

TOM DAVIS, VIRGINIA,  
CHAIRMAN

DAN BURTON, INDIANA  
CHRISTOPHER SHAYS, CONNECTICUT  
ILEANA ROS-LEHTINEN, FLORIDA  
JOHN M. McHUGH, NEW YORK  
JOHN L. MICA, FLORIDA  
MARK E. SOUDER, INDIANA  
STEVEN C. LATOURETTE, OHIO  
DOUG OSE, CALIFORNIA  
RON LEWIS, KENTUCKY  
JO ANN DAVIS, VIRGINIA  
TODD RUSSELL PLATTS, PENNSYLVANIA  
CHRIS CANNON, UTAH  
ADAM H. PUTNAM, FLORIDA  
EDWARD L. SCHROCK, VIRGINIA  
JOHN J. DUNCAN, JR., TENNESSEE  
NATHAN DEAL, GEORGIA  
CANDICE MILLER, MICHIGAN  
TIM MURPHY, PENNSYLVANIA  
MICHAEL R. TURNER, OHIO  
JOHN R. CARTER, TEXAS  
MARSHA BLACKBURN, TENNESSEE  
PATRICK J. TIBERI, OHIO  
KATHERINE HARRIS, FLORIDA

ONE HUNDRED EIGHTH CONGRESS

# Congress of the United States

## House of Representatives

COMMITTEE ON GOVERNMENT REFORM

2157 RAYBURN HOUSE OFFICE BUILDING

WASHINGTON, DC 20515-6143

MAJORITY (202) 225-5074  
FACSIMILE (202) 225-3974  
MINORITY (202) 225-5051  
TTY (202) 225-6852

[www.house.gov/reform](http://www.house.gov/reform)

HENRY A. WAXMAN, CALIFORNIA,  
RANKING MINORITY MEMBER

TOM LANTOS, CALIFORNIA  
MAJOR R. OWENS, NEW YORK  
EDOLPHUS TOWNS, NEW YORK  
PAUL E. KANJORSKI, PENNSYLVANIA  
CAROLYN B. MALONEY, NEW YORK  
ELIJAH E. CUMMINGS, MARYLAND  
DENNIS J. KUCIENICH, OHIO  
DANNY K. DAVIS, ILLINOIS  
JOHN F. TIERNEY, MASSACHUSETTS  
Wm. LACY CLAY, MISSOURI  
DIANE E. WATSON, CALIFORNIA  
STEPHEN F. LYNCH, MASSACHUSETTS  
CHRIS VAN HOLLEN, MARYLAND  
LINDA T. SANCHEZ, CALIFORNIA  
C.A. DUTCH RUPPERSBERGER,  
MARYLAND  
ELEANOR HOLMES NORTON,  
DISTRICT OF COLUMBIA  
JIM COOPER, TENNESSEE

BERNARD SANDERS, VERMONT,  
INDEPENDENT

### SUBCOMMITTEE ON TECHNOLOGY, INFORMATION POLICY, INTERGOVERNMENTAL RELATIONS AND THE CENSUS

Congressman Adam Putnam, Chairman



### OVERSIGHT HEARING STATEMENT BY ADAM PUTNAM, CHAIRMAN

Hearing topic: *"The Science of Voting Machine Technology: Accuracy, Reliability and Security."*

Wednesday, July 20, 2004  
10:00 a.m.

Room 2247, Rayburn House Office Building

#### OPENING STATEMENT

Good morning and welcome to the Subcommittee's hearing on "The Science of Voting Machine Technology: Accuracy, Reliability and Security." An estimated 50 million registered voters, representing nearly 30 percent of all voters, are expected to cast their votes using some type of electronic voting technology this November. The Subcommittee scheduled this oversight hearing to examine where we are today with the evolution of electronic voting technology, including the subject of access, utilization and the associated issues of reliability, ease of use, efficiency, accuracy, and security.

The overriding goal of voting systems is to produce election results that accurately represent the will of the people. The Presidential election of 2000 highlighted deficiencies in the voting process that became the subject of many policy discussions at all levels of government. Since then, many localities have sought to evaluate and improve their voting systems through the use of electronic voting technology, believing that such technology will improve the accuracy of vote recording and tabulation, decrease costs, and increase voter turnout.

The issues we will be examining today in the processes of balloting and tabulating the results of elections, have been the subjects of discussion throughout our history. Deficiencies of one type or another have existed in virtually every process that has ever been utilized, yet today's

technology offers greater opportunities for participation in the important process of selecting our elected representatives as well as other ballot questions.

The federal government had not historically set mandatory standards for voting systems, nor had it provided funding to state and local jurisdictions for the administration of elections. However, after November 2000, Congress, the states, and various electoral commissions examined election procedures, voting technologies, whether national standards are necessary, along with the federal role in the election process. Congress considered and debated federal election reform legislation, and the Help America Vote Act of 2002 (P.L. 107-252) (HAVA) was enacted in October 2002. The act creates a new federal agency with election administration responsibilities, sets requirements for voting and voter-registration systems and certain other aspects of election administration, and provides federal funding.

I'd like to note for the record that both Polk and Hillsborough Counties in Florida, which I represent, had made significant investments in improving their voting machines and had touch-screens in place for the 2000 election.

HAVA established a program to provide access to approximately \$4 billion in federal grants to states to modernize the voting systems currently in use. And acquisitions of new voting system technology are underway in a number of states and localities. HAVA does not require any particular voting system, but it sets requirements that will influence what systems election officials choose. HAVA's requirement for at least one handicapped accessible voting system per polling place and other factors are expected to drive states toward adopting touch-screen or direct recording electronic (DRE) machines.

Beginning January 2006, in accordance with HAVA, voting systems used in federal elections must provide for error correction by voters, manual auditing, accessibility, alternative languages, and federal error-rate standards. Systems must also maintain voter privacy and ballot confidentiality, and states must adopt uniform standards for what constitutes a vote on each system.

In general, it is desirable for voting systems, amongst other things, to:

- count votes accurately;
- prevent double voting;
- maintain voter privacy and anonymity;
- assure the voter that his or her vote has been counted toward the final tally without compromising anonymity;
- prevent vote tampering with results, both during and after the period during which polls are open, especially by anyone with authorized access to those results;
- provide for meaningful audits;
- maintain proper operation even in the face of power failures and other disasters; and
- support equal access to voting (including access for sub-populations such as non-English language voters and voters with various disabilities).

Currently five technologies are used: hand-counted paper-ballots, mechanical lever machines, computer punchcards, optical scan or marksense forms, and direct recording electronic systems. Most states use more than one kind of system. Each has advantages and disadvantages with respect to error rates, cost, speed, recounts, accessibility to disabled persons, and other characteristics. Differences in actual performances in elections are difficult to measure accurately and depend on many factors, such as the design and condition of the system, the familiarity of voters with it, the complexity and design of the ballot, local standards and practices, and the level of competence of polling place workers.

Since 2000, many electronic voting systems have been proposed. Today, DREs, which present voters with choices on a video display and record votes electronically, are gaining favor. They offer improved user interfaces, facilitate voter confirmation, provide instant running tabulations, and potentially satisfy HAVA's requirement for at least one handicapped accessible voting device per polling place.

There is currently some controversy about how secure these systems are from tampering by voters, election personnel, or even manufacturers. There is also concern by some about the potential for software defects or other technical failures that could interrupt the capability of a given system. There are disagreements among experts about both the seriousness of these concerns and what should be done to address them. While it is generally accepted that tampering is possible with any computer system given sufficient time and resources, some experts believe that current security practices are sufficient. Others believe that additional steps are needed.

Some experts believe that the problem is serious enough to require changes in the systems before they are more widely adopted, ranging from more sophisticated computer security to the printing of paper ballots that would be verified by the voter and hand-counted if the election results were contested. Others believe that procedural and other safeguards can make DREs sufficiently safe from tampering, that use of printing paper ballots would create too many problems, and that the controversy risks drawing attention away from the demonstrated utility of DREs in addressing known challenges of access to and usability of voting systems.

As presently designed, many electronic voting systems do not produce a record that can be independently audited. For this reason and others, the prospect of electronic voting systems has been met with some skepticism in parts of the information technology community. Moreover, experience with large-scale technology deployment indicates that it takes some time before the bugs in the system, the technology, procedures and people associated with using and operating the technology, are shaken out or even identified, and so even communities that have deployed and used these systems will face the challenge of how to evaluate their performance. Additionally, there continues to be questions about the maturity of the technology available to the market today, as well as the functional capabilities of access for the disabled community and the ability to conduct audits should that be necessary.

I look forward to the expert testimony from all our distinguished panelists that will provide a greater understanding of the fine points of voting machine technology. Today's hearing will seek to further examine the science and technology of electronic voting systems; what are the lessons learned thus far; and what are the most appropriate next steps, both short term and long term, to insure the integrity, reliability, accessibility, and security of the voting process that is such an important ingredient in American democracy and a justifiable expectation of the American people

This is an election year, and as such it is often the case that those on both sides of the aisle attempt to score political points. That is not the purpose of this hearing. We are here today to examine the technology that is available, and learn from panels of experts what is and is not feasible in the real world. Our goal is to further the discussion and debate on the technological advances that improve the manner in which our society conducts elections. I know that my colleagues share my desire to conduct an oversight hearing that is free from rancor and division.

#####