

**Testimony Submitted to the
U.S. Election Assistance Commission
on the Election Day Survey and Tracking Voting System
Performance**

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Thank you Chair Rodriguez and Commissioners Beech, Davidson and Hillman for the opportunity to testify today on the importance of reinstating questions about voting machine performance into the Election Day Survey as part of an overall effort to track and share information on voting system performance.

Common Cause is a national nonpartisan, nonprofit public advocacy organization founded in 1970 by John Gardner as a vehicle for citizens to make their voices heard in the political process and to hold their elected leaders accountable to the public interest. With nearly 400,000 members and supporters and 36 state organizations, Common Cause is committed to honest, open and accountable government and to encourage citizen participation in democracy. Consistent with our overall mission we have been at the forefront of election reform advocacy, working to improve accessibility, accuracy, transparency, and verifiability in our democratic process.

My testimony follows in three parts. First, I discuss the need for a federal effort to track information on voting system performance as part of an overall program to improve elections. Second, I will discuss how re-instating questions on voting system performance into the Election Day Survey can be a meaningful part of that process. Third, I will discuss other avenues to collecting information on voting system performance.

I. The Need for a Federal Clearinghouse on Voting System Performance

Since the passage of the Help America Vote Act (HAVA) in 2002 and the distribution of more than 3 billion of taxpayer dollars by the EAC and GSA, our national election system has been changed. Many states used a portion of their HAVA funds to purchase new voting equipment. Voters and election workers were introduced to brand new voting machines, sometimes with mixed results.

Like all machines, the new voting systems are not problem free. Touch screens go out of calibration, paper trail printers jam, optical scanners malfunction. Software bugs, inadequate code, and programming problems have occurred. Systemic problems in the tabulation equipment have led to the loss of votes. All of these malfunctions have at times lead to serious problems for election officials as undervotes, lost votes, and phantom votes have thrown the outcome of a number of elections in question. These failures have led to complete a complete changeover in voting equipment in a number of instances. A few examples below represent just a small sampling of the problems presented by malfunctioning voting systems:

- In Ohio's March 2008 primary, votes in at least 11 counties were "dropped" when memory cards were uploaded to computer servers due to a software flaw.

- In the August 26, 2008 primary in Palm Beach County Florida, several votes in a judicial contest disappeared during a recount, then reappeared in a second and third recount, flipping the outcome to a different winner each time.
- In the September 9 primary in Washington, D.C., three different counts produced three different vote totals, with thousands of “phantom votes” appearing in the first two counts.

Perhaps in anticipation that problems with new voting equipment might occur, and as prudent stewards of the billions of taxpayer dollars, the drafters of HAVA charged the Election Assistance Commission with “[maintaining] a clearinghouse of information on the experiences of State and local governments ... in operating voting systems in general”, so that election officials in one jurisdiction might learn of problems and forewarn election officials in other jurisdictions.

The need for a federal entity, to collect, track and publish information about voting system performance has been illustrated time and again as election officials are forced to cope with voting system irregularities without the benefit of information and knowledge collected by their colleagues around the country.

For example, after the March primary in Ohio, a post election canvass discovered that a voting system central tabulator manufactured by Premier (formerly known as Diebold) failed to upload hundreds of votes from memory cards¹. The problem, it was discovered was a “logic error” in the central tabulator. The Ohio Secretary of State sued Premier for breach of contract for this significant defect. After several months of denying their software was defective, Premier eventually, in a preemptive measure to prevent further litigation, sent out an advisory² to all election officials using the faulty product to warn them it may fail to upload votes. However, it is important to note that this problem may have been identified as early as 2004. In DuPage County, Ill. a remarkably similar problem occurred in which the Diebold/Premier central tabulator failed to properly upload memory cards during the March primary.³ Election officials, not only in Ohio but in all 1,750 jurisdictions using the Premier system, could have benefited from this information.

At present, election administrators must rely on the voting machine vendors to voluntarily alert election officials to system irregularities. Unfortunately the vendors are not always forthcoming in admitting to problems. On October 3rd, the Washington, DC city council held a hearing to investigate voting system malfunctions that generated 1,500 phantom votes in the District primary.⁴ The

¹ Flaherty, Mary Pat, “Ohio Voting Machines Contained Programming Error that Dropped Votes”; *The Washington Post*; Aug. 21, 2008 http://voices.washingtonpost.com/the-trail/2008/08/21/ohio_voting_machines_contained.html

² <http://www.sos.state.oh.us/sos/upload/news/20081001c.pdf>

³ <http://www.votersunite.org/info/DuPageDieboldReport.pdf>

⁴ Harris, Hamil, “Council Grills Election Board”, *The Washington Post*; Oct. 4, 2008; <http://www.washingtonpost.com/wp-dyn/content/article/2008/10/03/AR2008100303336.html>

DC councilmembers asked representatives from Sequoia Voting Systems if their equipment or software had ever previously malfunctioned and produced incorrect totals. Sequoia testified under oath that it had not. One of the Councilmembers later produced a stack of press accounts of Sequoia voting equipment malfunctions from states across the country that belied Sequoia's claim of a spotless record.⁵ The DC city council investigators need a complete and accurate understanding of Sequoia's past problems to carry out a meaningful investigation, but clearly they cannot rely on Sequoia to provide it.

In the February primary in New Jersey, several counties found that their Sequoia Advantage voting machines produced incorrect ballot counts.⁶ Sequoia announced it would alert officials in jurisdictions that use the Advantage to the problem. However, a Montgomery County, Pennsylvania election administrator later told *The Philadelphia Inquirer* that they had not been advised that the Advantage voting machines had produced incorrect ballot totals in NJ.⁷

During early voting in this year's general election there were numerous reports of "vote-flipping" on the ES&S iVotronics in Tennessee⁸, Texas⁹, and West Virginia.¹⁰ But when West Virginia Secretary of State Betty Ireland was asked if she was aware of problems with ES&S equipment in other states, Secretary Ireland responded that she didn't know.¹¹

The absence of an effort to collect, track and share information about voting system performance has been identified as problematic for election administrators by the General Accounting Office. In 2005, in its report *Federal Efforts to Improve Security and Reliability of Electronic Voting Systems are Under Way, but Key Activities Need to be Completed*, the GAO concluded:

"[t]he continued absence of a national clearinghouse for voting system problems means that segments of the election community may continue to acquire and operate their systems without the benefit of critical information learned by others regarding the security and reliability of those systems."¹²

⁵ http://octt.dc.gov/services/on_demand_video/on_demand_october_2008_week_1.shtm

⁶ Walsh, Diane, "Machines Get Vote of No Confidence after Errors in Primary"; *The Star-Ledger*; Feb. 20, 2008, <http://www.votersunite.org/article.asp?id=7551>

⁷ Nunnally, Derrick; "Voter Interest Surges in Pennsylvania Suburbs"; *The Philadelphia Inquirer*, Mar. 10, 2008

⁸ Zetter, Kim, "ES&S Voting Machines Flip Votes in Tennessee"; Oct. 23, 2008, *Wired Blog* <http://blog.wired.com/27bstroke6/2008/10/ess-voting-mach.html>

⁹ Cluett, Libby, "N. Texas Residents Say Machines Switched Dem Votes"; Oct. 24, 2008 <http://www.chron.com/disp/story.mpl/hotstories/6077085.html>

¹⁰ Nyden, Paul, "More W. Virginia Voters Say Machines are Switching Votes"; *The Charleston Gazette*; Oct. 18, 2008. <http://wvgazette.com/News/200810180251>

¹¹ Nyden, Paul, "Touchscreen Machines Vetted"; *The Charleston Gazette*, Oct. 28, 2008, <http://wvgazette.com/News/200810270716>

¹² "Federal Efforts to Improve Security and Reliability of Electronic Voting Systems are Under Way, but Key Activities Need to be Completed", Sept. 2005 pg.55 <http://www.gao.gov/new.items/d05956.pdf>

The GAO again addressed the lack of centralized program to collect and disseminate information on voting system performance in 2008, in its report *Federal Program for Certifying Voting Systems Needs to be Further Defined, Fully Implemented and Expanded*.

*"This means that no federal entity is currently responsible for tracking and facilitating the resolution of problems found with the vast majority of voting systems that are used across the country today and that could be used in the future, and thus states and local jurisdictions must deal with problems with their systems on their own."*¹³

The GAO is not alone in expressing concern over the absence of a program to collect data on voting system incidents. In December 2007, the EAC's Board of Advisors passed a resolution advising the EAC that it *"could greatly facilitate the ready access and dissemination of information on field incidents concerning voting systems' performance, security, and other objectives by collecting and publishing incident reports – without regard to whether they have been verified scientifically..."* and recommending the EAC *"create on its website an effective compilation of voting system incident reports that have been reported by local or State officials, keyed to different voting system vendors and models."*¹⁴

Clearly there is an outstanding need to collect data on voting system performance so that election officials have access to information about the strengths and weaknesses of their systems and can prepare for irregularities that could occur.

Additionally, the collection of pertinent and comprehensive data on the performance of voting systems will be a of great use in developing and improving a meaningful set of standards for the voluntary voting system guidelines and the certification process.

In a 2004 paper entitled "Recommendations for the Conduct of Elections in Miami-Dade County using the ES&S iVotronic System" computer science professor and voting system expert Dr. Doug Jones described the necessity for performance data in any certification process stating:

"In general, the process of system certification requires feedback. Thus, for example, the Federal Aviation Administration requires reports for all incidents involving airplanes to be sent to the FAA as well as to whoever might have caused the incident. Without this feedback, the FAA would not have the information needed to improve their regulations, their testing of airplanes, or their operating rules. Similarly, in the voting system domain, the state elections office and the Federal Election Assistance Commission

¹³ "Federal Program for Certifying Voting Systems Needs to be Further Defined, Fully Implemented and Expanded", GAO, Sept. 2008 pg. 27 <http://www.gao.gov/new.items/d08814.pdf?source=ra>

¹⁴ http://www.eac.gov/about/committees/advisors/docs/2007-resolutions.pdf/attachment_download/file

need to learn about any problems encountered by the counties so that they can adjust their certification requirements.”¹⁵

In testimony to a joint hearing by the House Administration and Science and Technology Committees in 2006, Dr. David Wagner noted:

Standards should be informed by experience. At present, there is no requirement for reporting of performance data or failures of voting equipment, no provision for analyzing this data, and no process for revising regulations in a timely fashion in response. The 2007 VVSG should incorporate a framework for collecting, investigating, and acting on data from the field and should provide a mechanism for interim updates to the standards to reflect newly discovered threats to voting systems. For instance, the FAA requires airplane operators to report all incidents (including both failures and near-failures), uses independent accident investigators to evaluate these reports, and constantly revises regulations in response to this information. Adopting a similar framework for voting systems would likely improve voting systems.¹⁶

Although the EAC has designed an anomaly reporting program for EAC-certified equipment, this will not serve the country’s present needs as the only equipment in use is non EAC-certified and these systems are likely to remain in the field for a long time.

Clearly the ultimate goal is to create a robust program to collect and share vital information on problems experienced by all voting systems in use,

Common Cause is committed to working with the EAC, state and local governments, the Administration and Congress to expand on the work the EAC has already begun to track voting system performance. We recognize that it is vital to consult with experts in the field of data collection and with other agencies that have comparable clearinghouse and certification responsibilities in order to design and implement a comprehensive and meaningful program to fulfill these duties in the best way possible. Developing and implementing such a robust program will take time and resources.

That said, the need to collect information on voting system performance is urgent, therefore we urge the EAC to begin collecting information on voting equipment incidents through less prescribed and complex methods, starting by re-instating questions on voting system performance in the 2008 Election Day Survey.

II. Re-instating Questions About Voting System Performance as Part of the EAC Election Day Survey

¹⁵ <http://www.cs.uiowa.edu/~jones/voting/miami.pdf>

¹⁶ http://votetrustusa.org/index.php?option=com_content&task=view&id=1554&Itemid=26

As you know, the 2004 Election Day Survey included basic questions on voting system performance which exposed some common problem areas but the overall the data collection was insufficient. In comments, Election Data Services, the contractor who compiled the survey results recommended the EAC expand the collection of data on voting system performance, stating “[we recommend] that the EAC institute a more extensive program designed to investigate reported voting equipment problems. ... With the wide ranging rumors and reports of voting equipment problems that came out of the 2004 elections, there is a lack of full information to substantiate or dispel the rumors.”¹⁷

In its comments, EDS also raised another important point election officials must often grapple with – at present most unrestricted information on voting system performance is limited to news reports that can be incomplete or inaccurate. The press may incorrectly identify a minor problem as a major one or report on a problem that has already been resolved. Often, reports in the press quote the machine vendors laying the blame for a voting system malfunction on the election administrators, pollworkers or voters without proper or adequate substantiation. Conversely, there are many voting system irregularities that do not get reported in the press at all but that may be reoccurring across the country in identical system yet election officials overseeing the systems may remain unaware that other jurisdictions are experiencing the same problem or may have already developed a resolution.

We firmly believe that with the appropriate preparation, research, pilot work, and funding, questions on voting system performance should be reinstated into the Election Day Survey. While we understand that the Election Day Survey is not the only instrument to collect data, and that it is an imperfect instrument, a correctly worded, funded, set of questions on voting system performance is critical to improving our voting systems so that the public and election officials can understand performance problems and be prepared for them. We recommend that the EAC take the following steps in fairly short order.

- 1) Solicit information from states about those jurisdictions (counties or townships) which currently have exemplary practices in collecting data on voting system performance and election administration. In other words, if there are best practices currently in existence, the EAC should query state election officials to bring them to light.

For example, Maricopa county Arizona has established a robust, award winning program for election incident reporting which includes real time reports called in by election workers and voters. The data gathered from

¹⁷Recommendations from Election Data Services on the 2004 Survey can be found here: http://www.eac.gov/program-areas/research-resources-and-reports/copy_of_docs/eds2004/eds-2004-part-3/attachment_download/file

hotlines serves both to quickly resolve problems on Election Day and to alert election administrators to problems which are systemic – be they related to voting machine performance, language assistance or disability access. The data is stored in a sortable accessible database. This type of program can help inform how Election Day data on voting system performance can be best attained.

- 2) Work with experts in the field of election administration and data collection to determine how best to craft questions and create a good survey instrument to collect data on voting system performance.
- 3) Conduct a pilot program in collecting this data during the next off cycle election to inform questions for the 2010 federal election.

We understand that this effort will take time and resources, but we will be willing to assist in any way that we can to facilitate this process.

It should be noted that as part of reinstating specific questions on the issue of voting system performance to the Election Day Survey, we also recommend that the EAC reinstitute the practice of gathering data on the number of overvotes and undervotes. These data items can be of extreme importance in helping to investigate what may have happened in a troubled election and with problematic voting equipment. Without these important tools policy makers are just left with the combined "residual vote" calculation in order to note extreme instances of missed votes. Because the American people have a right to "not vote" in an election contest, the residual vote calculation can mask instances where overvotes are the real problem. In many instances, high numbers of overvotes have occurred because of poor ballot design.

III. Supplementing EAC Survey Data Collection With Other Methods for Collecting Data on Voting System Performance

In addition to the Election Day survey, there are other readily available ways in which the EAC can begin to collect useful information on system performance and irregularities. We urge the EAC to begin exploring different options and are pleased to suggest a few:

During the election, voter hotlines collected a great deal of data on voting system problems and user issues around the country. This information could be an extremely valuable resource and could be examined.

Additionally, the EAC should consider asking vendors and election officials to voluntarily provide the EAC with copies of all product advisory notices that are issued for voting systems. This could be an excellent resource for election

officials to ensure that they are up-to-date on all known voting system issues and their resolutions.

Finally, we urge the EAC to consider creating a web site for election stakeholders to input information about voting system irregularities as suggested the EAC Board of Advisors.

By implementing a true clearinghouse information of the experiences of state and local governments in using voting systems in general, the EAC will create a much more accurate and comprehensive understanding of malfunctions when they occur and may dispel rumors or unsubstantiated concerns about machine performance. Furthermore, by collecting information on malfunctions across the country, the data may expose patterns of repeated failures so that they may be properly addressed

The public has spent more than a billion dollars to upgrade and improve voting equipment so that our elections are transparent and accurate. We need to have a comprehensive understanding of how well these systems have performed. A great first step should be to include detailed specifics about voting machine performance in the Election Day Survey. We will be happy to work with the EAC, Congress, and state and local election officials to strengthen this vital undertaking.

Thank you very much for your time.