related equipment. In addition to storage, once the new machines are purchased, the county will be responsible for hiring custodians during the election season to move the machines and prepare them for the elections, as well as acquiring transportation to haul the machines from the storage facility to the polling sites and back. The county will also be in charge of training all poll inspectors and educating the voting public on the operation of the new machines. In accordance with HAVA's requirements regarding ADA, counties are also responsible for ensuring that all polling sites are handicap accessible according to standards set by the ADA, as well as securing long-term leases for any site that requires a permanent modification.

The size of the storage facility required will soon become another issue that county election commissioners will have to figure out. As of yet, there is no Federal or New York State rate for the ratio of voters to the new machines. States that have set standards already are diverse in their numbers. Michigan requires at least one machine for every 600 registered voters, but the ratio in Wisconsin is 1:200. The ratio that a state determines to be acceptable could have an inadvertent affect on the type of machine selected by a county due to the amount of funding available. If the ratio in New York is set at 1:200, as it is in Wisconsin, then elections commissioners will have to determine which method would be the most cost efficient. Conversely, if the ratio were set at 1:800, the same question could yield different results. Since DRE's may handle fewer voters than optical scan machines; Is it cheaper to purchase and store more DRE machines or fewer optical scan machines along with the accessories necessary to



comply with state law? Each style of voting system would require the same type of environmentally friendly storage facility.

One way to avoid this and lower the additional cost that the County and municipalities could incur from the management takeover of the elections is a form of redistricting of the entire county. Historically, the redistricting or shifting of election districts was done by towns and municipalities, usually occurring after every ten year census. With the county now responsible for all aspects of elections, we need to establish new rules so that the county can set a precedence and keep adapting to changing laws. Before purchasing new voting technology, we now should move to establish new Election Districts in order to meet changing needs. If a reassignment of voters occurred before the county purchased new voting machines, it would give the Commissioners a more accurate figure of the number of machines that would need to be purchased. This reassignment would encompass registered voters without considering the fact that in most elections, less than 60% of registered voters actually cast their ballot. **This modified redistricting (reassignment) plan would shift voters into different election districts, thus evening out the number of voters per election district while reducing the overall number of election districts.** This plan would aim to keep voters not only in the same geographical areas, but also in the same legislative districts to ensure numerical parity in each district across Albany County. This plan can not move forward until we learn the capacity of the new voting machines relating to the number of voters one machine can handle in a day. Once those numbers are determined, it will provide a basis for an accurate reassignment of voters to new election districts.

Another issue that counties will be forced to address is that the majority of current poll inspectors may not be comfortable with the prospect of working an election with new technology

that is very different from the lever machines. To address this before it becomes too late, Albany County will focus on the retraining of current inspectors and the recruitment of inspectors who are capable and comfortable with new electronic technology. In order to entice them to take time off from their daily jobs, counties must pay a reasonable fee for the amount of time and effort required. The integrity of the new poll workers selected will remain the key as it always has in the past. If fewer poll inspectors are needed across the county, the remaining inspectors could be paid more and receive better training without costing the county more money than it already budgets for poll inspectors.

Albany County is comprised of three cities and ten towns. Currently about 69% of the election districts in the cities have less than 500 registered voters each, compared with only about 11% of election districts in the towns. In the City of Albany alone, there are 11 election districts with less than 75 voters each. There are no towns in the county with less than 75 voters in an election district. Each election district has at least one voting machine and four poll inspectors. Poll inspectors are paid \$325 for their services, broken down as \$25 for training, \$100 for primary election and \$200 for general election. By combining just the 11 election districts in the City of Albany that have less than 75 voters, Albany County could save thousands of dollars on poll worker expenses alone. This would also allow the county to purchase fewer machines than on a one to one replacement of current machines for each election district as they are presently drawn. Reassigning the voters in election districts would even out the number of voters in each district, saving Albany County tens of thousands because there would be less election districts, fewer sites needed, fewer poll inspectors and less voting machines that would need to be purchased. The reassignment of registered voters could be done during 2007 and be

implemented in 2008. It would not have to affect any office as we would not seek to change district lines, only a reassignment of voters to new polling sites.

Saving money wherever possible regarding the county takeover of the management of elections may now be more important than ever. New York State is set to lose \$46.9 million administered by the Election Assistance Commission because it failed to replace old voting equipment by the first federal election of 2006 which was the September 12<sup>th</sup> primary. The only way for the state to keep this funding is for Congress to pass legislation allowing for it or for the state to sue the federal government to keep the funding and gain more time to fully implement the new voting system into New York State. Our Board believes that New York State should provide more time to bring the machines online in order to avoid machine and operational pitfalls. While New York State was the last state to start HAVA implementation, it is one of the few states with comprehensive legislation that should cut down on problems experienced by other states, including the requirement of a voter-verifiable paper audit trail for every machine and the exclusion of any wireless device on a voting machine that can transmit or receive data.

When looking at the status of the election situation in New York State, one must realize that there is much more to the full picture than which style of voting machine system to employ in the future. There are positives and negatives regarding DRE machines and Optical Scan machines, however, the bottom line is that both styles of machines are electronic and are prone to the same problems and both can be attacked by hackers interested in tampering with election results. Also, there is no evidence to suggest that one system is more voter friendly than another. New York State needs more time to address all the issues involved in taking over the elections. Before a machine is selected, counties should reexamine their election districts and look for ways to consolidate and save money. All aspects of this debate should be thoroughly studied and

scrutinized before any steps are taken to purchase new voting machines in New York State.

Currently, the delivery timetable for the new voting machines, which has yet to be approved by the State Board of Elections, is in the late spring of 2007. Will this allow enough time for the manufacturers to produce the number of machines that will be needed in each county? Will there be sufficient time to recruit, identify and train Election Day workers? Will there be enough time to properly educate the voting public on the operation of the machines? **By waiting another election cycle to fully implement the machines, voters and workers will have more time to become acquainted with the new technology and manufacturers will have enough time to address any problems that will inevitably arise. Based upon the successful implementation of Plan B, New York State should consider keeping this plan in effect for the 2007 elections, allowing adequate time for Plan A to be properly implemented. Counties may need new legislative intervention in order to move forward toward full HAVA implementation, but jeopardizing the integrity of the 2007 elections is at stake and that is at the very core of our democracy.**