

New York City Board of Elections
John Ravitz
Executive Director
32 Broadway, 7th Floor
New York, NY 10004

Dear Mr. Ravitz:

In the next several weeks, you will make a critically important decision about which new voting system your jurisdiction will purchase. This is, no doubt, a very difficult decision; we are aware that between the claims of vendors and activists, it can be very difficult to secure the most important, objective data to assist you in making this decision.

As you may know, this month, the Brennan Center for Justice at New York University School of Law issued a landmark study on electronic voting systems entitled *The Machinery of Democracy: Voting System Security, Accessibility, Usability and Cost*. The study is the first comprehensive, empirical analysis of electronic voting systems in the United States. It comes after nearly two years of study with many of the nation's leading academics, election officials, economists, and security, usability and accessibility experts.

The report is a national study. As a result, some of the information will not be applicable to New York. Most importantly, New York has determined that all machines must comply with a "full face" ballot requirement. This means that you cannot purchase the "scrolling" DREs that almost all other jurisdictions in the United States using DREs have purchased. When reading our conclusions about DREs, please pay close attention to whether we are referring to "full face" DREs or "scrolling" DREs. This distinction is particularly important in our usability and cost studies; we found that full face DREs are significantly more expensive and result in many more voter errors than scrolling DREs.

Since our report's release, Professor David Kimball, an author of our usability chapter, has provided us with additional information about residual or "lost vote" rates for the various voting systems. We summarize those findings in the table below:

**Residual Vote Rates for State Ballot Initiatives by Voting Equipment
2004 General Election**

	Voting Equipment	Residual Vote Rate
Better Than Nationwide Rate	Scrolling DRE	6.3%
	Optical Scan – Central Count	7.7%
	Mixed	8.2%
	Optical Scan – Precinct Count	8.8%
<i>Nationwide Residual Vote Rate</i>	<i>All Systems</i>	9.3%
Worse Than Nationwide Rate	Paper Ballot	11.4%
	Full Face DRE	15.4%
	Lever Machine	32.1%

Based on 2,042 counties in states with ballot initiatives in 2004.

On average, the votes of 15.4% of voters using full face DREs were not counted for state ballot initiatives in 2004; by contrast, only 8.8% of voters using precinct count optical scan machines did not have votes counted for state ballot initiatives. Professor Kimball found that this difference in residual vote rates was significant *regardless of vendor*.¹

As you will see, our usability chapter also finds significantly higher lost vote rates for full face DREs than precinct count optical scan machines for “top of the ticket” races in 2000, 2002 and 2004. This discrepancy appears to be particularly high among Hispanic and low-income voters. Discriminatory residual vote rates may prompt court challenges. The Brennan Center successfully sued for modifications to New York’s current lever machines based on discriminatory residual vote rates in 2000.

Of course, the number of lost votes is just one measure of how “usable” a system is, and the usability of a system is just one factor that you must consider in determining which system to purchase. But you should be aware that plaintiffs have previously brought successful litigation against jurisdictions that have used machines and procedures that resulted in higher lost vote rates among the general public and that disproportionately impacted minority populations.

¹ Importantly, Professor Kimball’s research also shows that for “top of the ticket” races, optical scan ballots that require a voter to *connect an arrow* produce significantly higher error rates than systems that require a voter to fill in an oval.

We urge you to read the entire report to assist you in making your purchasing decisions, and in developing best practices after your purchase is made, regardless of the system you purchase. Please feel free to contact us if you have any questions or would like to discuss the report in greater detail. I can be reached at lawrence.norden@nvu.edu or 212-998-6322.

Sincerely,

A handwritten signature in black ink, appearing to read "Lawrence Norden". The signature is written in a cursive style with a large, prominent initial "L".

Lawrence D. Norden
Associate Counsel, Democracy Program

Encl.