

Common Cause

DEREK BOK
Chairman

CHELLIE PINGREE
President

ARCHIBALD COX
Chairman Emeritus

JOHN GARDNER
Founding Chairman

FOR RELEASE: JULY 24, 2003

**Contact: Geoff Ward or Mary Boyle
(202)736-5770**

EDITORIAL MEMORANDUM: Voting Machines and Election Reform

Introduction: The Touch Screen Debate

The 2000 presidential election damaged Americans' faith in the country's election laws and procedures. Problems were not confined to Florida; poor procedures at polling places across the country created a national problem. There have been substantive election reforms since Florida, but new concerns have arisen over the use of electronic voting machines.

California today stands at the forefront of election reform after it was forced to discontinue the use of punch card machines in several major counties. That happened after organizations including Common Cause, the American Civil Liberties Union and the Southern Christian Leadership Conference of Los Angeles sued the state of California and then-Secretary of State Bill Jones (R), to end the use of "hanging chad" punch card voting machines. The lawsuit alleged that punch card machines used in counties with high minority populations were less accurate than voting machines used in other counties in the state. In September 2001, Secretary Jones announced that the state would concede the case, calling the machines "obsolete" and "outdated." A judge then ordered California to discontinue use of punch card machines by March 2004.

Several of the counties involved in that case, *Common Cause v. Jones*, are among the largest in the nation, including Los Angeles, San Diego and Sacramento counties. With their punch card systems decertified, the counties had to choose new machines, aided by about \$200 million in federal funds from the Help America Vote Act of 2002 (HAVA) and \$200 million from a bond measure approved by voters.

Objections to Touch Screens

As counties prepared to purchase new systems, Stanford University professor David Dill organized a coalition of computer scientists to oppose the use of new touch screen machines, also known as Direct Recording Electronic, or DRE, machines.

Dill argued that computerized voting equipment was “inherently subject to programming error, equipment malfunction, and malicious tampering.” Touch screen machines, he said, do not “provide a way for the voters to verify independently that the machine correctly records and counts the votes they cast.”

Furthermore, a recent study conducted at Johns Hopkins University found that touch screen machines manufactured by Diebold Corp., a major voting machine vendor, could be tampered with by individual voters or poll workers.

Dill proposed that states and counties refrain from purchasing touch screens in favor of other devices that rely on paper ballots. He also said that counties should consider using a new kind of touch screen that prints out a paper replica of the ballot that voters can examine, verify for accuracy, and confirm. That type of machine has been certified for use in some states, but has yet to be successfully used in the field. The latter approach drew the support of Congressman Rush Holt (D-NJ), who recently introduced the "Voter Confidence and Increased Accessibility Act of 2003," to require that all election machines used by November 2004 either be older paper-based systems, or a new type of touch screen machine that can produce a special voter-verifiable paper trail. It is uncertain, however, whether Holt's bill will be brought up for a vote.

Answering the Critics

In response to Dill's concerns, California Secretary of State Kevin Shelley (D) convened a task force to study the issue of voting machine technology. It became clear that a range of groups across the political spectrum have some disagreement with Dill's arguments and proposals.

Groups like Common Cause, the Leadership Conference on Civil Rights, the League of Women Voters and the American Association of People with Disabilities believe touch screens have some advantages over other current systems and are concerned about attempts to force counties and states to abandon current touch screen technology altogether.

They consider touch screen machines a reasonable option for counties to consider purchasing because they can be easier to use, more accurate and better able to comply with disability requirements than many other voting machines. These groups believe that if states and counties abandoned current touch screen machines altogether they would miss out on a generation of touch screen machines that have advantages over older systems.

Elections officials, in particular, believe that it would be difficult for hackers to exploit the security vulnerabilities of current machines. They argue that with safeguards, including extensive testing, voting on touch screens can be made safe. They emphasize that touch screens have been successfully used and well-accepted by voters in a number of jurisdictions, including the state of Georgia and Riverside County, California. Elections officials also point out that security is only one of several criteria they use in choosing machines, including ease of operability, accessibility, adaptability and accuracy.

Finally, voting machine experts like Roy Saltman, who wrote landmark studies on voting machine technology for the National Bureau of Standards (now known as the National Institute

"The assurance of public confidence in vote-counting is an issue of systems design and assurance; it is not limited to a single palliative measure, e.g., the provision of hard-copy ballots in DRE systems."

- Roy Saltman, voting machine expert

of Standards and Technology) have argued that the best way to improve voting security is to have adequate procedures and systems for testing and using machines. Other voting experts like Ted Selker of the Massachusetts Institute of Technology, Michael Alvarez of the California Institute of Technology and Michael Shamos of Carnegie Mellon University, have made similar arguments.

Background on HAVA and Voting Machines

While voting machine problems loomed large in the public eye in Florida, voting machine reform was only a small part of the larger Help America Vote Act. This was largely because prominent reports on election reform suggested that voting machines were part of a broader problem with voter registration and polling place operations.

Congress responded by passing HAVA with broad bipartisan support in October 2002. HAVA's requirements were far-reaching: the law required states and local governments to make polling places accessible to people with disabilities; to create statewide voter registration databases that can be easily managed and updated; to improve security by allowing voters to

ensure that they cast accurate ballots and to guarantee that no eligible voter is ever turned away at the polls. Congress phased in these fundamental reforms over several years, giving states time and federal aid to make the necessary changes.

Many voting rights groups hailed the passage of HAVA, but cautioned the bill was only a start to reform. One reason HAVA didn't go further was because it was shaped by compromises between its Republican and Democratic sponsors, Senator Mitch McConnell (R-KY) and

"We had a carefully crafted compromise on this whole issue of whether or not to, by either direction or indirection, require certain voting machines in jurisdictions.... We don't want to dictate to any State what form or what kind of machine they choose to take.... In crafting this bill, we were careful to avoid mandating any particular system out of existence."

- Senator Mitch McConnell (R-KY) during Senate debate over HAVA 2/14/2002

Representative Bob Ney (R-OH) and Senator Chris Dodd (D-CT) and Representative Steny Hoyer (D-MD).

Republicans expressed concerns that banning certain types of machines or setting standards too high would 'federalize' what had been traditionally the function of state or local governments. They worried about the costs of mandating machine replacement. While the federal government was providing billions of dollars under HAVA, states and counties would still have to pay the bulk of the cost for replacing new machines. Sen. McConnell and Rep. Ney, however, did agree with their Democratic colleagues on the need for some significant reforms.

Under the compromise, HAVA set up a \$325 million grant program to help states replace lever and punch card machines if they choose, but permitted states to continue to use the machines if they wanted.

HAVA also required that voting machines allow voters to verify their vote before the ballot was cast and counted, provide voters with the opportunity to correct ballot errors and produce a paper record in case of audit. HAVA required that every polling place in the country purchase at least one "touch screen" machine that would be accessible to individuals with disabilities, allowing the blind and visually impaired to cast ballots privately for the first time.

Finally, they agreed to create a new federal agency called the Election Assistance Commission (EAC) to review existing voting machine standards, and fund grant programs for research and development and the creation of pilot programs for the testing of new voting machine technology.

The Failures of Current Federal and State Voting Machine Standards

The standards that HAVA left in place for voting machines form a loose regulatory net that has caught some poorly functioning machines while allowing other mediocre systems to remain in use. Part of the problem is that state and federal voting machine standards are weak.

Up until the passage of HAVA, the Federal Election Commission (FEC) was responsible for creating voluntary standards for voting machines.

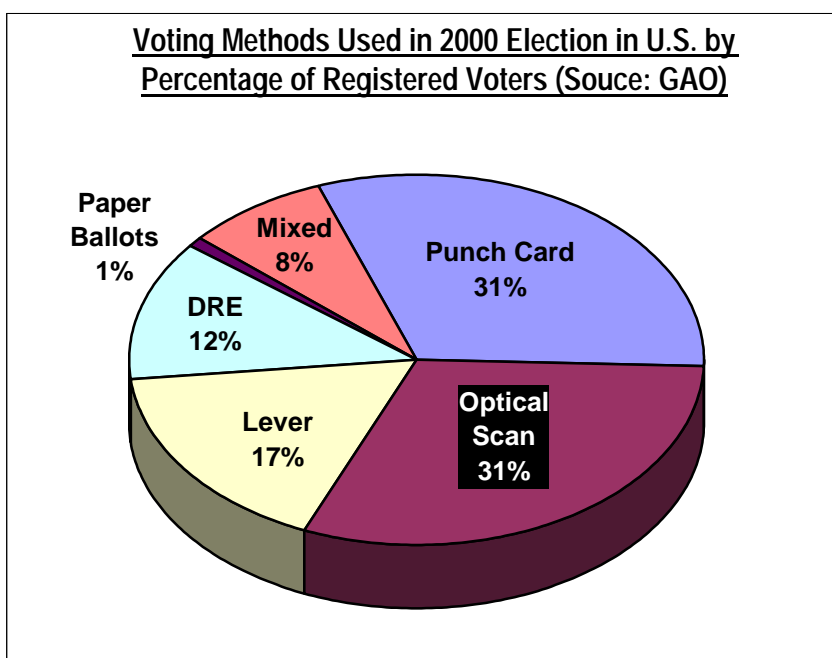
Only 38 states currently require voting machines to meet those FEC standards, and testing is conducted by a non-government agency. Only about 40 percent of jurisdictions nationwide used voting equipment that met FEC standards, according to a 2001 General Accounting Office (GAO) study.

Current voluntary voting machine standards have permitted the continued use of obsolete machines.

Major cities like Boston and New York still use lever machines invented more than a hundred years ago. Punch card ballots, introduced in the 1960s, are still commonly used today, despite a 1988 recommendation by the National Institute of Standards and Technology that they be eliminated because they inaccurately capture voters' choices and fail to reproduce results in the case of a recount.

Current federal standards also disregard how voters actually use voting machines. One revelation of the 2000 election was how many machines tested satisfactorily, but performed poorly on Election Day.

Some of these problems can be eliminated by reforms such as improved poll worker training and better voter education. Even punch-card ballots have recorded low rates of error if administered effectively. But some voting systems are easier to administer and use than others.



Evaluating machines based on how voters and poll workers interact with them would help catch problems before they emerge.

Not only are these “real world” tests not performed, but a number of states and localities do not collect “real world” data on their voting machine's efficacy. That same GAO report in 2001 found that 96 percent of jurisdictions nationwide were “satisfied” with the performance of their voting equipment during the November 2000 election, but that only 48 percent of jurisdictions bothered to collect data on the accuracy of their voting equipment. That means about half the jurisdictions surveyed had no empirical evidence for their “satisfaction.”

Without local data, states cannot compare results across jurisdictions or monitor for disparities. National data on machine performance is then incomplete. Other critics of federal tests have pointed out that the non-governmental organization responsible for testing voting machines is not overseen by the National Institute for Standards and Technology, which accredits laboratories in a number of technical fields. The current testing labs also have an explicit policy of not responding to requests for information from the public or press. This disturbing lack of transparency and accountability undermines the limited effectiveness of an already flawed testing process.

“We currently rely too much on the promises of vendors selling their products,” said Chellie Pingree, president of Common Cause. “We should subject voting machines to the toughest tests we can devise, overseen by experts and open to public scrutiny.”

Common Ground: Pushing for Tougher Standards

Despite the heated exchanges over the voting machine issue, there is agreement about the need to replace inadequate voting machine standards.

California's task force released its report on touch screen machines on July 1. The task force achieved consensus on proposals recommending that federal and state standards and local practices be strengthened to improve security. Since all states are in the process of formulating plans to reform their election systems, including voting machines, the California report could have a significant impact.

On the federal level the report proposes improving oversight and transparency of testing facilities, making testing a periodic process as opposed to a one-time review, and increasing the

involvement of the National Institute for Standards and Technology. State-level proposals include requiring random audits and on-site testing of machines and making procedures easier for the public to access and understand. At the local level this would include protecting systems from hackers by keeping machines offline and requiring logic and accuracy testing before and after elections.

The California report recommends allowing counties to continue using touch screen machines. It also calls for the state to require that all voting machines by 2007 have in place a mechanism to audit votes either by paper or electronically. That would force vendors to improve the current generation of touch screen machines.

These recommendations focus on security. But there are other areas in which experts recommend improving standards. At a congressional hearing in 2001, experts like Steven Ansolobehere of MIT and Saltman made practical suggestions, such as requiring that voting machine testing simulate actual voting conditions and that more information about machine testing and performance be made public.

Common Cause agrees with these two sets of reforms. Says Pingree, "If voters have doubts about voting machines, and experts agree improvements are needed, we should demand reform. Our goal should be to produce machines that we can all trust."

Conclusion: Can New Standards Be Adopted?

While much of this debate could be resolved with a common push for tougher standards, other hurdles remain. Voting machine vendors, for example, oppose toughening standards, as it would impose additional costs, work and time on their industry. Vendors are a powerful lobbying force, particularly at the local level where their campaign contributions and technical expertise are highly valued.

This debate will continue on both the federal and state level. The new HAVA-created Election Assistance Commission will review the old federal standards, giving Members of Congress, computer scientists, and civil rights groups a chance to push for tougher federal rules. But for now, many are looking to California, which faces immediate choices on choosing machines that best assure secure, accurate, and trustworthy elections.

Even if California were the only state to adopt tougher standards, it would affect the voting machine market: vendors might improve the machines they sold nationwide rather than losing the chance to sell their machines in the country's largest state.

Pingree, the Common Cause president, believes that voters deserve more accurate, accessible and secure voting machines, and will encourage other states to follow California's steps and enact tougher reforms. "California should be commended for taking the lead to improve voting machines," Pingree said. "Voters want confidence in their elections. We will urge the rest of the country to follow suit."

#

For more information on election reform, visit the following websites:

Common Cause:

<http://www.commoncause.org/action/action.cfm?topicid=6>

Leadership Conference on Civil Rights:

<http://www.civilrights.org/issues/voting/details.cfm?id=11254>

League of Women Voters:

<http://www.lwv.org/join/ear.html>

American Association of People with Disabilities:

<http://www.aapd.com/dvpmain/elreform/paperballots.html>

California's Ad Hoc Touch Screen Task Force Report:

<http://www.ss.ca.gov/elections/taskforce.htm>