



**CITIZENS UNION FOUNDATION TESTIMONY  
TO THE NEW YORK CITY BOARD OF ELECTIONS  
Re: Voting Machine Public Demonstrations**

**Delivered by  
Douglas Israel, Director of Public Policy and Advocacy and  
Andrea Senteno, Program Associate, Citizens Union Foundation  
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Good Afternoon President Como and Commissioners. I am Douglas Israel, Director of Public Policy and Advocacy at Citizens Union Foundation (CUF), a non-profit research, education and advocacy organization here in New York City. With me is Andrea Senteno, our Program Associate who will also be testifying today. CUF would like to thank the New York City Board of Elections for the opportunity to testify today and for holding three additional public demonstrations and this additional public hearing. It is important that voters from every borough were afforded the opportunity to test the different voting machines and gain a better understanding of what voting will look like in New York City in the future.

Citizens Union Foundation attended a number of the voting machine demonstrations and alerted our members of the dates and locations of the meetings. We encouraged our members that attended the demonstrations to forward us their thoughts and opinions on the machines. Today we will share some of the concerns and observations of our members and staff. We recognize and would like you to understand that these experiences were not scientifically measured and may not reflect the position of Citizens Union Foundation, however, they do speak to the concerns and questions voters have with the machines.

First let me start by saying that CUF has not officially endorsed a single voting system. We see pros and cons with each system and believe that planning, voter education and poll worker training will be essential to ensuring a smooth transition to the new machine selected. Today, we would like to highlight some of the concerns raised by our members and staff for both optical scan and DRE machines.

At the public demonstrations we tried to evaluate the machines through the eyes of a voter. To those we surveyed it was clear that the DRE offered the greatest ease of use. This was largely due to their appearance and format, making them most similar to our current lever system and familiar to voters. That being said, we recognize that the greatest advantage the optical scan machines offered was the security a voter gained knowing that a self marked paper record existed of their vote. We understand the importance this sense of security can mean to a voter. With each system we believe there is room for improvement and hope that the issues raised above are addressed to ensure that the voting will be made easy, reliable, and secure.

## Optical Scan Voting System

- The main advantage to the optical scan voting appears to be the added security and confidence the paper ballot provides to voters that their vote will be accurately recorded. The knowledge that a paper ballot exists that was filled out directly by the voter is very comforting in light of the many election day problems and security issues that have attracted public attention.
- The Diebold optical scanner does not sufficiently communicate undervotes to voters. The voter is notified only of the first of possibly several undervotes on their ballot. Should the voter choose to make a correction to that race, they must eject the ballot, make their selection and rescan it. For someone who may have undervoted more than once, it is possible they would need to return to the scanner multiple times.
- The ES&S model notified the voter of undervotes more effectively by displaying, on the LCD display, the number of undervotes that appeared on the ballot. After scanning his or her ballot, if there were undervotes, the voter is prompted to "eject ballot" to make corrections or "continue on" leaving the undervote as is. Upon speaking with the ES&S vendor representative it appears the scanner can be programmed to go through each undervote on the ballot, allowing them to eject it or continue on. This feature allows voters to select to undervote on a specific race without unintentionally undervoting on other races that may follow. This was not a feature on the Diebold model.
- Optical Scan allows voters to choose to overvote, resulting in a null vote. If a voter wants to correct an overvote they must receive a new ballot. The voter however also has the option to "continue on," however this would effectively void their vote for that race. This is not a problem we encounter with our current lever machines.
- Other potential problems exist with Optical Scans in the case of under and over votes such as poll site flow and line confusion if voters are required to get back in line for a privacy booth and to have their ballot rescanned. Perhaps there should be a separate privacy booth and scanner for those that are revising their selections. Also, the need to account for "spoiled" ballots at the end of the day is of concern. These must be guarded with proper security.
- In general, the additional lines that voters may have to wait on could be troublesome during busy hours and for voters short on time. Poll site configuration will be important.
- At the Manhattan hearing the Diebold representative was questioned regarding the use of RAM to record and store votes rather than ROM, a more secure means to store data. The Diebold representative responded that a person would need to have extensive knowledge of the system and extended time with the machines in order to compromise the memory security. We are concerned that this is not an adequate answer and that Diebold should better justify its decision to use RAM instead of ROM.
- Taking into account that the ballots provided at the demonstrations were only samples, they did not adequately present voters with a sense of what a ballot would look like in New York.
  - While including voter initiatives on the reverse side of the ballot does not fail the full face ballot test they could very well be overlooked. It may be beneficial to look at more creative ways to include voter initiatives on the front side of the ballot.
  - While it was suggested that ballots can be extended and perforated to include more races careful consideration of layout is imperative.
  - If the scanner is not able to handle a ballot wider than 8.5 inches it might be very problematic to list parties along the top row, as Diebold ballots were configured.

## DRE Voting System

- The main advantage that DRE machines appear to offer is that they are most user friendly and most closely resemble the current lever machines. However, failures to accurately record votes, as was evidenced with the use of DRE machines in several locations across the country the past several elections, raises concerns for Citizens Union Foundation.
- The Avante DRE appeared to be easier to read and understand than the Sequoia. The four synchronized panels of the Sequoia DRE is a potential distraction and the color highlighting option for undervotes and overvotes of Avante stood out more clearly.
- The multiple back-up systems to store vote tallies is an important step toward ensuring security and accuracy. The Avante system had one additional source of recording votes compared to the Sequoia model. With either model we would hope that extensive testing would be done to ensure the proper safeguards have been taken to protect the machine against tampering.
- The Sequoia voter verified paper trail displayed a clearer marking for spoiled ballots by printing "Voided" at the top of a receipt after a voter chose to make corrections to their selections. To decrease the likelihood of human error in the event of a hand paper recount, differentiating voided and valid votes with numerical codes is problematic and the Sequoia model better distinguishes the two. The Avante system of separating ballots without firmly noting a valid vote, rather using "replacement (1)" or "replacement (2)" seems to be more susceptible to human error in the event of the hand recount, even if using the program within the machine to identify valid and invalid ballots.

## General Concerns

- We understand that NYS's strict guidelines for new voting machines has made certification difficult, however, we hope that whichever voting system is chosen that security and accuracy can be guaranteed. CUF sees New York's adoption of the 2005 Voluntary HAVA guidelines as a strong step in ensuring this, and would hope that these strict guidelines are not compromised in the future to make certification easier for vendors.
- We also realize that with new machines and a new way of voting the public and poll workers will need extensive education and training on the new machines. It will be especially important that poll workers, and specifically poll site coordinators, are given more than adequate training and hands on experience with the voting machines. Additionally, we would encourage the Board to consider raising the pay for both of these positions.
- The Gartner and Board of Elections Voting Machine Facilities Working Group assessment gave the Bronx and Brooklyn poor ratings due partly to poor roofing, insufficient lighting, pest control, and ventilation. The electric wiring in Queens and Staten Island were also of concern. It is clear that all of these spaces will need to be reevaluated when a machine is selected to ensure they can accommodate.
- Likewise, there should be a thorough examination of poll sites to ensure they have the space and accessibility necessary to accommodate the new system once it is selected.
- The American Institutes for Research "New York State Voter System User Rate Assessment Study" and the Board's "Analysis of the Number of Voters per Voting Machine" found DRE machines to accommodate less people in a 15 hour time span than the optical scan, however at different ratios. These statistics are good starting points, but when determining the number of machines New York City will need it will be necessary to account for factors such as voting times for people with disabilities, non-English speaking voter, as well as, undervoting, overvoting, and peak voting hours.

Citizens Union Foundation recognizes that the difficulties that the city Board of Elections has had in selecting a new system has been due to forces out of its control. We believe the city Board of Elections has done an admirable job to date, and has conducted the process in an open and transparent manner. We recognize that implementation of new machines in 2007 is now no longer a feasible option. As that is, we have very serious concerns with the idea of implementing a new voting system during the 2008 presidential elections. This truly would be a worst case scenario. There will be open primaries for both major parties, and there is a very real likelihood that there will be major candidates from each of the political parties that hail from New York. This will not only result in added interest in the party primaries, but could very well turn New York into a battleground state during the general election. While we are not prepared to recommend this at the moment, we do feel it is only practical to consider implementation in 2009 as a possibility.

We understand this has been a long and difficult process, and will likely suffer further setbacks and obstacles; however we would like to reiterate the importance of public involvement in the process. We continue to encourage the Board to ensure that all stages of the decision making process are transparent and open, including the testing and certification, fiscal analysis, and contracting.

Thank you for the opportunity to testify today.