

Remarks by Paul DeGregorio
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Commission
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Good afternoon, ladies and gentlemen. It is a pleasure to be a part of this distinguished panel and address you today. I would also like to extend my thanks to Dr. Toth and his staff for organizing this fantastic conference, and to Arnis Ciminars, our host, for having us in his beautiful country.

My remarks today will focus on the future of technology in election administration in America, more specifically as it relates to electronic voting machines and the possibility of internet voting.

The subject of electronic voting machines is proving to be an increasingly contentious one in the United States as their use becomes more and more widespread. Many people do not realize that ballots have been counted electronically in the USA since the 1960s, and that voters have been casting ballots on electronic devices since the 1980s. However, their recent proliferation is due to the Help America Vote Act of 2002 passed after the turmoil surrounding the 2000 Presidential Election. We expect that over 90% of all the ballots in our November Congressional election will be cast or counted electronically.

The Help America Vote Act or "HAVA" represents the first major piece of federal legislation on national election reforms. Among other provisions, HAVA appropriated \$3.1 billion in funding to states to update their voting equipment and replace out-dated lever and punch card systems. HAVA also requires that each precinct have at least one voting machine accessible to those with disabilities. The US Congress was determined to avoid a repeat of the 2000 Florida recount when the presidency hung in the balance and dimpled chads entered into the world's vocabulary.

All new touch screen systems notify a voter in the event of an error, overvote, and allow for convenient ballot review as per HAVA guidelines. Furthermore, to address security and recount concerns, a majority of US states have passed legislation requiring all electronic machines to produce a voter verifiable paper audit trail, or VVPAT; and, the US Congress is currently considering such national legislation as well.

Enhanced accessibility is another prime advantage of the new systems. Voting in many jurisdictions around the USA has become as easy as touching a screen or filling in an oval. Many machines can be programmed to produce ballots in several different languages, and disabled voters, who I will discuss more in-depth later, have a multitude of assistance options available to them.

Election administrators were not forgotten during the usability upgrades. The counting and tabulating of ballots has never been more efficient or reliable. Touch screen machines keep several internal tallies, notifying poll workers immediately when there is an error; and, operating systems include counting technology that can process over 300 ballots per minute. If a machine is malfunctioning, it can notify poll workers of the problem, and be placed out of service.

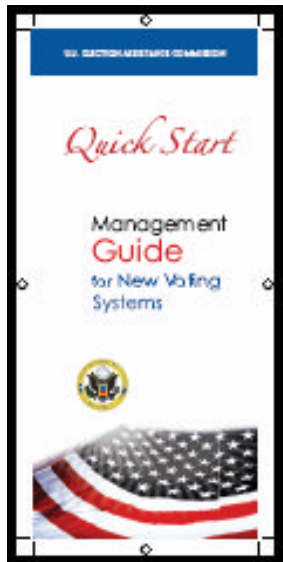
A significant component of HAVA's voting machine funding was allocated for the purchase of handicapped accessible machines. Every precinct in the US is now required to have at least one such machine. The underlying



goal is to ensure that as many individuals as possible are able to vote independently and privately. From features like Braille and audio recordings for the blind to paddles and sip-and-puff technology for those with muscular control issues, disabled voters are being given the tools to vote without assistance at an unprecedented level. While touring the United States to observe state primary elections this year, I witnessed many of these technologies in use and it is a truly remarkable sight when someone with a disability in their 70s or 80s can finally cast their first ballot independently.

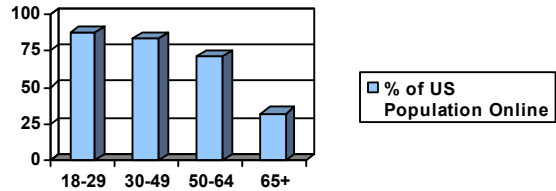
Opponents of electronic touch screen systems cite many instances and occasions when they say the machines exhibited their untrustworthiness. However, upon closer examination, I believe that the vast majority of these cases are not the fault of the machines or the technology, but rather result from the lack of implementation of sound management practices and poor training provided to poll workers. The machines are dependent upon their operators to properly load and maintain memory and access cards, and paper audit trails. The machine element is almost entirely dependent upon the human element for the entire equation to work as it should.

The only way to ensure this is by encouraging localities to offer more training to their election administrators, precinct supervisors, and poll workers. In addition to the usual classroom training methods, individual jurisdictions should conduct mock elections which would allow their staff to uncover problems and to give poll workers hands-on training in a similar environment to Election Day. The federal agency that I currently chair, the U.S. Election Assistance Commission, has just released a convenient Quick Start Management Guide for New Voting Systems. This 9-page pamphlet highlights priority items essential to managing a successful election with a new voting system. It covers everything from how to educate the electorate to security measures to Election Day procedures. In the future, the EAC will be producing more of these guides, as we work with local jurisdictions to improve their training and management methods. I have some copies available to share with you today.



Turning now to the question of internet voting, I would like to begin the discussion by mentioning a few statistics on internet usage in America. There is no way to accurately speak for or against the prospect of voting online without first understanding to what extent Americans use the internet.

According to the Pew Internet and American Life Project's April 2006 survey, 73% of those over the age of 18 use the Internet every day. They log on to check their email, make travel reservations, view the news or buy something from an online retailer.



Broken down by age, well over 80% of 18 to 25 year olds access the internet each day. I wouldn't expect that percentage to be any less from this technology savvy generation. However, greater than 70% of my generation, the post-World War II baby boomers, are online, as are nearly a third of senior citizens.

Some have argued that the internet is the purview of the middle and upper classes. However, statistics show that half of Americans making under \$30,000 a year are online. At the same time, for those Americans making more than \$30,000, the internet usage rate begins at 80% and moves progressively higher.

I do not think we can draw any conclusion from these numbers than that we are increasingly in the age of the internet. Everyone is logging on. From college teens to soccer moms to retirees. Whites, blacks, and Hispanics are all connecting to the internet in equally impressive numbers. This is not a trend. This is not a fad. I firmly believe that the rate of internet access and the percentage of the population that is internet savvy will only rise over time.

It should be no surprise that election administrators have adjusted our practices to incorporate the internet as a tool for educating voters.

Many states and localities in the United States have created what are known as Voter Information Portals and made them central components of their websites. Quite simply, these portals contain everything a voter might need to know- from registration info and sample ballots to individual voter verification data and introductory materials for new voting machines. An EAC working group currently studying the issue found that the two most important features

for these portals as identified by voters were the ability to view sample ballots and determine polling place and registration status online.

Another example of innovative internet usage deals with actual voter registration. In Arizona, when you update your driver's license information through the Department of Motor Vehicles website, you can also register to vote. While this is not a widespread practice, and setting aside security and evidentiary concerns, it does embody one future aspect of election administration. Canvassing for unregistered citizens could theoretically become as easy as sending out a mass email and directing them to a website.

A particularly troublesome issue that we face in America is that of overseas voting. How do we ensure the millions of Americans living abroad or serving in the military have the opportunity to vote? The oldest – and still prevalent – method of accommodating these voters is through a long and tedious exchange of registration materials, blank ballots, and completed ballots through the mail. Clearly, the chances of a lost piece of mail or a clerical mistake are great considering the time and distance involved.

I have been particularly impressed by the ingenuity of some jurisdictions in responding to this problem. Several states, including Virginia, Missouri and Iowa offer blank ballots via fax or email transmission. I want to stress that these forms of electronic voting do *not* include the receipt of cast ballots, only the transmission of blank ones.

To further explore this issue, the EAC is launching a study in September to learn more about what these states are doing well, what could be improved, what overseas voters themselves would like to happen, and how we can make the use of these practices more widespread through an idea-sharing conference.

The electronic transmission of ballots to overseas voters is really the only true form of e-voting practiced in the United States today. That does not mean, however, we have not studied and examined internet voting. There have been several large-scale elections conducted with significant online components, which I will now discuss.

The first serious study in America was undertaken by the California Internet Voting Task Force, which issued its findings in January 2000.

Commissioned by the governor of California, the Task Force surveyed the practicability of instituting some form of e-voting within California.

I would like to remind you that in the United States, states and localities are individually responsible for administering elections at all levels of government.

The California Report recognized the internet as an avenue which could up the elections process to millions of potential voters who would not otherwise participate. Internet voting would not necessarily involve casting ballots from remote terminals connected to the web at one's home or office, but could include a voting kiosk situation in a well-trafficked area like a shopping mall. The Task Force concluded by advising that any institution of internet voting by through an "evolutionary rather than revolutionary" process, and called for future studies and experiments to help determine the right balance of accessibility, security, and usability.

In addition to the California Task Force report, 2000 was a year that saw two successful tests of internet voting. The first was conducted by the Federal Voter Assistance Program – or FVAP – on a small scale for eventual use by service members and citizens serving or living abroad. This test, known as the Voting Over the Internet Pilot Project, required the cooperation of Federal, state, and local election officials. Small samples of voters were selected from military bases and communities around the nation. 91 service members and citizens registered to vote online using the pilot program. 84 earned the distinction of casting the first binding votes in a federal election over the internet. FVAP reported the pilot was a resounding success, which spurred on a larger-scale experiment that I will discuss in a moment.

The second 2000 e-voting test took place in the State of Arizona for its Democratic Primary. Registered Democrats received a unique PIN number in the mail in the weeks before the primary. Voting extended over 3 days, with traditional polling places open on the last day to accommodate all those who wished to vote in the usual manner. In all, 41% of the electorate, more than 35,000 voters, opted for the online system without issue or complication.

Four years later in 2004, the Democratic Party of Michigan decided to offer an online voting component for its caucus. I want to briefly note that since it was a caucus and not a primary

election, the political party, in this case the Democrats, assumed total responsibility for administration; there was no government involvement.

In Michigan, voters were mailed ballots which could either be returned completed through the mail, or voted online using a unique username and password printed on the blank ballot. Over 46,000, or roughly a third of those casting votes, chose to do so via the internet, again without issue.

Encouraged by the success of the Voting Over the Internet Pilot, Congress granted extra funding to FVAP for a large-scale registration and online voting experiment. Known as the SERVE Project, it was designed to involve collaboration by Federal and state election officials in the United States with their counterparts in over 50 countries. The anticipated scope estimated handling 100,000 votes cast electronically over the internet for the primaries and November 2004 General Election.

However, before the Project could be implemented, it was terminated following the issuance of the Security Peer Review Group's Report. The security reviewers determined that as a web-based voting system it was open to any number of cyber attacks from individuals or foreign agents. They recommended that the security risks necessitated the cessation of further work for the 2004 Election, and in the absence of viable alternatives and technological advances, internet voting be set aside as too unreliable.

The security reviewers report, compiled by computer science professors around the nation, raises the interesting question: What is the current scholarly debate on the issue? As you might expect, there are numerous authorities to fill the ranks of either side.

Those academics in favor of internet voting cite several persuasive reasons; most significantly that the convenience and mobility benefits of e-voting should increase participation among currently under-represented voters like young adults, the elderly, and the disabled.

Internet voting would also eliminate many opportunities for human error by computerizing the responsibilities for tabulating and reporting the votes. Finally, in response to security concerns, they reminds us that we freely and willingly trust internet security checks when spend billions of dollars a day on e-commerce.

The opposition's argument is two-fold, on a political and technical level. They contend

that the likely demographic users of internet voting are those who are already active participations in the political process. They feel that the "Digital Divide" - the gap between those with knowledge of and accessibility to the internet and those who do not - remains unabridged and e-voting would only serve to exacerbate problems of class-bias in voting. On a technical level, they feel that the procedure needs to be almost entirely secure - if not perfectly - since we are entrusting it with our democracy. What suffices for online shopping, they say, is simply not a rigorous enough standard.

At present, I think the United States should continue to explore internet voting, stopping short of a full-scale implementation. Americans are currently engaged in a debate over the merits of new touch screen voting systems. It would not be prudent for us to launch a new and widespread e-voting initiative without first settling issues over existing technology. Right now, the US should continue to study the issue, while closely watching advancements in online voting and security technology; and also keep an eye on Europe where election officials are proceeding with success into this medium.

In the future, however, I am optimistic about the fate of internet voting in America. The popularity and accessibility of the internet will only increase. Remember, over 80% of 18-25 year olds are already on the web. As these generations, especially the youngest voters, mature in the political process, they will likely demand an e-voting component in their elections. And, they would be right to do so.

We have at our disposal a medium in the internet that has brought people closer the world over. It has broken down cultural, educational and financial barriers. Why should we not also expect it to eliminate any remaining divides between eligible voters and casting a ballot, especially when we see voter participation at its lowest for young voters?

Finally, I believe that electronic voting—in whatever form—is here to stay, and that its usage will only continue to grow as more methods are found to instill voter confidence in such systems. Thank you very much.