

# ELECTION REFORM: H.R. 811

---

---

HEARING  
BEFORE THE  
SUBCOMMITTEE ON ELECTIONS  
COMMITTEE ON HOUSE  
ADMINISTRATION  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED TENTH CONGRESS  
FIRST SESSION

MEETING HELD IN WASHINGTON, DC, MARCH 23, 2007

Printed for the use of the Committee on House Administration



Available on the Internet:  
*<http://www.gpoaccess.gov/congress/house/administration/index.html>*

U.S. GOVERNMENT PRINTING OFFICE

36-023

WASHINGTON : 2007

---

For sale by the Superintendent of Documents, U.S. Government Printing Office  
Internet: [bookstore.gpo.gov](http://bookstore.gpo.gov) Phone: toll free (866) 512-1800; DC area (202) 512-1800  
Fax: (202) 512-2250 Mail: Stop SSOP, Washington, DC 20402-0001

COMMITTEE ON HOUSE ADMINISTRATION

JUANITA MILLENDER-McDONALD, California, *Chairwoman*

ROBERT A. BRADY, Pennsylvania

ZOE LOFGREN, California

MICHAEL E. CAPUANO, Massachusetts

CHARLES A. GONZALEZ, Texas

SUSAN A. DAVIS, California

VERNON J. EHLERS, Michigan,

*Ranking Minority Member*

DANIEL E. LUNGREN, California

KEVIN McCARTHY, California

---

SUBCOMMITTEE ON ELECTIONS

ZOE LOFGREN, California, *Chairwoman*

JUANITA MILLENDER-McDONALD,  
California

CHARLES A. GONZALEZ, Texas

SUSAN A. DAVIS, California

KEVIN McCARTHY, California

VERNON J. EHLERS, Michigan

## ELECTION REFORM: H.R. 811

FRIDAY, MARCH 23, 2007

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON ELECTIONS  
COMMITTEE ON HOUSE ADMINISTRATION  
*Washington, DC.*

The subcommittee met, pursuant to call, at 9:45 a.m., in room 1310, Longworth House Office Building, Hon. Zoe Lofgren (chairwoman of the subcommittee) presiding.

Present: Representatives Lofgren, Millender-McDonald, Gonzalez, Davis of California, McCarthy, Ehlers.

Staff Present: Tom Hicks, Election Counsel; Janelle Hu, Professional Staff Member; Matt Pinkus, Professional Staff/Parliamentarian; Kristin McCowan, Chief Legislative Clerk; Gineen Beach, Minority Counsel; and Peter Sloan, Minority Professional Staff.

Ms. LOFGREN. Good morning. The subcommittee will come to order. I would like to ask everyone in the room to please turn off your cell phones, if you have not done so yet.

Today, we are going to discuss H.R. 811, Voter Confidence and Increased Accessibility Act of 2007, which would amend the HAVA Act of 2002 with respect to ballot verification and mandatory paper record audit capacity, and accessibility and ballot verification of results for individuals with disabilities. Mr. Holt's legislation also aims at increasing the security of voting of systems through prohibiting the use of undisclosed software and also banning any conflicts of interest between voting machine vendors and test labs. We know that our election process must be open and transparent, and we know that we need standards to modernize our voting system and to bring accountability into the system throughout America.

Election reform is not a partisan issue. This is something we can all agree on, and this bill has bipartisan support. For this reason, I am delighted that Governor Crist of Florida has accepted our invitation to testify to the progress that he is making in his State.

This hearing on the Voter Confidence and Increased Accessibility Act is just one step in the process for making elections—a fundamental tenet of our democracy—open, fair, accountable and correct.

So I will now recognize the ranking member for any opening statement he may have.

Mr. MCCARTHY. Well, I thank the chairwoman for calling this hearing on an opportunity to examine H.R. 811. I am excited about hearing from the individuals today.

During the last election, we had more than 435 results certified by respective States, and we have quite a few State representatives here that were certified as well. So I look forward to the discussion.

Ms. LOFGREN. Thank you very much.  
All the members are invited to submit their statements for the  
record.  
[The information follows:]

Committee on House Administration  
Subcommittee on Elections  
U.S. House of Representatives

“Election Reform: H.R. 811”  
Friday, March 23, 2007

Opening Remarks of Chairwoman Zoe Lofgren

Good morning. Today we meet to discuss HR 811, the “Voter Confidence and Increased Accessibility Act of 2007.” This bill amends the Help America Vote Act of 2002 (HAVA) with respect to: (1) ballot verification and mandatory paper record audit capacity; and (2) accessibility and ballot verification of results for individuals with disabilities. Mr. Holt’s legislation also aims at increasing the security of voting systems through prohibiting the use of undisclosed software and also banning any conflicts of interest between voting machine vendors and test labs.

Our election process must be open and transparent to ensure public confidence. This legislation provides guidelines to all states for the security and auditing elections. It proposes federal standards to modernize our voting system and to bring accountability into the system across the board. Transparency in our election process does not mean we sacrifice security and verifiability.

Election reform is not a partisan issue. This is something we can all agree on and this bill has bi partisan support. Politics and political affiliation should not keep us from making the changes needed to restore the confidence of our citizens in the electoral process. For this reason, I am delighted that Gov. Crist accepted my invitation to testify to the progress he is making in his state as well as California’s own, Secretary of State Deborah Bowen.

This hearing on The Voter Confidence and Increased Accessibility Act is just one step in the process for making elections. A fundamental tenet of our democracy is the right to vote and have that vote counted. We must be vigilant in protecting this right and ensuring that our voting system is fair for every American.

Ms. LOFGREN. As Governor Crist has another obligation, we are going to ask him to testify first and take questions only from myself and the ranking member.

Governor Crist is here to speak about what he is doing in his State, where there were several contested elections in Florida. But he is not here about that. He is here about the future, and that is all that we are here to examine today.

So we are just so honored that you are here, and we are honored that our colleagues, Mr. Lincoln Diaz-Balart and Bob Wexler, are going to do the honors of introducing you.

Mr. Wexler, shall we begin with your introduction?

Mr. WEXLER. Thank you very much, Madam Chair; and thank you for giving Congressman Diaz-Balart and I the honor of presenting and introducing to you and the committee our Governor in Florida.

Governor Crist has served 3 months as Governor, and in that period of time he has reformed the way in which government does business in Florida. Governor Crist is a Republican, but Democrats, Independents and Republicans alike in Florida are very proud of the very inclusive fashion in which he has governed thus far.

There is no better example of his inclusiveness than the election proposal that he put forth to the Florida Legislature in his budget, which I dare say has resolved a very divisive issue in Florida that has persisted for the last 6 years. In essence, what Governor Crist has done, he has proposed replacing electronic machines, which do not have any paper trail, which do not have a backup system, with an optical scan system that will be used in each of Florida's counties, both on election day and in early voting. In the process, I believe he has created what I hope will be a model for the Nation in ensuring that everyone's vote is cast and counted in the manner in which they choose.

And it is with great pleasure that I ask my dear friend, Congressman Diaz-Balart, to continue.

Mr. DIAZ-BALART. Well, thank you. Thank you so much, Congressman Wexler.

It is a privilege for me to join my good friend Robert Wexler, Madam Chairman, distinguished ranking member and members of the subcommittee, in welcoming our Governor here to the Capitol.

Charlie Crist is a close personal friend of my brother's and of mine and indeed of my family's, and we have long been proud of him. As Congressman Wexler has made reference to, in the short time that he has been Governor, the people of Florida have been able to see what extraordinary judgment guides his actions day in and day out and his exceptional fairness. He is a man who everyone can know, and, as I say, the people of Florida are realizing, makes his decisions in an ultimately fair way. So as we have seen him in the short period of time that he has been Governor already tackling issues, dealing with issues that the people of Florida want to be dealt with. Obviously, we are even more proud of him.

So it is a great privilege, and I thank you, Madam Chairwoman, for allowing Congressman Wexler and I to introduce our Governor to you because of the esteem, the respect and, indeed, the admiration that we have for Governor Crist. So thank you and all of you members for this great privilege.

Ms. LOFGREN. Well, thanks to both of you.

Governor Crist, I can't think of another time when I have heard such passionate praise on a bipartisan basis for a Governor. So I look forward, and we all do, for hearing your testimony at this point. Thank you very much.

**STATEMENT OF HON. CHARLIE CRIST, GOVERNOR OF  
FLORIDA**

Governor CRIST. Thank you, Madam Chair. I appreciate the opportunity to be here, and I first want to thank you for your graciousness in allowing me to—and to all the members of the committee, I appreciate the chance to be here.

And I want to thank my friends, and we are great friends. I have known Lincoln and Robert, the Members of the Congress, for many years. The words you just heard are incredibly kind and almost embarrassing, but I am very grateful for their friendship and for their leadership.

On behalf of the people of Florida, they have been tremendous public servants, and we have a very proud delegation. I am very proud of all of our members of our delegation. Lincoln Diaz-Balart, along with Alcee Hastings, Chair it; and they do an extraordinary job for the people of our State. And I am just proud to be able to be here.

Congressman Wexler, as you know, has been a passionate advocate on behalf of improving our voting system; and his passion is evident this morning again, as is Lincoln's, as it relates to voting and the importance of supporting our democracy.

I also would like to recognize our Florida Secretary of State, Kurt Browning. He is here with us today as well, and he is doing a great job.

I had the opportunity last evening to experience some of our national monuments. Standing at the feet of Lincoln and Jefferson, one can't help but be inspired by their words and their dedication to freedom. I was struck by Jefferson's words in which he said, and I will quote, "Laws and institutions must go hand in hand with the progress of the human mind. As that becomes more developed, more enlightened, as new discoveries are made, new truths are discovered and manners and opinions change. With the change of circumstances, institutions must advance also to keep pace with the times."

I want to speak to you this morning about the important issue of a paper trail and share with you the improvements that we have proposed in the State of Florida to our election process.

As we all know, Florida has garnered much attention in past elections. However, I am pleased to report that our State has entered a new era. With the bipartisan efforts of the Florida State Legislature and our administration, we have moved beyond finger pointing and laying blame. Together, we have tackled the challenges facing our elections process and have made great progress towards implementing, I believe, a system that will allow every eligible voter to have their voice heard and ensure that their vote counts.

I would like to share with you the proposal that I am presenting to our legislature during the current session in Florida. I would

like to emphasize that every aspect of this proposal is aimed at a commitment to ensuring that every Floridian's vote will be counted and verifiable. This proposal will move Florida toward a comprehensive, streamlined election system that does use a paper ballot in every voting precinct in time for the primary election in the fall of 2008.

Our proposal has three major components to it. First, we will replace all touch screen voting machines in polling places with optical scanners. Optical scan voting machines have a proven track record for accuracy and provide the paper trail that can be used for any recount if necessary.

As you know, this system allows for the voter to use a pencil to fill in a designated space on a paper ballot for each race. The voter would then insert the completed ballot into an optical scanning machine which then records the vote on paper that can be used for verification purposes.

Second, we will provide a system known as a ballot on demand that will produce an optical scan ballot for all early voting sites. Ballot on demand is a ballot production system that can be utilized by absentee as well as early voters. Ballot on demand allows for individual optical scan ballots to be printed when the voter arrives for the early voting, thus eliminating the need for touch screens with voter-verifiable paper trails to be used at early voting sites. The benefits of the ballot on demand system from an election management standpoint are numerous.

In conclusion, Florida has worked in a bipartisan manner, actually, a nonpartisan manner, to effectively improve our election process. Our goal is to resolve voter confidence through new systems and restore voter confidence, procedures and implementation of both Federal and State legislation. We are pleased with the progress we have made in our State and continually look to enhance our elections system and streamline the voting process for millions of Floridians. When one of our citizens casts a ballot in an election at any level, be it local, State or Federal, they can leave the polling place with the confidence that their vote has been counted, recorded and can also be verified if necessary.

As the grandson of an immigrant who came to this country when he was only 14 years old, I have a deep and abiding admiration and love for this Nation, as do you. The United States offers its citizens exceptional power through our democratic process. That democracy must be preserved and protected.

I know your respect for our system of government is why each of you serve in this august body with great honor. We must work together to continue to ensure the integrity of that process. Our electoral process is the foundation of our democracy.

As my friend Lincoln Diaz-Balart knows well, people just 90 miles south of Florida shores are unable to freely exercise that right to vote. Every 2 years, millions of Americans express their opinion without fear of consequence. Sadly, people around the world yearn for this freedom and don't yet have it.

We must work diligently to ensure our citizens' votes are validated and they are valued. The right to vote is the most fundamental of all American rights. There is no greater testament to our democracy than the ability of the people to choose their leaders.

Thank you, Madam Chair.  
Ms. LOFGREN. Thank you, Governor, for an impressive statement.  
[The statement of Governor Crist follows:]

**Testimony of Charlie Crist, Governor of Florida  
Committee on House Administration  
Subcommittee on Elections  
March 23, 2007**

Chairman Lofgren, Ranking Member McCarthy, Members of the Committee, good morning and thank you for the opportunity to testify today. I also want to thank my friends Congressmen Robert Wexler and Lincoln Diaz-Balart for being here with me today. Congressman Wexler has worked tirelessly to ensure Floridians have faith in the electoral process. Congressman Diaz-Balart is a passionate advocate of the Voting Rights Acts and guaranteeing all Floridians have their voices heard. I am proud to work with Lincoln and Congressman Alcee Hastings as they serve the Florida delegation as co-chairs.

I also would like to recognize Florida's Secretary of State, Kurt Browning, who is here with me today.

I want to speak to you about the important issue of voter verification and describe to you the improvements that we have proposed in the State of Florida for our elections process.

As we all know, Florida has garnered much attention in past elections. However, I am pleased to report that our state has entered a new era. With the bipartisan efforts of the Florida State Legislature and my administration we have moved beyond pointing fingers and laying blame. Together we have tackled the challenges facing our elections process and have made great progress towards implementing a system that allows every eligible voter to have their voice heard.

I will begin today by explaining the improvements that have been made to the Florida election process in the last several years. In 2001, we set a model for the rest of the nation when our Legislature passed the Florida Election Reform Act. Highlights included the following: (1) punch card machines, mechanical lever machines, paper ballots and central-count voting systems were decertified, beginning with the 2002 primary election; (2) implementation of uniform ballot designs for each certified voting system; (3)

implementation of a provisional ballot process; (4) clarification of recount procedures including the elimination of "partial" recounts; (5) greater facilitation of the federal Uniformed and Overseas Citizens Absentee Voting Act; (6) elimination of barriers for casting an absentee ballot; (7) adoption of a uniform polling place manual to guide poll workers; and (8) established minimum standards for voter education.

In July of 2003, Florida fully implemented the Help America Vote Act. Our state was one of only a handful to accomplish the monumental task of meeting all the requirements in preparation for the elections that followed.

In 2004, the State formed a dynamic partnership with Florida's Supervisors of Elections, and private and public entities to implement a statewide, nonpartisan Voter Education Campaign. It was an unprecedented, cohesive effort to educate Florida's voters in preparation for a successful 2004 election cycle.

The 2004 election cycle was a great success. Over 7.6 million Floridians voted in the presidential election. In 2000, undervotes and overvotes accounted for nearly 3% of the votes cast in the presidential race. In 2002, that number dropped to below 1%. The 2004 election cycle saw yet another reduction in that number, dropping it to a historically low 0.4%.

Florida launched the new Florida Voter Registration System on January 3<sup>rd</sup>, 2006, coming in on time and under budget to meet the federal deadline of January 2006. This system is a single, uniform, centralized, interactive, computerized statewide voter registration list defined, maintained and administered at the state level.

With support of our Legislature, Florida responded to the new responsibilities mandated by HAVA by establishing a Bureau of Voter Registration Services. I believe the Florida Voter Registration System and Bureau has already provided more timely and efficient registration services to voters, enhanced the integrity and accuracy of the voter registration rolls, and significantly minimized the risk of voter fraud.

As you can see, Florida has made great strides in all areas of elections. I am proud the State of Florida has been a nationwide leader in this process.

Moving forward, I would like to share with you the proposal that I am presenting to our Legislature during the current session in Florida. I'd like to emphasize that every aspect of this proposal is aimed at a commitment to ensuring that every Floridian's vote will be counted and verifiable. This proposal will move Florida toward a comprehensive, streamlined elections system that uses a paper ballot in every voting precinct in time for the general election in the fall of 2008.

Our proposal has three major components. First we will replace all touch screen voting machines in polling places with optical scanners. Optical scan voting machines have a proven track record for accuracy and provide a paper trail that can be used for any recount. As you know, this system allows for the voter to use a pencil to fill in a designated space on a paper ballot for each race. The voter would then insert the completed ballot into an optical scanning machine, which then records the vote on paper that can be used for verification purposes.

Second, we will provide a system known as "ballot on demand," that will produce an optical scan ballot for all early voting sites. Ballot on demand is a ballot production system that can be utilized for absentee, provisional, and early voting.

Ballot on demand allows for individual optical scan ballots to be printed when the voter arrives for early voting thus eliminating the need for touchscreens with voter verifiable paper audit trails to be used at early voting sites. The benefits of the Ballot on Demand system, from an election management standpoint, are numerous.

With these two measures, 99% of ALL ballots in Florida would be on a voter-marked ballot; that is, each individual voter will physically mark their own ballot, rather than through a machine.

In order to comply with the HAVA requirements, we will also retrofit touch screen machines in early voting sites with a voter verified paper

audit trail (VVPAT). In other words, touch screen machines that are used by the disabled or visually impaired will produce a vote that is recorded on paper. Additionally, visually impaired voters are able, through audio directions, to vote a secret ballot; just as all other voters are able to do.

In conclusion, the State of Florida has worked in a bipartisan manner to effectively improve the elections process. Our goal is to restore voter confidence through new systems, procedures and implementation of both federal and state legislation. We are pleased with the progress we have made in Florida and continually look to enhance our elections system and streamline the voting process for millions of Floridians. When one of our citizens casts a ballot in an election at any level—local, state or federal—they can leave the polling place with the confidence that their vote has been counted, recorded and can be verified.

The right to cast a vote is the most fundamental of all American rights. There is no greater testament to the democracy that our country was founded on than the ability for every American to take part in the legislative process by casting a vote for a candidate of their choice.

Thank you for your time and attention, today. I would be happy to respond to any questions that you may have.

Ms. LOFGREN. By unanimous consent, we will limit the questions to myself and the ranking member, because the governor's legislature is in session, and he needs to fly back there.

I will just ask two quick questions. First, as we are looking at amendments to HAVA, concerns have been expressed by some elections officials as to the timing and whether changes can be made in time for the next election in 2008. So I am interested in how Florida is dealing with that.

And the second question is, it is important to all of us and I know, sir, to you, that those who have disabilities have an opportunity to cast their vote freely and privately. And how are you addressing that?

Governor CRIST. Thank you very much for the opportunity.

The timing issue first. As I indicated, we believe that if the legislature grants our wish and gives us the appropriate funding to be able to pay for these machines, that again, by the primary of 2008, they would be in place.

Your other issue is extremely important to us as well. To make sure that the disabled have the opportunity to vote and that every one of their votes would count, we would employ touch screens with a printed ballot that would be produced next to it so that the opportunity and the ease of voting is accommodated there as well.

Ms. LOFGREN. Mr. McCarthy.

Mr. MCCARTHY. I thank the Governor.

I was reading the statement that you submitted. It was different than what you read.

I want to congratulate Florida on the improvements they have made. You were saying, dropping down on the Presidential from 2000, the undervotes down to .4 percent. Tremendous improvement. I thank you for that.

I come from a large State, California. We are moving our primary up. Are you moving your primary up?

Governor CRIST. We may be. And it is a very timely question. In fact, yesterday in our House of Representatives they passed an opportunity to move it up to either January 29 or maybe even February 5. It is uncertain in its language at this point.

Our State Senate, with a friend of the Congresswoman's, a new Senator, Jeremy Ring, has filed a bill that would address the same issue and also have the opportunity to move it up. But it is unclear at this point, but it may be moving in that direction.

Mr. MCCARTHY. The other thing, knowing we are both from large States and we go out to make purchases, I just worry about the timeline. Is Florida willing to pay for all of your new optical machines if that is where you end up going? And by the purchase agreement, going out to bid and you move the primary up, will you have the time and the training to be able to do that?

Governor CRIST. We believe that we will. That is a very important issue to us. We are willing to pay for it. As the Congressman mentioned, we have recommended it in our budget from the Governor's Office to the legislature. We are pretty confident that they are going to honor their request.

It is important to both our States. I have a sister who lives in the golden State, Laguna Beach. But I think it is very important that we have the appropriate funding, that we make sure the citi-

zens can have faith in their voting system and that the election of the next President is one that is carried out with integrity and honor so that our country continues to move forward.

Mr. MCCARTHY. I thank you for your time.

Ms. LOFGREN. With that, let me note that other members may submit questions to Governor Crist, and he has graciously offered to provide a written response.

Governor, we were so delighted and pleased that you were able to join us here today. Thank you so very much for making the effort to share your experience.

Governor CRIST. Thank you, ma'am, very much for having me.

Ms. LOFGREN. Well, we now have our two colleagues, Congressman Rush Holt and Congressman Tom Petri, who are sponsors of the bill that is the subject of this hearing.

We know them as well as friends and colleagues, but, for those in the audience, Congressman Holt is a Member of Congress from New Jersey. He has held positions as a teacher, congressional science fellow and arms control expert at the U.S. State Department; and he was the Assistant Director of the Princeton Plasma Physics Laboratory prior to his election to the Congress.

Tom Petri represents Wisconsin's Sixth Congressional District and is serving his 15th term in the House of Representatives. He is the ranking member on the Aviation Subcommittee of the House Transportation and Infrastructure Committee; and he is a former chairman of the House British American Parliamentary Group, an official organization formed to strengthen relations with the British Parliament and known as a foe of government waste.

We are happy to have you both here and to present on the bill that is the subject of this conference.

Mr. Holt, if you would begin.

**STATEMENT OF HON. RUSH D. HOLT, A REPRESENTATIVE IN  
CONGRESS FROM THE STATE OF NEW JERSEY**

Mr. HOLT. Thank you, Madam Chair.

I am delighted to be here with Mr. Petri, not only one of the couple hundred co-sponsors but one of the leading co-sponsors of H.R. 811.

Mr. McCarthy, Mr. Ehlers, Mr. Gonzalez, Mrs. Davis, I am sure you will agree with me that a self-governing country works only if we believe it does. The faith in the process of democracy has been shaken, and I think we have to take immediate steps to restore that trust. Anything of value should be auditable, and it is central to this legislation that each voter's vote will be verifiable and the results of every election will be publicly auditable.

As it is with nearly 40 percent of the voters around the country now, they are being asked to vote in ways that cannot be verified. In fact, a voter can leave the polling booth scratching her head or his head and wondering if the vote was recorded the way they intended. In fact, without a voter-verified paper ballot, no election official, no computer scientist, no vendor will be able to reconstruct what the voter intended. Only the voter can verify what she or he intended, and that is at the heart of this legislation.

The legislation would require a voter-verified, durable paper ballot for every vote cast that would serve as the record for all re-

counts and audits. It would preserve and enhance the accessibility requirements of the Help America Vote Act and fund the development of new accessible ballot marking and ballot reading technologies.

It would require random audits—and this is key—in every Federal election; and it would require that voters be given emergency paper ballots, emergency ballots immediately upon machine failure to prevent any disenfranchisement, as we saw, for example, this past year in Maryland. It would ban wireless devices, undisclosed software and Internet connections in order to make certain that the devices that are used are independent and unmodified.

It is worth pointing out that a number of States, more than two dozen, have paper ballot-based voting now. Many of these requirements have recently been enacted.

I think our legislation, which has been prepared with meticulous care and reviewed by many individuals and organizations, is somewhat better than many of those States. It is worth pointing out, for example, though 27 States have some sort of paper ballot-based voting, only 13 States conduct random audits.

This would require, as I say, random audits in every election. We have seen too many elections in recent years where the winner was lack of evidence and the loser was the intent of the voters. This I think will correct that.

I know there is some question about our ability to accomplish this in time. I am pleased that Governor Crist was able to speak this morning, because that gives an example that it is possible. As I understand what he plans to do, it would comply fully with this legislation, and they intend to have that in place before their primary in 2008.

Certainly if we were able to spend billions of dollars and mount a national effort to comply with the Y2K imagined or maybe imaginary threat, we certainly should be able to mount this same kind of effort to deal with something that is central to the functioning of our democratic government.

Ms. LOFGREN. Thank you very much, Congressman Holt.

[The statement of Mr. Holt follows:]

Statement of Representative Rush Holt  
to  
The Elections Subcommittee of the Committee on House Administration  
Hearing on the Voter Confidence and Increased Accessibility Act (H.R. 811)  
March 23, 2007

Chairwoman Lofgren, Ranking Member McCarthy, Members of the Subcommittee, I am pleased to be before you today, and deeply gratified that the Elections Subcommittee is taking such thorough and expeditious action on this critical legislation – the Voter Confidence and Increased Accessibility Act (H.R. 811). I must say that it amazes me that a concept so obvious – that we should be able to audit independently the accuracy of our election results rather than having simply to rely on the word of voting machine vendors as to that accuracy – would languish for four years in Congress without action. Thank you again for bringing it to action.

Free and fair elections are the very cornerstone of Democracy, and democracy works only if we believe it does. Today, if we have a question about the result, the voting system vendors simply tell us that the software counted the votes accurately and we have nothing to worry about. The voter does not believe the voter is in control.

Votes are in a sense the “currency” of Democracy, and they are inherently valuable. Anything valuable, such as bank records, or property records, must be independently auditable and regularly audited. We wouldn’t have it any other way. The same absolutely must be true of our votes.

Our legislation, the Voter Confidence and Increased Accessibility Act, would:

Require a voter verified durable paper ballot for every vote cast, to serve as the vote of record in all recounts and audits;

Require routine random audits in a percentage of precincts in every federal election, and an increased percentage of precincts when races are extremely close;

Require that voters be given paper emergency ballots immediately upon machine failure, to prevent disenfranchisement; such ballots are required to be counted as regular ballots;

Ban the use of wireless devices, undisclosed software and Internet connections to machines upon which votes are cast;

Preserve and enhance the accessibility requirements of the Help America Vote Act and fund the development of new accessible ballot marking and ballot reading technologies;

Authorize \$300 million to defray the cost of implementing the paper ballot and accessible verification requirements of the bill, and I would be happy with a higher authorization; and

Establish an escrow account through the Election Assistance Commission to create an arms-length relationship between vendors and test labs.

I'd like to present for you a not-so-hypothetical scenario. Let's say it is November 2008. We are in a state that has brand new touch screen voting machines in every polling place, but no voter verified paper ballots are used or produced for the votes cast on the machines. The voting machines run on trade-secret-protected software. Now, it is the day after the election, and a Presidential candidate has been declared the winner by 500 votes. The losing candidate discovers that in numerous election jurisdictions in the state that tend to vote for candidates from his or her party, there was a vast under-vote in the Presidential race – altogether, say, 75,000 votes. The losing candidate sues, arguing that the intent of the voters was not reflected in the reported result because 75,000 votes are, inexplicably, missing.

How does the losing candidate prove this? The votes that showed on the screen surface all day long, which would have been verified by the voters while in the booth, evaporated into thin air the minute each voter hit the cast vote button and left the booth, leaving no tangible copy of anything that the voters verified. Can any election official, computer scientist, or voting system vendor reconstruct what that voter intended? No. The voter votes in secret. Because of the secret ballot, only the voter can verify that his or her intention is recorded correctly. Granted, the software translated all of the screen touches into records of votes, but (1) the software is trade-secret-protected, so it cannot be examined to determine whether it contained any flaws and (2) even if the software could be examined and revealed no flaws, that doesn't mean it made an accurate translation on election day. So-called "Trojan horses" are designed to erase themselves after accomplishing their function (for example, switching votes). What now, for our losing candidate? How can he or she prove what the intent of those 75,000 voters was? The thing is, in that scenario, it's impossible. It's impossible because there is no evidence of voter intent left.

The end result is that "lack of evidence" is the winner and "intent of the voters" is the loser. That is, even though neither the loser nor the winner has any evidence with which to prove what the intent of those 75,000 voters was, the "lack of evidence" will by default tip the scale in favor of the declared winner, and the "intent of the voters," because it cannot be proven to support one candidate or another, becomes irrelevant to the end result.

Therefore, we simply cannot go forward into another general election without addressing this problem head on. There are 15 States that do not use paper ballot based voting – 15 States that are in the same position as the hypothetical state described above. The outcome of the 2008 Presidential election might hang in the balance in one of those states. Will "lack of evidence" of voter intent hand the White House to one candidate simply because neither candidate can prove what the intent of the voters really was?

I am certain the Subcommittee will agree that we simply cannot let that happen. In addition, we can all agree that the time available to solve this problem before the 2008 elections is short. But the country can meet a short deadline.

You all recall the year 2000 computer conversion crisis, known as Y2K. As the prior century came to a close, a date loomed large in our collective conscious: January 1, 2000. The Office of Management and Budget had targeted March 31, 1999 as the deadline for federal agencies to have completed the conversion of their systems to address this system-wide "glitch." Congress appropriated \$3.35 billion dollars for fiscal year 1999 to fund the conversion, all of the agencies implemented the necessary changes to their systems, and Y2K came and went and there was no meltdown.

Isn't protecting and preserving the integrity of our electoral system at least that important? And frankly, isn't the problem we're facing here vastly simpler than re-programming every single computer in operation everywhere in the United States? There must be paper-ballot-based systems, along with accessible devices for those who need them, everywhere. Optical scan voting systems and ballot marking devices are widely in use and readily available. Touch screen voting machines can be fitted with durable paper ballot printers.

We can do this. And if we care about the integrity of our democracy we will do this. And we will fund it, and we will implement it in time for the 2008 elections

The fundamental requirements of this legislation – a voter verified paper ballot for every vote cast and routine random audits as a check on the system -- have been endorsed or recommended by the bipartisan Carter Baker Commission on Federal Election Reform, the non-partisan Brennan Center for Justice at New York University School of Law, the National League of Women Voters, Common Cause, People For the American Way, VerifiedVoting.org, VoteTrustUSA, the Electronic Frontier Foundation, dozens of public interest and e-voting integrity groups, *The New York Times*, the *Washington Post*, *Roll Call*, the *Chicago Tribune*, the *Trenton Times* and many other newspapers. The bill is very carefully drawn. Every detail of the legislation has gone through meticulous review not only by Members of Congress, but also by lawyers, Secretaries of State, public interest groups, advocates for voters with physical disabilities, election reform advocates, and civil rights organizations. In the 109<sup>th</sup> Congress, a bipartisan majority of Members cosponsored it. Currently we have 200 cosponsors. This is not a partisan issue.

In addition, the country has done a veritable "about face" on this issue. When I first introduced this legislation in May of 2003, only a handful of states had a requirement for paper-ballot-based voting. Today, 27 states have such a requirement, and another eight used paper-ballot-based voting even though they do not mandate it. There are only 15 states that currently neither have such a requirement nor use paper-ballot-based voting, and it is time to bring those last few states into the fold so that all federal elections will be independently auditable. Also of those states now with auditable paper-ballot-based voting, only thirteen states currently conduct routine random audits, and the practice of

routinely double-checking the accuracy of the results of computer-assisted elections too must become a national standard.

Again, it is my honor to be here with you today, to discuss this critical issue. I look forward to working with the Subcommittee and the Committee to bring this legislation to the floor as soon as expeditiously as possible.

**STATEMENT OF HON. THOMAS E. PETRI, A REPRESENTATIVE  
IN CONGRESS FROM THE STATE OF WISCONSIN**

Mr. PETRI. Well, thank you very much for having this hearing, and I have a statement that I appreciate you making——

Ms. LOFGREN. We will make it part of the record.

Mr. PETRI. I will just summarize by saying the key responsibility we have is to do everything we can to assure public confidence in the integrity of the election process. That is, in my mind, accomplished by having a paper trail that can be checked; and if there is a recount, that people have confidence that they are getting an accurate count as a result of the recount.

There are always going to be some gray areas and questions in any system. We are in the business. We have all been through or have known colleagues who have been through recounts, but it is very important to have that opportunity.

People can challenge votes. They can look at it. They can look at each one and actually assure themselves that, as best can be determined, the voters' intention is being carried out. Some of these electronic systems don't provide that, and it seems to me that undermine confidence, and we all know the kind of conspiracy feelings that people have as a result.

So I have confidence that this committee, with your expertise, will sift through the various ideas. Look at what Florida is doing and what many States have already done to assure their voters they do have a verifiable paper trail and get Federal law in line with that objective.

Thank you very much.

[The statement of Mr. Petri follows:]

**Testimony of  
Rep. Thomas E. Petri (R-WI)  
Before the Subcommittee on Elections of the  
House Committee on Administration  
March 23, 2007**

I'd like to begin my remarks by thanking Chairwoman Lofgren, Ranking Member McCarthy, and the members of the Subcommittee for holding this hearing and also for affording me the opportunity to speak to you about H.R. 811, the Voter Confidence and Increased Accessibility Act of 2007. This hearing is part of an important process that can have a significant and positive impact on our electoral process. I am glad you have embarked upon this path, and I encourage your continued focus on this important issue.

I am here today in support of this legislation because I believe it will help to heal our electoral system of many ills, both real and perceived. As elected officials in a great representative democracy, we find ourselves in the position of easily understanding the problems addressed by H.R. 811. Each year, we stand before our constituents and by that election are given the opportunity to participate in this congressional policymaking process. The wide range of policy choices that we make only can be considered valid if our means of securing these seats is viewed as legitimate by the mass of voters making that decision.

I'd like also to take a moment to thank my colleague, and the author of this legislation, Congressman Rush Holt, for his efforts to bring these issues to the fore and for crafting a comprehensive bill that confronts a wide array of concerns with our election system. This project is infused throughout with his energy, and I do not think we would be here today but for his labors to transform abstract concepts into concrete legislation.

My support of H.R. 811 is easy to explain. I am attracted by its central concept: a voter-verified paper audit trail that can be used both by voters and election officials to confirm that the machines used to conduct federal elections are functioning properly and returning a result that includes the specific choice of each voter and reflects the true will of the aggregate of all voters. It is imperative that our elections be fairly conducted and crucial that they are carried out in a manner that communicates this fairness to the voting public.

Building from the bottom up, voter-verified paper receipts offer a method of checking and double checking the veracity of machine reported results at each stage of our electoral process – from the casting of the original vote through the reporting of a declared winner and finally as part of a recount held to determine the outcome of any contested election.

At various points in the course of our history, we have sought to improve and perfect the workings of our electoral democracy. We have faced various challenges and met those tests by altering the rules by which our elections are held. In recent years, such tests have arrived in a rapid fire fashion; first through the failure of voting systems in several high profile

elections, and finally by the doubts that have grown around the electronic voting machines put in place to correct those earlier breakdowns.

Electronic voting technology is certainly part of the answer, but we cannot turn over the electoral process entirely to technology as voting is a human activity. Voter verified paper vote receipts are a means of marrying the modern and the traditional and will allow us to manage the changes wrought by new voting technologies without losing sight of the disparate individual actions they are designed to quantify. The importance of openness and transparency in this regard cannot be understated.

I understand that H.R. 811 is not without its critics, and that today this Subcommittee will hear from some within that camp. During this hearing, you will hear from folks with backgrounds in election technology and in the conduct of elections. You will be told about technical limitations to the addition of printers to existing electronic voting machines. I imagine you will hear testimony concerning storage of durable vote records; concerning the length of time necessary for this storage; and regarding the physical properties of the paper needed to meet these requirements. I would not be surprised to hear a witness mention the cost involved in adopting the voter verified paper trail standard or the difficulty of implementing such changes on a specific timeline.

I mention these items neither to steal the thunder of those witnesses who will follow my testimony, nor to suggest that my support for this bill is flagging, but to make the point that these are technical issues that can be solved through the combined efforts of election reform advocates, election administrators, and experts in voting technology. Approximately half of the fifty states have adopted legislation similar to H.R. 811, and there is a broad pool of experience on which to draw.

Perhaps the answer is easier than we think. Perhaps the answer is the use of optical scanning systems already in place in many voting precincts throughout the country. Such systems offer the advantage of marrying the security of voter-verified paper receipts with an electronic means of tabulation. Optical scanning has been shown to be easily adaptable to the needs of disabled voters and is less vulnerable to electronic tampering than many other systems.

In the end, the choice of an appropriate standard is the job of this Subcommittee and the full Committee on House Administration. It is your task to take the spirit of H.R. 811 and carry it forward as you craft a package that combines its goals and ideals with the realities faced by elections officials. Keep in mind the important role that voter confidence plays in the long-term health of our democracy and do not let mere technical issues stand in your way of forging ahead with a comprehensive solution that includes a voter verified paper trail for ensuring the fairness of all federal elections.

Thank you for the opportunity of presenting my views at this hearing.

Ms. LOFGREN. Thank you both very much. We know that this is a busy day for all of us, and we appreciate your taking the time to appear here and to be willing to answer some questions if we have some.

In your written statement, Congressman Petri, you talk about some technical issues in the bill. Do you feel that we can deal with those technical issues as part of the hearing process and the amendment process?

Mr. PETRI. I think so. And I also think you have to be careful that—you have different vendors who are, obviously, looking for a little bit of an opportunity to have an edge when it comes to buying their equipment, and it seems to me the objective of the legislation should be not to favor one vendor over another but to make sure that there are standards that ensure an independently verifiable paper trail.

There are some issues about whether you would permit, for example, kind of like a credit card receipt and then the voter is supposed to look at it and say, yeah, that is the way I voted. I am not sure that really meets the standard of separate, after the fact, independent audit. I would prefer that people could look at what the voter actually did and check it out in a recount.

So there are issues like that that you need to look at very carefully, but it shouldn't be that complicated. Many States I think have got it right. The systems are in place where you cross—draw—as Governor Crist said, you draw a line through an arrow behind the name of the candidate you favor. The machine scans it and you see it drop into a bin. Those are there. They can be recounted or reprocessed and checked. It is a pretty confidence-inspiring system, I think.

Ms. LOFGREN. Mr. Holt, I know that both of you actually are very concerned, as are we, that disabled voters be able to have full access to the democratic process by casting a private vote, and you are aware that some concern has been expressed in some sectors relative to the paper trail and the ability of the visually impaired to certify that. What is your answer to that? How do we make sure that all Americans, including the disabled, are accommodated?

Mr. HOLT. Well, not only is increased accessibility explicitly dealt with in the legislation, it is really central to the conception of the legislation, that it is intended to build on the Help America Vote Act and enhance the accessibility.

I know there are some in the country—now you see it on the blogs—that are asking that we do away with all electronics and have paper ballots only. When confronted, they say, well, that is not quite what they mean, but it is, in fact, what they say. That would be a step backward, I think, as far as accessibility goes.

Voters with physical limitations don't want a separate but equal system of voting. They want to be able to vote in secret, independently, just as every other citizen does; and this legislation I think certainly allows that.

We have been careful not to get into the certification business, not pick and choose certain kinds of systems that should be used. Rather, we have chosen to establish principles that must be observed with a full recognition that there are systems available that

meet those principles; and the principles are accessibility, auditability and voter verifiability.

Ms. LOFGREN. Thank you very much. My time has expired.

Mr. McCarthy.

Mr. MCCARTHY. Well, I thank both of you for coming.

My first question is to Congressman Holt. Your bill talks about open source software. A lot of these machines run on also a Microsoft-based—and they have the intellectual property and protection and others, and they have to update regularly as they go through. How do you proceed to solve that problem? Or would you just keep it all publicly displayed or ask for that?

Mr. HOLT. The legislation as written was reviewed by a number of computer scientists and endorsed by them and by groups and organizations as well. I am certainly aware of that problem.

Someone once said to me, why can't the software be publicly disclosed? It only counts. What is the proprietary secret that must be protected?

Chairwoman Lofgren made reference to the legislative process that you are going through now. I am certainly willing to talk with you, and I am sure the computer scientists around the country who have shown such interest in this matter of verifiable voting would be willing to talk with you, to get the precise language that will give all voters the confidence that comes from transparency and, at the same time, protect legitimate trade secrets.

Mr. MCCARTHY. Thank you.

We have had quite a few hearings setting up to this one today, and you were able to participate in one we had the other day. The thing that struck me was the number of elected officials that run elections from the county to the Secretary of State that seem opposed to this bill and—I mean, we had the Executive Director of the National Association of Election Officials. I was just wondering if you could talk to that, explain to me why the majority of them would oppose your bill.

Mr. HOLT. I don't know to whom you are referring. I haven't taken a tally. But it was my sense that a large number of elected officials, the majority of elected officials, support this.

I do, for example, have here the written testimony that was submitted to you from the Secretary of State of Minnesota, speaking in favor of this legislation and also making the point that it could be implemented within the time prescribed.

I think some election officials have kind of the usual personal reluctance to have anybody tell them what to do. You know, several of them have said to me, what is the matter? Don't you trust us?

You know, it seems to me that is like a CEO saying, well, I am not going to have the books audited because what is wrong? Don't you trust me?

You want independent auditing in any case for anything of value.

Mr. MCCARTHY. Can I ask you one question?

Mr. HOLT. Yes, sir.

Mr. MCCARTHY. Do you have this letter that I got from NCSL and NACo, National Association of Counties opposing your bill?

I mean, I don't assume that—and I come from the State legislature. I find elected officials, whether Republican or Democrat, want to have accountability and want to have honest elections.

Then I guess if I could just follow up on another question with you. I appreciate your passion on this bill, and I appreciate your desire to make sure we have accurate elections. An interesting thing happened in one of the panels. A person said that their organization goes through all phases. And I agree with you. I want to make sure at the end of the day we have the most honest elections we can. And a unifying thing that most everybody says, the more people handle “paper”, the more options you have to have problems.

But, okay, we count at the end of the day auditing that those who voted make sure their votes counted. In your bill, you never addressed or would you address the people who vote—are we allowing people to vote who don’t have a right to vote? Would that not be overall accountability when a person says “all phases” and did you think of that or would you bring that into your bill?

Mr. HOLT. There are, I think, a number of aspects of elections and voting in the United States that still need attention, that has to do with everything from the registration lists to whether felons or former felons should be allowed to vote to how provisional ballots are counted and what happens if you intentionally deceive voters.

There are a number of things that are not dealt with in this legislation, including conflicts of interest, except in a limited way with regard to system vendors and so forth. There is a little language about conflict of interest, but I think many of those things are better dealt with in other pieces of legislation.

Mr. MCCARTHY. Thank you for your time.

Ms. LOFGREN. I would note for the record that the testimony of the Secretary of State of Minnesota, Mr. Mark Ritchie, will be included in the record.

[The statement of Mr. Ritchie follows:]

WRITTEN TESTIMONY OF MARK RITCHIE, SECRETARY OF STATE, MINNESOTA  
BEFORE THE COMMITTEE ON HOUSE ADMINISTRATION, ELECTIONS  
SUBCOMMITTEE  
US HOUSE OF REPRESENTATIVES  
MARCH 23, 2006

Congresswoman Lofgren, Ranking Member McCarthy, members of the subcommittee, thank you for this opportunity to submit written testimony on the "Voter Confidence and Increased Accessibility Act of 2007," HR 811. I am the elected Secretary of State in Minnesota, where I serve as the Chief Elections Officer, and would therefore have the responsibility for implementing this bill in our state.

In preparation for this testimony I discussed this bill extensively with local and state-level elections officials across Minnesota and the nation. Two main topics emerged in these conversations.

First, the widespread agreement that HR 811 is needed to help ensure that elections are conducted in ways that can be properly recounted. In Minnesota we vote on paper ballots and use optical scanners to count our votes. This system is very low cost and simple, making training of election poll workers relatively easy. Minnesota voters trust this approach, and this trust is reflected in our high election turnout. We are consistently the top state in the nation for participation among eligible voters in presidential elections, nearly 77% in 2004. Our voters know their ballots will be counted as intended and accurately recounted if needed.

Minnesotans are aware, however, that not every voter in the country has equal access to dependable election machinery and that this puts the credibility of our national elections in jeopardy. We are strongly in favor of the objectives of HR 811, making sure that votes can be accurately recounted in every jurisdiction in the country, and we know that some of our tax dollars will be needed to help other states restore trust.

Second, the HR 811 provisions for post-election audits could significantly enhance the credibility of reported results. In Minnesota we conduct randomly selected hand-counted audits in each county to ensure the accuracy of our machines. I am very supportive of the inclusion of post-election random audits in HR 811 and look forward to working with Congress to shape this section of the bill based on our experience.

To achieve these two important goals – elections that can be accurately recounted and post-election audits to confirm results, some states will need significant financial assistance. The largest single item will be the cost to replace unreliable electronic voting machinery with equipment that is dependable, secure, and trusted by voters. I will concentrate my testimony on these two elements to provide some perspective on what it would take financially and

logistically to implement this bill, including some ideas on what could be done to make this as simple as possible. Finally, I will suggest two additional measures for your consideration.

#### Costs and Logistics

In preparation for this testimony I gathered information from a number of sources to determine some of the cost and timing aspects of implementation. This included direct conversations with election officials, research from academic organizations, and a recent informal survey conducted by the National Association of Secretaries of State. The bottom line is this – about one-third of the states are roughly in compliance with HR 811 and another third are part of the way there but would need some financial assistance to meet the standards. The final one-third of the states will need significant support from the federal government to meet the paper ballot provisions of this bill.

Given currently certified equipment, the simplest way to fully implement the bill as written would be for jurisdictions that used DREs in November, 2006 to move towards voting systems that use paper ballots – marked physically by the voter or with the assistance of HAVA-compliant ballot marking systems.

It is also technically possible to convert existing DRE machines into ballot marking devices and this is a solution that some states may be interested in pursuing if the manufacturing companies are willing to make the necessary equipment. A representative from one of the largest voting equipment companies advised me that this is technically possible since DREs equipped with Voter Verified Paper Audit Trail (VVPAT) printers are already exporting data to one kind of printer, normally one using continuous rolls of thermal paper. Exporting this data into a printer that produced a full-sized ballot that could be optically scanned for verification by a voter with limited vision is a possible solution for some. While there is currently no DRE machine that would print and read back a paper ballot, the technology required to design and engineer such a device is well established and is in fact used in certain ballot marking devices.

The ultimate cost will depend on the timeline and final language of the bill but it is possible to make a rough estimate based on current best practices. Based on our experience with voting machine purchases in Minnesota over the past few years, I have estimated the cost of compliance to be a little over 1 billion dollars. I believe this small investment would yield great returns in voter confidence.

Changes in election machinery take time – both for the actual purchases and for the re-training and testing that has to accompany any major change. While there is no shortage of available equipment there are many “hoops” that every Secretary of State and county election official must jump through to purchase new technology and to distribute it with adequate testing and training at the local level.

Under HAVA the flow of money to the states was extremely slow. If the goal of this legislation is to restore voter confidence before the 2008 elections then mechanisms for

appropriating funding and distributing it quickly to the states needing assistance is crucial. The federal government can move money quickly when needed; for example when a hailstorm or drought hits the agricultural crops in my state money flows pretty quickly, especially in an election year. I believe we need that same expediency and sense of urgency to fully fund and rapidly implement this bill.

#### Options

If Congress appropriated \$1 billion within the next month for the purposes expressed in HR 811 and if there is efficient disbursement of the money, many states could be in compliance with the law by November 2008. Some states, like Minnesota, already meet most of the equipment standards and would not require funding. Some states, like Florida, are already considering voting machine purchases that would be fully compliant before the 2008 presidential elections using largely state funds, which are reimbursable under HR 811. Other states will need significant assistance.

Congress needs to be realistic about the financial difficulties that some states face and offer practical solutions. Perhaps the most important thing we can do is create a sense of urgency and priority. While about one-third of the states will need little or no help meeting the requirements of this bill the rest of the states will need significant financial and technical assistance. The top priorities fall into three categories.

1. Jurisdictions without any form of voter verified paper ballots. Voting systems that cannot be meaningfully re-counted or independently audited are the most important focus of this legislation and these jurisdictions would be the top priority for rapid funding and full-implementation by November 2008. The most cost effective solutions would be determined by each state but it appears that the least expensive and most readily available solutions would be paper ballots, marked by hand and HAVA-compliant ballot marking machines, with optical scan tabulators.
2. Jurisdictions using DREs with VVPAT printers for all voters would be the second tier priority. With adequate funding almost all of these DREs could be replaced with voter-marked paper ballots and optical scanning equipment. If the funding is inadequate these machines could be used for one more federal election cycle for HAVA-compliant voting alongside voter-marked paper ballots with hand or machine tabulation. Accessible voter verification components could be leased or purchased to ensure that disabled voters have the opportunity to verify their ballots. As soon as possible these machines could be replaced with systems that use or produce durable paper ballots and provide for accessible paper ballot verification.
3. States using DRE machines with VVPAT only for disabled voters (HI, MO, etc.) would be a third tier of priority, perhaps making use of short-term "bridge" solutions like leasing or adaptations of these DREs into ballot marking machines with accessible voter verification components.

I believe there are two additional steps that should be taken to strengthen this bill. The first is the establishment of national standards for the certification and use of voting systems. There have

been voluntary federal standards in place since the mid-1980s and Minnesota has required compliance with these standards since that time. Many of the problems that have occurred in recent years have been the result of a lack of uniformity in the rules for determining how a voting system should work and what kinds of voting systems should be permitted for use in our elections. We need national standards for the certification and use of voting systems.

The other matter that has contributed to the problems of recent years has been the lack of adequate preparation of the voting systems before Election Day. As election officials, it is important that we demonstrate to the voters prior to each election that the voting systems we propose to use are in fact accurate and that the voting process used is transparent and verifiable. We need national pre-election testing requirements for every voting system.

As Secretary of State I have to deal in the real world of funded and unfunded mandates, procurement procedures, litigation, local election administration capacities, and the realities of the election equipment marketplace. I believe that the goals outlined in this bill are largely achievable before the 2008 elections, but only with the financial and political support of the federal government. The sooner we start the better. The greater the flexibility to implement the better. The full weight of the Congress behind these proposed reforms will help move all other agendas.

Thank you again for this opportunity to submit testimony to this committee.

Ms. LOFGREN. Now I invite Congressman Gonzalez to—

Mr. GONZALEZ. Thank you very much, Madam Chair.

If I am not here throughout the proceedings, it is because we have a mark-up in Energy, and I will be going back and forth.

My second observation is that I don't think the sky is falling, but I think parts of the ceiling may be falling. So if I rush out of the way—

Rush, thank you very much. Tom, thank you very much for your testimony today. You have been here for the testimony for other election officials, and it seems to me—and we have the Governor today, of course, with his proposed legislation in Florida. If you had your druthers, would you prefer to go the route that Governor Crist is proposing in Florida, as opposed to your bill? Because we deal with legislative realities. I understand that. But I am just talking about if you had choices, because I am going to ask the same question of Tom in a minute.

Mr. HOLT. I have only had a second-hand account of what precisely the Governor is going to do. It sounds to me as if it would be fully in compliance with this legislation.

As I said, in drawing the legislation, we recognized that running elections has been, under the Constitution, the purview of the States and that there are many, many systems already in use. We chose not to specify election systems here. We didn't want to get into the certifying business of—that this system is good for physical accessibility for people with physical disabilities, this system is not, and so forth. So not knowing enough about the Florida system and in keeping with my general principle of this bill, I think I really can't answer that.

Mr. GONZALEZ. Tom, same question.

Mr. PETRI. Yeah. I think there is a danger of trying to overload what should be a pretty simple bill that has at its heart ensuring basically a paper trail so there can be an accurate recount. And issues of—as the Governor said and, of course, Florida, we are all aware of, has been in the crosshairs because of close Presidential elections and so on. But it has happened in every State, I suspect, in one election or another.

I think we should allow a reasonable amount of initiative to the people that have to carry this out and what the States are doing to deal with this problem, frankly. And I think the Governor has indicated he has bipartisan support in his State, and that is important I think for public confidence, for members of both parties as well.

There are a lot of other issues that might well be dealt with at one time or another, you know, who is qualified to vote, helping handicapped people vote with various types of disabilities and so on. But the key point, after what happened in Florida, is to attempt to upgrade or help States upgrade the election process, and to make sure that we have a system that people have confidence in at its core; and that is what I think the Governor was attempting to address.

Mr. GONZALEZ. And, believe me, I appreciate the effort that you are demonstrating regarding this piece of legislation. It seems to me—and we will have this debate—that if any State has had experiences that leads them to probably seek the most thorough of rem-

edies, it has to be the State of Florida. So I really applaud the Governor.

Let me tell you what I mean by that. It seems to me that I know we should have a paper trail. That is important. The voter can then verify to make sure that those are the votes, if in fact the voter takes his or her time and such. And then, for the purpose of a recount, obviously, without a paper trail, we know a recount means nothing in most instances; and I will tell you that from my experiences in the State of Texas.

The remedy that Florida proposes, though, it appears to have something in the front end; and that is that I think at the time of casting the ballot you have a more informed, thorough process at that point, if you take the testimony of the Governor.

It also addresses something else other than the verification, the audit, the recount, which is incredibly important, but, at the front end, we are talking about undervoting, undercount—people that believe they have cast a vote and somehow have not.

I really believe that Florida may be onto something, and I think we need to be exploring that avenue, and there is so much more to discuss, and I need to go. But, Madam Chair, there are other aspects of the voting process regarding its integrity, who is allowed to vote and so on. I think that is a different issue that needs to be dealt with, just as voter intimidation and denial of the right to vote by those who are eligible to vote. That is an argument, that is a debate for a different day, I believe, and that we should expend some energy on it, but, today, I think we are really looking at the mechanics.

Thank you very much.

Ms. LOFGREN. Thank you, Mr. Gonzalez.

Let me note our colleague, Corrine Brown, is here also from Florida. And Mr. Ehlers.

Mr. EHLERS. Thank you, Madam Chair.

First of all, I would observe that the ceiling never fell in when the Republicans were in control. Maybe we have had a few tremors in the last year.

First, for Dr. Holt, a very specific question that my staff was wondering about. Do you know of a DRE with a VVPAT that currently meets the accessibility standards described in your bill and that would be ready for deployment in 2008?

Mr. HOLT. Yes, I think there are several. In fact, there were several that were on display in this very room a week or so ago.

Mr. EHLERS. Okay. I would just appreciate for the record if you could just give those to us later. I don't want to take your time here.

Mr. HOLT. All right.

Mr. EHLERS. Next, I totally agree with you. You stated your objective at the beginning that every voter should have the assurance that the vote they cast is counted and, as you said, verifiable. That is a good goal. I have always added a second one, that they also have the assurance that their vote is not diluted by fraudulent votes being cast elsewhere. I think that is very important. We often forget that.

For example, the reason that the voting machines were developed, the primary reason was because of all the fraud that occurred

with the paper ballots of that day; and I find it interesting back then they went from paper to machines in order to avoid fraud and get reliability. Now we are talking about going from machines to paper to get better reliability.

I am not against your bill, by the way. I have raised a lot of questions about the specifics of it, but the State of Michigan has had several elections already using equipment precisely the same as what Florida is planning to install. Frankly, I think optical scan is a good approach, but it is not just the equipment. We have to get away from the idea that establishing equipment answers it.

The election in 2000 in Florida had a paper trail called punch card ballots. It is no different from the optical scan. You punched the ballot, the machine counted it and so forth. They did not maintain it properly, and that is what led to all the confusion.

So it really, once again, comes down to the local level.

I have some 35 years' experience at local elections and working with Secretaries of State. Some are absolutely superb. In a few elections it tends to go bad, but it is not always just the equipment.

One other comment, your comment about some opposition to your bill, and indeed there is, but I think the real issue is that most—the counties, the States feel it is overly prescriptive and that it doesn't trust their judgment to handle local situations, particularly I think the detailed audit requirements. For years, States have had a lot of audit requirements. It is called the Board of Canvassers, and they each have developed their own methods to suit their particular localities and particular States. So, I think the prescriptive nature of your audit requirement is what has alienated the counties and the States. The Boards of Canvassers have a very good record of doing this.

These are just comments on the bill. As I say, I don't oppose your intent, but I think we have to be very careful. First of all, not infringe on what the actual poll workers want to say and do, but, secondly, have a reasonable approach how that works and not define the market simply by being very prescriptive.

I do have a question for you. You are a physicist, as I am, and you have used computers most of your life. How did you verify the results of the computers when you used them?

Mr. HOLT. Usually and, in fact, it is a principle of computer science that a computer program cannot verify itself. There must be an independent verification. In other words, whether the landing module actually touches down or whether the books balance separately. Some people compare this to ATM machines; and I say, really, it is quite different from ATM machines. Because at the end of the month, you and the bank compare notes. But that cannot happen in the case of voting and still maintain the secrecy. So whenever I have done computer programming and I think whenever anybody does, the verification must come through some independent path.

Mr. EHLERS. But also verification can come through using the computer appropriately. I have verified programs by using the same computer but taking a different approach. My point is simply, being overly prescriptive and requiring a paper trail, couldn't we also just require that there be a verifiable redundant trail which

could, in fact, include the computer with an additional CPU that observes the keystrokes?

Again, you don't necessarily have to answer that and say, yes, that is okay. My point is simply, let's let the market and let's let the county clerks, the State, the Secretaries of State, and the State election officials decide which system is best for their State. We should just establish the principle that the result of the voters' actions has to be verifiable, has to be verifiable in your language by the voter, him or herself, but also by the canvassers, those who tally the votes and so forth. Would you accept that as a guiding principle?

Ms. LOFGREN. The gentleman's time has expired, but you can answer that.

Mr. HOLT. I can answer that very quickly by saying there have been suggestions that you use a separate electronic method of verifying an electronic count. That would not give the voters confidence. Maybe someday, in which case we would want to rewrite and update this legislation. But I think all of the co-sponsors and the endorsers of this legislation believe that the only way we will have confidence in the voting system is with paper ballots that voters can independently verify.

Mr. EHLERS. The only way I will—

Mr. HOLT. And as for fraudulent voters, there have been very few cases—

Ms. LOFGREN. We are going to ask—

Mr. HOLT [continuing]. Prosecuted around the country.

Ms. LOFGREN [continuing]. Congresswoman Davis be permitted to ask her questions.

We are going to have I think a vote around noon, so I think we are going to have to ask people after this panel to stick a little bit closer to the 5 minutes.

Mrs. DAVIS. Thank you, Madam Chair. I, too, will be in and out a little bit; and I am looking forward to the next panels as well.

But I wonder if you could just comment—I think one of the criticisms perhaps in terms of this prescription has been for the durable and archival paper trail, and if you could just comment on that, whether that is something, you know, we have available to us so that it is not necessarily in a roll—and, again, how would those paper rolls—if that or something archival—be counted, be audited and then possibly be recounted?

Mr. HOLT. Is that to me?

Mrs. DAVIS. Sure.

Mr. HOLT. When we wrote the bill, I didn't understand that archival paper has a generally understood meaning that archivists and book historians and others refer to. We definitely want, I believe, a durable paper ballot. It does not have to meet the standards of archival quality, and so that is a word that I would suggest changing in the legislation.

I know some have said we are using thermal paper, thermal printer paper, and we would like to continue to use that. I had a good example last weekend where I got a receipt on thermal paper, and I just sent it to my staff yesterday. Because when I went to look at it again, I guess because it had been near a hot liquid or something, it was illegible just from last weekend. It is not durable.

It is not the sort of thing that you want to count and recount weeks or even months later.

Mrs. DAVIS. So this is an issue that you are still looking at? Just for the record.

Mr. HOLT. That is right.

Mrs. DAVIS. Thank you. I appreciate that.

I am going to ask this question to the next panel. Hopefully, I will be here at that time. Because what we are talking about really goes to the heart of voter confidence.

One of the issues that was kind of facetiously mentioned at our hearing the other day, paper or plastic, as people come to vote, but the reality is that people choose absentee in many cases. They sometimes need a provisional ballot so there is an alternative to whatever system is in place at the precinct, and I am wondering if there is anything in your legislation here that precludes using both an electronic system and a paper system—well, I guess optical scans are electronic. But something that—where people were actually making those choices. Is there anything in your legislation that would preclude that—

Mr. HOLT. Well, I am not quite sure—

Mrs. DAVIS [continuing]. As long as it has a verifiable paper ballot?

Mr. HOLT. Yes. What our legislation requires, that there be a voter-verified paper ballot. Now what goes along with that, we don't really specify. There are some accessibility issues that, you know, a purely paper system cannot help the voter with disabilities along with the process.

Mrs. DAVIS. Exactly. And part of my question is—

Mr. HOLT. Ballot marking device certainly can, for example.

Mrs. DAVIS. Right. And the issue is whether or not—and I didn't suspect that there was in your legislation. I just wanted to confirm that. Because I think that, as the Governor from Florida mentioned, they will have two types essentially. My sense would be that people, disabilities or not, might choose one system over another; and there may be a point at which we arrive at that. We are not there today, but that is something that we might want to do.

Mr. HOLT. The one issue on that subject that I would caution you on is, with all good intentions, coming up with a system that is separate but equal for people with disabilities, to the extent possible voters with disabilities should be permitted to vote as everyone does.

Mrs. DAVIS. Right. As well. And anyone can vote on a system for the disabled as well. I think people could choose either system.

I think that is all I am asking and just to be sure that that is nothing that would be in this legislation that would preclude that for the future.

Ms. LOFGREN. Thank you.

We have been joined by the chairwoman of the full committee, Congresswoman Millender-McDonald, who will ask a few questions.

The CHAIRWOMAN. Thank you so much, and good morning to you, members, the ranking member, good morning and good morning to all of you. It is great to see you here this morning.

I am especially pleased to see my colleagues, Congressman Rush Holt and Congressman Petri.

I can say unequivocally that Congressman Holt has given this everything he has. He has worked tirelessly to make sure that this bill came before the Committee, and that we recognize the important work that he put into it. I thank you so much for your tenacity and for ensuring that we try to look into something that is especially important to the American people. People want to know that when they vote, their vote is counted accurately. You have come up with what you perceive is a way to ensure that happens.

I have just one question, and I don't know whether I can ask either of you. In December the Technical Guidelines Development Committee sent a recommendation to the Election Assistance Commission that said all voting systems meet requirements for an independent verification system that produces multiple independent records of ballot selections that can be audited to a high level of precision. Are there other methods for achieving voter confidence without using this paper? Is there anything, Mr. Holt or Mr. Petri, that you know about? Are you aware of that?

Mr. HOLT. Actually, I am not sure that I understood the question. I apologize.

The CHAIRWOMAN. Well, that is okay. I am looking into that further.

Mr. HOLT. I will be happy to follow up on that.

The CHAIRWOMAN. All right then. Is there any statistical data on the number of votes lost during the 2000 election because of overvotes and the number of votes lost in 2006 when DREs were used in elections?

Mr. HOLT. Well, following the 2000 election, there was a study done by a group of academics from MIT and Caltech that looked at what they call residuals, overvotes, undervotes for various kinds of systems.

And that is partially out of date now because many States have changed their systems in the meantime. But still there are 40 percent of Americans now who are voting in ways that are unverifiable on machines of the type that did not fare too well in those studies. So you might suspect that there are some problems that are going undetected because there are no paper ballots for the actual count.

There have been other studies done by a variety of groups, more recently taking slightly different approaches. But, yes, there are data about overvotes and undervotes and the vendors, some of whom were here last week.

The CHAIRWOMAN. Right.

Mr. HOLT. Who have changed their designs in many cases to try to address those issues so that they will catch overvotes, undervotes, intentional and unintentional.

The CHAIRWOMAN. Okay. Well, Madam Chair, I will just stop there and I will resume questioning the witnesses when your next panel comes, because it appears to be someone that you and I both know.

Ms. LOFGREN [presiding]. Thank you both very much for your leadership on this issue.

We are now pleased to have two secretaries of State testify before us: the Honorable Debra Bowen, Secretary of State of California; and the Honorable Chris Nelson, Secretary of State of South Dakota. Thank you both so much for taking the time to be here.

And another friend from California. Hello, Delores.

Our Secretary of State—and I say we are heavily Californian on this committee—Debra Bowen is the author of the first-in-the-world law to put all of California’s legislative information on line and has required all audits to be conducted in public and to include absentee and early voter ballots.

She was elected California Secretary of State last November. She has been a pioneer of open government, personnel privacy rights, and election integrity. After earning her law degree at the University of Virginia, she practiced corporate tax and ERISA law. And she was elected to the California Assembly in 1992, served for 8 years in the California State Assembly. And she became only the sixth woman in California history to be elected to statewide constitutional office. We are very proud of Debra Bowen in California.

And the Honorable Chris Nelson, South Dakota Secretary of State, has been the State election supervisor in the Secretary of State’s office for 13 years. He is currently serving, of course, as the Secretary of State, having been elected in 2002.

Prior to becoming Secretary of State, he held the position of State election supervisor for 13 years and he received in 2003 the 2003, Excellence in South Dakota Municipal Government Award from the South Dakota Municipal League. He has been appointed in 2005 as the National Governors Association representative on the United States Election Assistance Commission Board of Advisers. He graduated from White Lake High School and South Dakota State University in 1987 with highest honors. And we welcome you both.

**STATEMENTS OF HON. DEBRA BOWEN, SECRETARY OF STATE OF CALIFORNIA, AND HON. CHRIS NELSON, SECRETARY OF STATE OF SOUTH DAKOTA**

Ms. LOFGREN. Debra, thank you so much for being here, and if you would start. We have this little machine, and we ask that the testimony try and be within 5 minutes. The written testimony will be a part of the official record. When the yellow light goes on it means you have about a minute left, but we are not too heavy on the gavel, as you have noticed. Welcome back, Debra.

**STATEMENT OF DEBRA BOWEN**

Ms. BOWEN. It is an enormous honor for me to be here with you today and I join you as a very proud American, proud of this country’s history, of our spirit, our ability to create and to innovate. And I believe that the greatest innovation in this country’s history is democracy itself. And when I work on these issues that involve the democratic process, I remind myself that in the history of civilization, there has been nothing obvious about self-governance.

One of the wonderful things about democracy is it permits us to correct course. In fact, it demands we correct course. And in most of our country’s early elections, voters had to be white, male, and own 50 acres of property in order to exercise the franchise. We

have corrected course on that, of course, but we face another great challenge now, which is proving to skeptical citizenry that every vote counts.

I would offer three key thoughts:

First, at this point in our country's history, every State's elections affect every other State's citizens. We truly are interdependent.

Second, our democracy, our self-governance has costs, but those costs are a small price to pay for the certainty of fair, open, and honest elections, with results that are beyond doubt.

And third, we can and should accomplish the goals of having fair, open, and honest elections, without doubt, and we should do that now.

That provision that we be able to prove that the results of an election are accurate is our greatest challenge. That verification must be publicly reviewable and verifiable. Which is what makes it unlike the verification of software used, for example, on a lunar landing module or a fly-by-wire system. It is not just those who are using the computer system who have to be able to verify its accuracy, it is every single citizen who relies on the accuracy of the system has to be able to do that.

This issue, as has been discussed here today, is not partisan. We currently in Orange County, California have a situation where two Republicans, Janet Nguyen and Trung Nguyen, are locked in a recount with less than 10 votes separating them. And the e-voting experts have already been engaged.

So what steps can States and local jurisdictions take? Our first step in California was to require that electronic voting machines have a paper trail. That has been the law in California since 2004, pursuant to a bill carried by Republican State Senator Ross Johnson, who was just appointed by Governor Schwarzenegger to chair our Fair Political Practices Commission. But having the paper trail proved to be insufficient and we subsequently revised our laws to require that that paper trail be used to conduct the mandatory 1 percent recount that every county does before an election is certified.

And even so, in California questions about voting equipment persist and that is why I have undertaken a top-to-bottom review of every voting system that we currently use. We will review security, accuracy, verifiability and usability not just for voters and disabled voters, but also for poll workers and elections officials. The more complicated you make a system, the more likely you are to make mistakes, and I think that is a useful principle for all of us to keep in mind.

So while I know what I would do if I were a county registrar of voters—I am not; my task in California, my statutory mandate, is to review systems to determine whether they meet the basic criteria of security, accuracy, verifiability and usability. We have a very short time frame to complete this. As you all know, we have recently added a February 5th primary to our election schedule for next year and I do not want to put county elections officials in the position of having to purchase and deploy new election equipment 2 months before an election or between the three elections we will hold next year. We will get this done and we will have public par-

ticipation. And I would ask and hope that other States would do the same.

We cannot afford another election in which the citizenry questions the results once the election is complete. Thank you.

[The statement of Ms. Bowen follows:]



**DEBRA BOWEN** | SECRETARY OF STATE | STATE OF CALIFORNIA  
1500 11th Street, 6th Floor | Sacramento, CA 95814 | Tel (916) 653-7244 | Fax (916) 653-4620 | www.sos.ca.gov

March 22, 2007

The Honorable Zoe Lofgren, Chairwoman  
Subcommittee on Elections, Committee on House Administration  
1309 Longworth House Office Building  
Washington, DC 20515-6157

Dear Chairwoman Lofgren:

I first want to applaud you and the subcommittee for taking on this important challenge and for inviting me to appear before the subcommittee on Friday.

I think we would all agree that it's time to solve and move past the "process" issues associated with voting by giving voters the confidence of knowing that their ballots were counted as they were cast. Once that is in place, then voters can focus solely on the policy choices presented to them on Election Day.

I am strongly supportive of changing the current system to improve the integrity of and the public confidence in our electoral process. On Friday, it's my intention to focus my testimony primarily on two main practical concerns – timing and funding.

Timing

In California, the length of time it's taken to select a new voting system has varied greatly between counties. For example, Placer County, which has 176,000 registered voters, appears to have taken about two months to select a system and negotiate a contract with the vendor. Yolo County, which has 91,000 registered voters, took approximately nine months to award a contract. San Francisco County, which has 418,000 registered voters, originally forecast an eight-month procurement process that is now entering its second year due to concerns about the type of system that was proposed to be deployed.

The length of time it takes to develop a competitive bid package, solicit and review bids, provide for public input, negotiate a contract, and buy and deploy a system will vary by state and, in California's case, by county, since each of the 58 counties buys its own voting system. That procurement process is affected by a number of things outside of the control of the elections official – namely, the amount of public input that is required, demanded and provided, the cooperation of the vendor, and the relationship between the county elections official and the county governing body.

As you're well aware, the public interest in the voting systems used across the country has exploded in recent years. That means any procurement process needs to build in time for the public to review and comment on the proposals, and for the procurement itself to change based on those comments.

The Honorable Zoe Lofgren  
March 22, 2007  
Page 2

The last thing any of us want is to truncate public review of any system, rushing through approval under the presumption that any solution is better than the current system, only to find ourselves back here in two or three years, having this same discussion all over again.

Funding

This is an issue I know the committee is acutely aware of, but I raise it to make three points.

First, California's counties spent at least \$162 million and probably closer to \$250 million buying voting systems to comply with the Help America Vote Act by January 1, 2006. Considering that California has approximately 10% of the total number of registered voters in the country, the cost for making significant changes in our voting systems could be over \$1 billion.

Second, I'm concerned from a financial, logistical, and voter acceptance standpoint, about requiring certain changes by 2008 that may be made obsolete by other changes that could be required by 2010. I don't think any of us want to require counties and states to buy a system that may only be used for one election cycle.

Third, in states that are required to make another change, I don't think it's unreasonable to ask the subcommittee to consider the inclusion of per capita payments for poll worker training and voter education.

Following the last two elections, I read many news articles where it was stated that the equipment performed fine, and any problems were solely a result of "human error." If poll workers and voters don't know how to operate the machines, it's simply not possible to have an election without a large segment of the population being disenfranchised. That's why I'm so committed to ensuring that whatever changes are made, we include the time and money needed to make sure elections officials, poll workers, and voters can use the machines for their intended purpose -- to take part in our democratic process.

I look forward to discussing these and other issues in greater detail when I appear before the committee on Friday and thank you once again for the opportunity to provide testimony.

Sincerely,



Debra Bowen  
Secretary of State

DB:elg:lf

The Honorable Zoe Lofgren  
March 22, 2007  
Page 2

The last thing any of us want is to truncate public review of any system, rushing through approval under the presumption that any solution is better than the current system, only to find ourselves back here in two or three years, having this same discussion all over again.

Funding

This is an issue I know the committee is acutely aware of, but I raise it to make three points.

First, California's counties spent at least \$162 million and probably closer to \$250 million buying voting systems to comply with the Help America Vote Act by January 1, 2006. Considering that California has approximately 10% of the total number of registered voters in the country, the cost for making significant changes in our voting systems could be over \$1 billion.

Second, I'm concerned from a financial, logistical, and voter acceptance standpoint, about requiring certain changes by 2008 that may be made obsolete by other changes that could be required by 2010. I don't think any of us want to require counties and states to buy a system that may only be used for one election cycle.

Third, in states that are required to make another change, I don't think it's unreasonable to ask the subcommittee to consider the inclusion of per capita payments for poll worker training and voter education.

Following the last two elections, I read many news articles where it was stated that the equipment performed fine, and any problems were solely a result of "human error." If poll workers and voters don't know how to operate the machines, it's simply not possible to have an election without a large segment of the population being disenfranchised. That's why I'm so committed to ensuring that whatever changes are made, we include the time and money needed to make sure elections officials, poll workers, and voters can use the machines for their intended purpose – to take part in our democratic process.

I look forward to discussing these and other issues in greater detail when I appear before the committee on Friday and thank you once again for the opportunity to provide testimony.

Sincerely,



Debra Bowen  
Secretary of State

DB:elg:lf

Ms. LOFGREN. Thank you very, very much. Mr. Nelson.

**STATEMENT OF CHRIS NELSON**

Mr. NELSON. Madam Chairwoman, members of the committee. It is truly a privilege for me to appear before this honorable committee. Just one additional bit of introduction of myself, I also serve as a cochair of the National Association of Secretaries of State Elections Committee.

The key question that I would like to answer today is this: How can we improve the election system in America without damaging the things that are currently working?

And my answer to that question is this: I ask you to allow State and local election officials the time and flexibility needed to perfect the HAVA mandates before we go on with additional mandates from the Federal level.

I can assure you that after each election, election officials evaluate what worked, what needs to be improved and what new challenges may occur in the next election, and we work with a passion to get it right. You heard a powerful example from the Governor of Florida this morning about changes that they are making because of the issues that they have been involved with. They are making those changes at the State and local level.

I ask who is best positioned to drive the change in the improvements that are needed in our election system in America? I believe it is State and local officials who understand the landscape. I also know that what might work in Los Angeles County may not work very well in Jones County, South Dakota, with 817 registered voters, and the perfect fit for Jones County may not work in San Diego or San Jose. One-size-fits-all mandates and requirements at the Federal level simply may cause unintended consequences and problems when implemented at the State and local level. As State and local officials, one of our first priorities when we work on change and improvement is to make sure we do no harm to the things that are already working.

I just want to address briefly two of the principles in the whole bill, the first being the requirement for the individual verified paper ballot requirement. And I want to be clear. I am a paper ballot advocate. I am a paper component advocate. In South Dakota we have adopted the optical scan system with a touch-screen marking device for that system. It has worked very well.

But I also understand that across America hundreds of millions of dollars have been spent in the last 3 and 4 years in faithful compliance with the requirements of the Help America Vote Act. That money was spent to procure equipment and train and implement and test that equipment. And now we are looking at a bill that may require much of that to be scrapped in the next 12 months and that is a shameful, shameful waste of taxpayer money and I hope we can find some way to work around that tremendous expenditure that has already been made to try to comply.

I know the bill contains \$300 million to help offset those costs. I don't think that is going to be enough for the retooling that will have to happen across America with the requirements of the bill.

The section 5 audit requirement provision of this particular bill, I absolutely agree and understand that accountability is a manda-

tory and valuable part of an election system. States are adopting audit requirements. States have provisions that can deal with these issues and are moving in that direction. But those provisions that States are adopting work in harmony with their existing procedures as opposed to complicating processes that are already in place.

The audit provisions of H.R. 811, I believe, may lead to unintended consequences. In visiting with my State auditor, he said this is going to put me in a position of conflict of interest that we work very hard never to be in. The logistics are a concern to me. The audit board, is this board going to travel from county to county to county in some sort of traveling show doing vote counts? Or are we going to be sending ballot boxes into the State capital with all the accompanying security concerns that would be involved in that? I have questions about that.

I have concerns about the delay that this will cause in certifying Federal elections. In 2004, South Dakota's lone House seat was vacant. We held a special election. And our citizens were anxious to get that position filled. When they elected our Congresswoman, Stephanie Herseth, we were able to certify that in a day or two after the election. This bill would require that it take several weeks before an audit would be complete and we would be able to install a Congressperson when there is a vacancy. That is an unintended problem or consequence.

As you are aware, there is a provision in this bill to reimburse States for that audit requirement. You are also aware that the original Help America Vote Act contained another \$800 million of authorization to reimburse States for their costs. That money has never been appropriated. And I will tell you, at the State and county level we are skeptical whether or not the funds will be appropriated to pay for this new mandate.

The last thing that I would say—and I would just ask you, work with us to allow us to finish implementing the original HAVA requirements and work out those problems that might be there at the State and local level before we put new mandates and pressures on the system. Thank you.

Ms. LOFGREN. Thank you.

[The statement of Mr. Nelson follows:]

**House Administration Subcommittee on Elections  
Testimony of  
Chris Nelson, South Dakota Secretary of State  
March 23, 2007**

Madam Chairwoman and Members of the Committee:

Thank you for the opportunity to offer testimony on HR811. It is a privilege for me to come before this honorable committee.

Allow me to introduce myself. My name is Chris Nelson. I am the Secretary of State of South Dakota. From 1989 until 2002 I served as the State Election Supervisor for South Dakota. In 2002 I ran for Secretary of State and was elected. In 2006 I ran for reelection unopposed. One of the reasons I was unopposed is that I have earned a reputation in my state of being able to lead the conduct of elections in a manner that is fair to all parties and independents, open to the fullest participation and instilled with integrity. I serve as the co-chair of the National Association of Secretaries of State Elections Committee. I understand the election process and know what works and what doesn't.

I think it is vital that you hear from the perspective of a state election official who has experience in conducting elections and who will shoulder the weight of compliance with HR811.

Let me assure you that every day, election officials at the state and county level are working to ensure that elections across America are conducted fairly, that voters are able to cast their votes as they intend and that their votes are counted correctly. Our commitment as election officials is the same as yours. We work daily to ensure that this process works. State and local election officials are passionate about wanting to provide an election in which voters are well served. We do not take our responsibility lightly.

I believe there are three questions that need to be answered today.

- #1 – Does further change need to happen in our election system?
- #2 – Who is best positioned to fashion that change?
- #3 – How can change occur without damaging the current system?

The last six years have seen monumental changes in the election system in America. This period of change is unrivaled in the history of our country. In nearly every instance, election officials in America have responded to the call for change and performed well.

Are there areas that still need improvement?

The answer is "Yes".

After each election evaluations are made concerning what needs to be improved. Election officials look ahead to the next election to anticipate what changes are needed to provide a perfect voting experience.

HR811 gives the impression that Congress believes no change is occurring across America and therefore it needs to be mandated at the federal level. Nothing could be further from the truth. Every day state legislatures, secretaries of state, state boards of elections, county boards of elections and local election officials are evaluating and working to make the next election even better than the last one. Change is happening.

Who is best positioned to drive that change. I believe the most effective change will come from state and local officials who know and work with voters every day.

These officials understand the landscape. They understand what will work best for their community. They talk daily with their constituents. State and local officials are capable of assessing where change is needed and have the ability to implement that change. Local officials can create solutions that fit their locality. What works in Los Angeles County may not be the best answer for Jones County South Dakota with 817 registered voters. Likewise the perfect fit for Jones County would likely not work in San Jose or San Diego.

Inflexible federal laws such as HR811 which provide one-size-fits-all "solutions" are ripe for unintended consequences. These consequences can be especially harsh in those parts of our country that may fall outside of the "norm."

A poignant example of an unintended consequence of the Help America Vote Act occurred in South Dakota. The law requires voting machines to be programmed in languages covered by the minority language requirements of the Voting Rights Act with no regard for the usability of such requirement. South Dakota spent \$28,000 complying with this singular requirement in 2006. Ten people used that function. All ten were bilingual and did not use it out of need. \$2800 per voter is not taxpayer money well spent. State and local election officials could have found much more effective ways of serving the minority language voters than this universal mandate in HAVA.

When state and local officials evaluate change, their first priority is to do no harm to those parts of the election system which are working well. There are parts of HR811 which may damage processes which currently work well. I will address those portions of the bill.

**Section 2 individual voter-verified paper ballot requirement:**

Let me be very clear, I am a paper component advocate in my state. Given the mandates of HAVA to provide a voter assist terminal for voters with disabilities, I worked with our local election officials to determine the best system for our citizens. We chose an optical scan paper system with a voter assist ballot marking device. It is the right answer for South Dakota. Our citizens universally have approved the system and have great confidence. I cannot tell you that such a system is going to be the best for other jurisdictions with different demographics.

HR811 requires paper ballots of archival quality readable by naked eye and by scanner. Many of the voting machine voter-verified paper systems today would not be considered archival quality or meet the scanner requirement. Many of these systems have been implemented in the last two years as a direct result of the requirements in HAVA. Hundreds of millions of dollars have been spent on procurement, installation and training for these systems. They may be working fine in their jurisdictions. HR811 requires these systems be scrapped in a shameful waste of taxpayer dollars.

Jurisdictions who complied in full faith with the requirements of HAVA will be set back two to four years as they search for, procure, implement, test and train on voting equipment which would be HR811 compliant. Millions of dollars will be spent retooling. It is unlikely the \$300 million authorized in HR811 will come close to covering the costs. State and local governments will be left to fund the deficit created by this mandate.

The bill requires an emergency paper ballot system essentially requiring many counties to print a full compliment of paper ballots plus operate their electronic voting equipment. This added requirement puts more strain on the system and adds to the cost.

HR811 attempts to deal with the scenario of paper ballot counts not matching the electronic count. Any system which has the capability for printer breakdown will have the distinct probability of vote totals which do not match. This bill can attempt to define which count is used in various situations but I can guarantee that which ever candidate loses a close race in this scenario, the disparity will end up in a courtroom or the Floor of the House or Senate for ultimate resolution. One side will claim the paper is correct. The other side will claim the electronic record is correct. Citizens will wonder if either side is correct and ask why we have a system capable of producing more than one result. It is a recipe for destroying voter confidence.

**Section 2(c)(1) election notice prescription:**

This section prescribes the exact language of a notice to voters in the polling place. Is it really necessary to place the exact wording and type requirement in federal law especially when the requirement is language which would be very difficult for new adult readers to comprehend?

When election notices are created in South Dakota, we work with a local literacy council and new adult readers to craft notice language that is precise, yet clear and easy to read for new adult readers. These may be new citizens whose first language is not English or it may be others who never learned to read English as children. We have been told by literacy experts that election notices which are unnecessarily complex discourage participation. At the state level, we understand that concern.

The proposed notice language contained in HR811 violates several of the principals used by literacy experts. First, the notice is in upper-case letters. Messages in all upper-case letters are hard for new readers to decipher. Using upper and lower case letters is easier to follow and read. Second, the sentences are too long. Third, words like "representing", "serve", "vote of record", "audits", "confirmed", and "accurately" would be difficult for first time readers to deal with. They should certainly not be mandated in federal law.

**Section 3 sidesteps the State Administrative Complaint Procedure:**

HAVA required the creation of a state administrative complaint procedure for resolving HAVA Title III complaints by voters. HR811, while not removing the state procedures, in reality replaces them with an investigation by the Department of Justice. Allow the state complaint procedure to work. Allow citizens to interact with their state election officials to solve problems and complaints. Must every complaint be federalized by turning it over to the Department of Justice without giving state officials time to resolve complaints? Give state election officials a chance to work things out with their constituents.

**Private Right of Action:**

I can assure you from personal experience that the Department of Justice stringently monitors state compliance with HAVA. DOJ has repeatedly conducted written and verbal checks for compliance with the various requirements of HAVA. It is with the understanding that failure to comply will mean answering a lawsuit brought by the Department of Justice. Private Right of Action may unnecessarily duplicate and complicate those enforcement efforts.

**Section 5 Audit Requirement:**

As election officials we understand that accountability is a mandatory and valuable part of the election process. States have and are adopting audit requirements that meet the needs of their state. These are audit requirements that work in harmony with their current requirements instead of complicating their process.

South Dakota has a system which allows any three voters in a precinct to request a recount of all the races in their precinct if there is a belief that the results are not correct. This recount is paid for by the county with no liability for the requesting voters. This has served as our safety valve and citizen check on the vote count. The voters are in control. Recounts can be requested where and when necessary. When recounts are conducted, they routinely uphold the original counts. Recount boards are judicially appointed to take partisanship out of the board appointment process while allowing board members who have election experience to serve on the board. The process works well. There is absolutely no need to conduct an across-the-board audit by newly appointed officials having no election experience.

Confidence in our state's system is high. In 2002 former Congressman and current Senator John Thune ran against Senator Tim Johnson. Thune lost by a margin of less than sixteen one hundredths of a percent – 524 votes. No recount was called because the system is trusted and the results would not have changed.

The audit provision of HR811 will lead to unintended consequences. I have spoken to my state auditor regarding this provision. His response is that this provision will place his department in a conflict of interest situation, one which they strive to avoid at all costs in their profession.

The logistics of conducting this audit are concerning. First it will take time. Will the audit board travel to each county of a state to conduct the hand count? In South Dakota this will take 20 to 30 working days. Larger states would be even longer. Or will ballot boxes be transported to the State Capitol for counting? Transporting ballot boxes outside the county would be unprecedented. Following elections, ballot boxes are typically secured pending any local recount or court challenge. If the audit board is not willing to travel to each county, the previously sealed and secured ballot boxes would be transported with an accompanying loss of security once outside the local courthouse.

HR811 delays the certification of federal elections. Certification can now be done within seven days of the election in my state. The audit requirement would draw out that time, again with unintended consequences.

In 2004 South Dakota's lone House seat was vacant and a special election was held to fill the seat. South Dakotans were most anxious to fill the seat quickly. Under our procedures we were able to have our new congresswoman, Stephanie Herseth, certified with a day or two of the election. HR811 would have delayed that certification by weeks leaving our state or any vacant congressional seat without representation for much longer than necessary.

HR811 authorizes reimbursement for the costs of the audit. The fact is that HAVA authorized \$800 million more than has ever been appropriated to assist states in complying with the original HAVA mandates. Until this HAVA money is appropriated and provided to states, there is great skepticism among election officials as to whether the HR811 promise of additional reimbursements will ever be made. To us, this is looking like another unfunded or under-funded mandate.

In closing, it is crucial to remember that election officials across our great country are striving every day for what we all want – elections which are free, fair, open and accurate. Those officials are giving their all to make democracy happen in their jurisdictions. I know. I work with them every day.

I can share one great truth with you that I have learned from my experience as a state leader. It is this. It is much more productive to lead by working with not against those in other units of government. Many of us at the state and local level perceive HR811 as working against us. The rigidity of the requirements of the bill take away and complicate the progress we are making. We ask that you work with us to accomplish our purposes. Work with us by allowing the existing HAVA mandates to be implemented and the kinks worked out before adding new mandates.

State and local officials are best positioned to see the needs of this great system of elections we have in this country. Allow us to continue improving that system as our experience and understanding guide us. We are committed to that end.

One final thought. Our country's election system is much like a guitar string. A tweak here and a peck there by those who know the guitar and beautiful music is the result. Continued pressure

on that string by those who don't know the limits of instrument and soon the guitar string will snap – an unintended consequence.

As election officials make careful changes and improvements to their system, the beauty of citizens participating in the selection of their leaders is fulfilled. Relentless pressure of one federal mandate after another after another may one day cause this election system to snap. Let's not make that mistake. Allow state and local election officials time to absorb the requirements of HAVA before further pressure is brought to bear.

Thank you for your consideration.

Ms. LOFGREN. Now we will get into our questions. I just have a couple of questions. In California, you are doing a top-to-bottom review and—could this result in some machines or systems being decertified in this calendar year?

Ms. BOWEN. Yes.

Ms. LOFGREN. And then the counties would have to have another system in place by February of next year?

Ms. BOWEN. That is correct.

Ms. LOFGREN. Obviously, you wouldn't do that unless you felt it was possible for them to comply. How do you think this is going to work?

Ms. BOWEN. It is going to require a lot of teamwork with elections officials and the public. And one of the things that we can do in a primary election that we cannot do in the general is to lease equipment or to use equipment from other States. And that happened in the 2006 cycle in some places. We don't all go to the polls at same time.

Ms. LOFGREN. So your real deadline is November of 2008.

Ms. BOWEN. The big issue for the country is November of 2008. And the other option, and it is one that has been used in California before, because we have to have an election and even if equipment is not what we would choose, we still have to have an election. But there are conditions that can be put in place that help make up for flaws in security, accuracy, and usability.

So if we are in the situation where equipment does not meet the the standards, we will have some difficult choices to make about what conditions should be put into place. Just as an example, one of the difficulties we have had with some of the electronic voting machines is that they are in large counties. They are sent home with poll workers, sometimes as much as a week in advance, fully programmed, and stored in places that are not necessarily secure. One of the conditions we might think about is a much more secure means of delivery. That is available in the private sector.

Ms. LOFGREN. Correct. Let me just raise the issue of software. You have been a proponent, if I am correct, of open source. Why have you advocated that? And if you could also comment—I think California requires an exact copy of source code to be put in an escrow-type situation, and I am wondering has that been resisted by software companies. Could you address those two issues?

Ms. BOWEN. I have the software in my office, and when we do the top-to-bottom review we will engage experts to look at the software. But obviously I have fewer eyes and fewer experts to do that review, because some of that software is proprietary and I cannot release it.

Using open source software has two advantages. One is that it allows everyone to review the software, and there are a very large number of computer programmers in this country who have not normally been highly active in political processes who are very engaged in issues around voting systems.

And second, the ownership is in the public domain so that any State, any local jurisdiction, can use that software without paying a licensing fee; and also, then, if they are using open source software, can change vendors without having to scrap an entire system and buy everything over again.

Having said that, an open source system that is certified does not currently exist. There is a system that is ready to be certified. I would particularly be interested in seeing open source software used in the tabulator, because even if we go back to paper ballots at the polling place, we are going to be tabulating, using a computer, and that counting is so critical and it is so important that that software be open.

And the other place I would like to see a focus on that is with better disabled voting systems. We do not have, for all of the great innovation in this country and in Silicon Valley, we don't have a large number of choices in voting systems that meet the needs of some disabled voters.

Ms. LOFGREN. Thank you so much.

Mr. McCarthy.

Mr. MCCARTHY. Thank you both for coming. If I could follow up with Secretary Bowen, in listening to your statement and hearing you in these concerns you have, in the bill it says it wants this to be implemented by 2008. And it sounds like that would be a major concern to you. And also the only concern I thought I had, listening to you, was the \$300 million would not be enough.

Ms. BOWEN. \$300 million is not enough, particularly if States that currently have only touch-screen voting systems with no paper have to replace those systems. 2008 is doable for some parts of the bill and difficult for others. I am not going to ask my counties to procure something that does not exist, or to use it. So we have to be realistic about what exists. And then States need to get together and work towards creating systems that meet their needs.

Mr. MCCARTHY. My other question to you, then, is would you propose to audit every Federal race, knowing some of these races, some are close and some are not close at all? Referring to our Speaker, she won with 80-some percent of the vote. I won with 71 percent of the vote. And you and I had a little discussion about time line. The Secretary talked about time line. Would it be feasible or would it be better to do random?

Ms. BOWEN. The best audit system, I think, is one that is random, but that in the randomly selected precincts does audit each vote, including early votes in that precinct and votes cast by absentee ballot or by mail ballot.

One of the suggestions that I think has been the best is to then use that result to trigger a fuller review, depending on what the margin is. In a race in which there is only one candidate on the ballot, there is not a lot of need to go to a 100 percent hand recount or hand audit. But in a race such as the one in Orange County right now, where they are very close, it is appropriate I think for elections systems to build in a trigger that automatically does that audit without the need for a candidate to post the funds to do that. It is public interest to have accuracy.

Mr. MCCARTHY. What percent do you do in California when we do the random? Do we do 3 percent or 1 percent?

Ms. BOWEN. One percent.

Mr. MCCARTHY. Do you feel that is sufficient?

Ms. BOWEN. It is not sufficient.

Mr. MCCARTHY. What do you feel that number should be?

Ms. BOWEN. We need the guidance of statisticians. We want statistically significant audits and recounts. That is a stepped process. When I do the 1 percent count, if you get a result that is a significant difference you may decide that is not a place to recount. But this isn't a place where politicians should be making the calls; it is a place where—statistics is a well developed science. We don't need to reinvent it.

Mr. MCCARTHY. Maybe we should not sit down and mandate in every congressional race in California you need to do 10 percent of the vote. Would that be feasible?

Ms. BOWEN. Of course it is feasible, but I don't think it makes sense. It is not the best use of the resources that we have.

Mr. MCCARTHY. Okay. I appreciate you coming all this way. And congratulations, by the way.

Ms. BOWEN. Thank you.

Mr. MCCARTHY. To Secretary Nelson, you talked about one-size-fits-all does not work. If you could elaborate on that on some of the experiences you have had.

Mr. NELSON. I have had a lot of years of experience working with the various laws—of election laws that we have to administer. In my written testimony I give a poignant example of a one-size-fits-all requirement that was in the Help America Vote Act. And it dealt with the requirement for putting minority languages on the voting machines in those areas that are covered by the minority language provisions of the Voting Rights Act.

And in South Dakota that applies to Native Americans with the Lakota language. And we went to the leaders within that community and we said this is the new Federal requirement. And they said, that does not make any sense. Our people are not going to use that. And yet we said we have to do it. And so we did. And we spent \$28,000 on that requirement, and 10 people statewide used it. It is \$2,800 per voter that we spent on that particular requirement.

In areas of our country where there is a heavy population of minority speakers, that might make sense. In other areas it does not, and yet that is one of the unintended consequences when we get Federal legislation that does not take that into account.

Mr. MCCARTHY. Thank you both for your time.

Ms. LOFGREN. Thank you.

The CHAIRWOMAN. It is very interesting to sit and hear the two of you who are the top guns, as election officials in your respective States, and yet as we sit here and talk to manufacturers and look at machines, it is disturbing to hear Secretary Bowen say that we do not have a lot of voting equipment that will work for the disabled. That seems to be a travesty in this country.

Are we talking to manufacturers? Are they beginning to look into this? Where are we in this continuum?

Ms. BOWEN. We do have some systems that I think meet the needs of disabled voters quite well. There is one system that is a ballot-marking device that has sip-and-puff capability, has capability for voters who are visually challenged, and that ballot-marking device produces a ballot that can be optically scanned. That is important because it means that counties that use an optical scan system and that ballot-marking device for disabled voters only need

one tabulating system, one auditing and review system, one place where everything is done.

It is an enormous advantage to using optical scan ballots. It is a well-developed technology. You can, if you have a long line in a particular polling place, simply hand people the paper ballot and a marking device and they can shorten the line very quickly, if they choose to do so, by marking their ballot independently.

But, again, I don't like being in a position where there are only one or two or three vendors. And that is a place where, if we don't have what we need, then I think it is our responsibility as election officials to get together. And States can do this together, and particularly with open source software. I think we will find that there will be foundations and groups who will work with us. I would expect if we come back with this issue in 2 years, that the landscape about what is available will be quite different than what it is currently.

The CHAIRWOMAN. I had about six or seven manufacturers here last week with their machines, and one had a telephone-type machine that can be used by the disabled. How do you feel about that? Do you think that particular machine is good for our disabled voters?

Ms. BOWEN. For many disabled voters that system is terrific. The difficulty is that it requires a securitized telephone call. It depends on a call that is originating from a place that is known. Otherwise, an election official has no way of knowing that the voter who is using the code they have been given is actually that voter, or whether the code has been given to someone else, usurped by someone else, sold to someone else.

In States that use that system, a disabled voter has to come to a polling place or to the registrar's office to be able to use it. We don't have a mechanism to vote over the Internet, not because the technology isn't there, but because we have no way to know who is casting that vote.

So we will look at that system if counties in California want to use it. Vermont did use it. I believe it was quite expensive on a per-vote basis and it does not solve the single greatest challenge to exercising the franchise for disabled voters, which is transportation to the polling place.

The CHAIRWOMAN. The vendor did state that this type of phone system could be used in a polling place and that would make it a little easier for you to track it.

Ms. BOWEN. In a polling place if you set up a secure connection, you can use that. But remember that polling places are often situated in locations that are challenged in terms of security. I have voted in a carpet store, I have voted in a garage, a living room, the fellowship room of a religious institution. Many of those places could not continue to be used with the advent of electronic voting, simply because they do not have the capacity to provide enough electricity to run all of the equipment that would be needed.

The CHAIRWOMAN. Madam Secretary, you spoke of wanting to ensure that each vote is secure, accurate, and reliable. How can we assure that, with everything we have just outlined, plus the myriad of other things that we know are taking place?

Ms. BOWEN. We have good lessons from the private sector on how to do this in two areas that I would suggest the committee review. One is in the casino industry where the standards for the auditing and the review of electronic slot machines are very stringent. They do things such as if there is a problem with an electronic slot, it is pulled off the floor immediately. We don't do that with voting machines. We reboot and keep the machine in service in many instances. And that is a matter of money. The machines are expensive. If you have to provide enough machines in each polling place to allow for difficulties in pulling a machine, you are going to spend more money. But the casino industry and their standards are a useful measuring point.

Another place that I think it is useful to look is the computer game manufacturers. They have a great interest in keeping counterfeit software from being used, and they have some very clever ways of determining whether the software that is running on a particular game card is actually what was licensed by the manufacturer. Some of it is trade secret and proprietary. But I have been very impressed with some of the tools that could help us in a situation where we have to verify that the software that was certified is actually what is running on every single location, which is another challenge that we haven't talked about today.

The CHAIRWOMAN. Both of those that have been cited in terms of looking into, in terms of helping us. And yet if it is proprietary, there we are back at square one.

Will we have another round of questions, Madam Chair?

Ms. LOFGREN. No, but with unanimous consent, the Chairwoman has an additional minute.

The CHAIRWOMAN. You are just a sweetheart, thank you. Just one more question. Some DRE touch-screen voting machines use a paper ballot printer. In the voting forum that I held last week, I witnessed a printer that used a reel-to-reel thermal paper roll. A version of this type of thermal ballot printer was also used in Cuyahoga County, Ohio in May of 2006.

You are probably familiar with the analysis of that election done by the Election Science Institute. One of the findings of the analysis was that almost 10 percent of the paper ballots were missing, damaged, or blank. How does that compare with your experience with the thermal printer and the ballots printed? Either one of you can answer that.

Ms. BOWEN. I am extremely concerned about reliance on a paper trail that is printed either on thermal paper or on standard paper. The number of ways that that kind of system can go wrong mechanically is fairly—the list of problems, potential problems, is fairly long. Paper jams, overwrites. It is difficult, because the ballots are on a roll, to maintain secrecy if you only have a small number of voters voting.

It is also difficult to audit. We do it in California pursuant to our law that requires that we use that paper trail, and it is a very cumbersome process as someone sits and goes through the paper and looks at the votes that were crossed out or unkept.

The other issue that arises is what happens in a crowded polling place with long lines, where a voter may feel very pressured to vote because they know that there are several hours of people standing

behind them, and the time that it takes to actually verify properly may mean that people spend as long as 20 minutes voting on a touch-screen machine.

We also had basic problems in California in our recent elections, such as the county elections officials not providing a sufficient supply of paper. We had a poll worker in Santa Clara County, the home of our high-tech industry, who sent a poll worker to Kinko's with \$40 to copy sample ballots, which, if marked by hand, are legally cast ballots in California. Otherwise the lack of paper was going to completely bring that polling place to a stop.

The CHAIRWOMAN. Mr. Nelson did you want to expound on that a little bit?

Mr. NELSON. We don't have any experience in South Dakota with that type of technology, but all of the reasons that Secretary Bowen laid out and the potential problems are one of the reasons that we chose to go with the optical scanner in response to the HAVA mandate as opposed to going that direction.

The CHAIRWOMAN. Thank you for your courtesy, Madam Chair.

Ms. LOFGREN. Mr. Ehlers.

Mr. EHLERS. Thank you, Madam Chair. I will try to be very brief because the time is wasting here.

Secretary Bowen, I am very pleased with your last comment. One of the provisions of the bill I am very upset with is that it mandates that in case of dispute, the paper trail is the vote of record. I agree totally with you. I have very little confidence in the type of printers that you have described. I have seen some that I do have confidence in, but a number that I don't. I thank you for making that point. We simply should not, sitting here in the Congress, decide what is the matter of record. That should be up to the local election officials and State election officials. So I appreciate your comment.

Also, Mr. Nelson, I thank you for your comments because it reinforces my observation that maybe it is because I have been at the local level. I have been at the State level. I have a lot of confidence in our people there who know how to run elections better than many Members of Congress do, and your statements certainly reinforce that.

I yield back so that we can move on.

Ms. LOFGREN. Thank you very much. Congresswoman Davis.

Mrs. DAVIS. Thank you, Madam Chair. And I just want to say, on a matter of personnel privilege, that I think the State of California is very fortunate actually to have such a diligent and attention-to-detail Secretary of State. And I appreciate that.

And I wanted to just ask you very quickly if you could comment on the importance of a backup system at the polls. I mentioned the idea of people actually being able to choose one of two systems. One that would be available certainly to anyone who needed special assistance, but also to anybody who may be in line and need to vote in that way.

Can you comment on that? And I guess for the future, what other issues ought we be looking at?

Ms. BOWEN. The California law already requires that a voter—gives the voter a right to ask for a paper ballot. The implementation of that has been difficult in some counties. But in a county

that uses an optical scan system, again, that is a fairly simple matter because precisely the same ballot is created by the voter, just in a different manner.

In a county that uses a touch screen or other electronic voting system, it means that the elections officers will need to find a different way to count hand-marked ballots. Either they need to have more than one voting system, they need to count optical scanned ballots if that is what the paper is, or they will be literally counting those ballots by hand as they do with write-in ballots and that, obviously, adds a significant amount of delay to the process.

I think it is useful—backup, let me say, is a really critical issue that we have not addressed significantly as a country. We know from experience around the country that there will be problems at individual polling places and that you might have hurricanes, storms, various things, and you need to have a mechanism to allow people to vote. So the backup system is critical, and we have a lot to learn from what we did in Y2K and what is done in the private sector.

When we look at our voting systems more generally and what issues we should be considering, we actually have very little academic research when it comes to usability by voters and what the experience of a voter—particularly one who is not accustomed to using ATM machines and does not have a credit card—what their experience is voting.

Someone commented earlier that voting systems are only a small portion of the challenge that we face as election officials. Poll worker training and voter education are also very important and easier to accomplish using an optical scan system than using a touch-screen system. The whole audit procedure and the closing procedure is far simpler using the older technology that we have.

So as we deal with what systems we should use, we need to ask for results. We need to ask for better measures of what we have done, and then we need to look at the overall costs; not just the cost of equipment, storage and all of the things we think of, but the costs of training, the cost of poll workers and the cost of educating voters. Every time we change voting systems, we have any number of voters who have a great deal of difficulty with the new system, and the same is true of poll workers who, as I am sure you know, are not getting younger as we go along.

Mrs. DAVIS. Secretary Nelson, quickly.

Mr. NELSON. One comment that I would make, when the Help America Vote Act was passed, one of the very first statements that I made in my State was that I did not want any of our polling places to be hostage to an electronic voting machine. So that if that machine went down, that things stopped and people could not vote. That is why we went with the optical scan device, with the voter assist device to mark that ballot. So I understand that concern.

Ms. LOFGREN. Thank you very much. Thank you to both Secretaries of State. We know that your days are busy ones and we very much appreciate that you were willing to take this time and spend it with us and share your expertise. Thank you so very much.

Our next panel, if they could come forward, would be Tanya Clay House, George Gilbert, Dr. Felten and Dr. Norris.

I would like to introduce Tanya Clay House who began her tenure with People for the American Way in April of 2002 as the senior legislative counsel. She now serves as director of public policy. Miss House also serves as the policy liaison for the the African American Ministers Leadership Council, a program of PFAW Foundation. She began her legislative career as counsel for our colleague, Congresswoman Sheila Jackson Lee. And in 2003 she was awarded the Congressional Black Caucus Chair's Award for her dedication and leadership and commitment in advancing the cause of civil and human rights.

George M. Gilbert, since 1988, has been director of elections to the Guilford County Board of Elections, a jurisdiction of more than 300,000 registered voters. During his 19 years in this position he has administered 56 elections, using four different DRE voting systems.

We have also Dr. Edward Felten, a professor of computer science at Princeton University. His research interests include computer security and privacy technology law and policy. He is the author of Security Analysis of the Diebold AccuVote-TS Voting Machine Study, and his research on electronic voting has been covered extensively in the press. And we were fortunate to have him testify before this very committee in the last Congress.

We also have Dr. Donald F. Norris, a professor of public policy at the University of Maryland, a specialist in public management, urban affairs, and application management and impacts of information technology in public organizations. He has consulted with local governments and State agencies for more than 25 years in the area of information technology and management.

**STATEMENTS OF TANYA CLAY HOUSE, DIRECTOR OF PUBLIC POLICY, PEOPLE FOR THE AMERICAN WAY; GEORGE GILBERT, DIRECTOR OF ELECTIONS, GUILFORD COUNTY, NORTH CAROLINA; EDWARD FELTEN, PH.D., PROFESSOR OF COMPUTER SCIENCE AND PUBLIC AFFAIRS, PRINCETON UNIVERSITY; AND DON NORRIS, PH.D., PROFESSOR OF PUBLIC POLICY, UNIVERSITY OF MARYLAND, BALTIMORE COUNTY**

Ms. LOFGREN. We welcome all of you. And because we have a vote coming soon, I will actually ask people to stay within 5 minutes, and your written testimony will be made part of the official record. And if we could begin with Tanya Clay House.

**STATEMENT OF TANYA CLAY HOUSE**

Ms. HOUSE. Good morning and thank you, Madam Chair, and Ranking Member McCarthy and the committee members. On behalf of the civil rights community, I thank you for the opportunity to speak with you today regarding this important issue of election integrity and accessibility.

I am the director of Public Policy at People For the American Way and the director of federal legislation for Democracy Campaign on Voter Rights and Election Reform. People For is a national nonprofit social justice organization with more than 1 million members and supporters and more than a quarter century of commitment to nonpartisan citizen participation efforts.

Since our founding, People For has urged Americans to engage in civic participation and sought to empower those traditionally underrepresented at the polls, including young voters and people of color. At People For, election reform is our number one priority. And since the debacle of the 2000 election, People For Foundation and its key allies, including the NAACP and the Lawyers Committee for Civil Rights Under Law have led the well-known Election Protection Coalition to ensure that every citizen has the right to vote and to have that vote counted. This work, supplemented by litigation and People For's legislative efforts, has provided our two organizations with a depth of expertise on how we must continue to reform our election process and to protect this most fundamental right to vote.

The use of nonsecure and unauditable voting technology is particularly troubling because it can and has resulted in the disenfranchisement of thousands of voters across the country. This problem was highlighted as a result of the implementation of the 2006 Help America Vote Act deadlines which precipitated the widespread replacement of older voting technology. Thus, more voters and poll workers throughout the country used new voting systems in 2006 than in any previous election.

With so many counties using the new voting systems for the first time, the number of voting machine problems increased dramatically over 2004. In fact, complaints about voting machines outnumbered all other complaints to the Election Protection Hotline with voters in more than 35 states reporting various problems related to voting machines.

People For supports H.R. 811 as a strong effort to change the status quo so that voters will have the confidence that their votes will be counted as cast. And we are grateful for your leadership, Madam Chair, on the issue of election reform, and in particular voting technology. We further thank the leadership of Congressman Rush Holt and Tom Petri and a multitude of others on both sides of the aisle for H.R. 811.

This bill is notable for its efforts to accommodate not only the need for additional security in our elections, but also to demand appropriate accessibility for all voters. As a civil rights organization, and a close coalition partner of national organizations representing tens of thousands of voters with disabilities and minority language voters, including the National Disability Rights Network, MALDEF, the National Counsel of La Raza, and the Asian American Justice Center, People For is committed to ensuring that any new voting standards maintain the current accessibility protections afforded under HAVA, and all voting machines provide the necessary language translations in all steps of the voting process as required under section 203 of the Voting Rights Act.

For this reason, People For supports the provisions of H.R. 811 which allows States this flexibility to decide which types of election systems best meet the needs of its voting population, so long as that system is verifiable, auditable and secure. These provisions acknowledge that the best system in Utah may not be the best system in Los Angeles, and vice versa.

H.R. 811's commitment to both security and accessibility is to be commended and has earned endorsements from a diverse set of

civil rights and election integrity groups, including Common Cause, the Lawyers Committee, the Brennan Center, SEIU, and the NEA. While accessible systems that are not fully secure and auditable are unacceptable, secure election systems that are not accessible to all eligible voters likewise cannot be tolerated. American voters deserve and expect both security and accessibility. And while no language is perfect, H.R. 811 is to be commended for attempting to reach such a balance. My written testimony will expand further on our support for H.R. 811.

Madam Chair, thank you again for your commitment to addressing this most pressing need of voting technology. As has been the case in the past three Federal elections, we expect that many of the races in 2008 will be very close and Americans deserve to know if their vote will be counted as cast and, if necessary, counted by fair and independent observers.

As a member of the civil rights coalition that helped to draft the components of HAVA, I am vividly aware of the unfortunate problems that were caused by delayed financial support and oversight by Congress. Therefore, People For is committed to working with members to ensure that the proper funding is provided and that a reasonable implementation schedule is developed, so that election officials will have all necessary resources. And this must be done as soon as possible.

Ms. LOFGREN. Thank you very much.  
[The statement of Ms. House follows.]



**Testimony of Tanya Clay House**

Director of Public Policy  
 People For the American Way and  
 People For the American Way Foundation  
 Committee on House Administration  
 Elections Subcommittee

March 23, 2007

Good morning, Madame Chair, Ranking Member McCarthy and Committee Members, thank you for the opportunity to speak with you today regarding the important subject of election integrity and accessibility. I am the Director of Public Policy for People For the American Way and Director of Federal Legislation for our Democracy Campaign on voting rights and election reform. People For is a national, nonprofit social justice organization with more than one million members and supporters, and more than a quarter century of commitment to nonpartisan civic participation efforts. Since our founding by Norman Lear, Barbara Jordan, and other civic, religious, business and civil rights leaders, People For has urged Americans to engage in civic participation, and we have sought to empower those who have been traditionally underrepresented at the polls, including young voters and people of color. Today, I am speaking on behalf of both People For the American Way and our Foundation and our more than 1,000,000 members and activists.

Since the debacle of the 2000 election, People For the American Way Foundation and its key allies, including the NAACP and the Lawyers' Committee for Civil Rights Under Law, have led the well known Election Protection Coalition to ensure that every citizen has a right to vote and to have that vote counted. This work, supplemented by litigation and People For the American Way's legislative efforts has provided our two organizations with a depth of expertise on how we must continue to reform our election process in order to protect this most fundamental right to vote.

The use of non-secure and unauditable voting technology is particularly troubling. As a result of the 2006 Help America Vote Act (HAVA) deadlines, the widespread replacement of older voter technology meant more voters and poll workers throughout the nation used new voting systems in 2006 than in any previous election. With so many counties using new voting systems for the first time, the number of voting machine

problems increased dramatically over 2004. In fact, complaints about voting machines outnumbered all other complaints reported to Election Protection, and voters in more than 35 states reported various problems related to voting machines.

People For supports H.R. 811 as a strong effort to change the status quo so that voters will have confidence that their votes will be counted as cast. Hence, we are extremely grateful for your leadership, Madame Chair, on the issue of election reform, and in particular voting technology. Unauditable, paperless electronic voting machines have likely left a trail of disenfranchised voters throughout the country. Thanks to the leadership of Congressman Rush Holt, and a multitude of others, including over 200 co-sponsors on both sides of the aisle, H.R. 811 addresses many of the problems facing our voting technology, and is a giant step forward towards ensuring future elections are more secure than past elections.

First, this bill is notable for its efforts to accommodate not only the need for additional security in our elections, but also to demand appropriate accessibility for voters with disabilities and other special needs. As a civil rights organization and a close coalition partner of national organizations representing voters with disabilities and minority language voters such as the National Disability Rights Network, MALDEF, the National Council of La Raza and the Asian American Justice Center, People For is committed to ensuring that any new voting standards maintain the current accessibility protections afforded under HAVA and that all voting machines provide the necessary language translations in all steps up the voting process as required under Section 203 of the Voting Rights Act. For this reason, People For supports the provisions of H.R. 811 that allow states the flexibility to decide which types of election systems best meet the needs of its voting population so long as that system is also verifiable, auditable, and secure. It acknowledges that the best system for Utah, for instance, might not be the best system for Los Angeles, and vice versa.

H.R. 811's commitment to BOTH security and accessibility is to be commended, and has earned it endorsements from a diverse set of civil rights and election integrity groups from Common Cause to the Lawyers' Committee for Civil Rights Under Law and the Brennan Center to the SEIU and NEA. Furthermore, well respected experts in this field have similarly voiced their support, such as Avi Rubin and Ed Felten. While accessible systems that are not fully secure and auditable are unacceptable, secure election systems that are not fully accessible to ALL eligible voters likewise cannot be tolerated. American voters deserve, and expect, BOTH security and accessibility, and H.R. 811 is to be commended for refusing to compromise on either.

Importantly, this bill requires that all voting systems produce paper ballots. Currently, while some jurisdictions require some sort of paper ballot – either a paper ballot read by an optical scan tabulator, or a Voter Verifiable Paper Audit Trail (or VVPAT) – other jurisdictions use completely paperless, unauditable electronic voting machines (or DREs). H.R.811 fixes this problem, creating federal standards requiring all voting technology to produce a paper ballot that would be the official ballot for purposes of any recounts or audits. The paper ballots produced by any technology must be

durable, of archival quality, such that ballots could be preserved and readable for at least 22 months, consistent with federal law, and due to other provisions, including the provision prohibiting the preservation of the paper in any way that makes it possible to associate a particular vote with a particular voter, we believe that this bill would ban the use of the confusing, difficult to recount, and likely to jam, reel-to-reel printing technologies used with many DREs.

Additionally, any technology used, whether optical scan paper ballots, or DREs with VVPATs, would be treated the same way – the first tabulations compiled electronically by the optical scan tabulators or the DREs would then be subject to audits which could lead to recounts of the paper ballots, which would trump any electronic tally, unless there was clear and convincing evidence that the paper ballots were compromised. While there are currently no mandatory federal standards for audits of election technology and ballots, H.R.811 sets up a comprehensive framework of mandatory manual audits, about which you've previously heard testimony. The audit framework contemplated in H.R.811 establishes an effective "floor" for required audits, and would not preclude states from adopting even more stringent audit standards.

Finally, while voting machine vendors have up until now fought tooth and nail to prevent examination of the source code and firmware in their machines, even when it appears that said technology failed to count votes properly, H.R.811 requires that all such source codes, etc., be available for inspection and examination. As you heard in earlier testimony, computer science and voting technology experts believe that such a requirement will improve the security of our elections.

Madame Chair, thank you again for your commitment to addressing this most pressing issue of voting technology. With the country facing an enormous voter turnout for the elections in 2008 which will decide control of Congress and the presidency, as well as thousands of down-ballot races, the need for election reform in this country is urgent. As has been the case in the past three federal elections, we expect that many of these races will be close. Americans deserve to know that they will cast a vote that will be counted – and, if necessary, recounted, by fair and independent observers.

As a member of the civil rights coalition that helped to draft components of HAVA, I am vividly aware of the unfortunate problems caused by delayed financial support and oversight from Congress. Therefore, People For is committed to working with Members to ensure that the proper funding is provided and a reasonable implementation schedule is developed so that election officials will have all of the necessary resources to ensure voters have secure and accessible voting systems. Time is of the essence. For election officials to have enough time to properly implement the important requirements of this bill in time for the 2008 elections, this bill needs to be passed as soon as possible and we look forward to working with this Committee and House Leadership to advance this goal.

Thank you.

Ms. LOFGREN. Mr. Gilbert.

**STATEMENT OF GEORGE GILBERT**

Mr. GILBERT. I would like to thank both the Chairwomen, the Ranking Member, and Mr. Ehlers for allowing at least one election official to speak to you today. I think I am the one that got selected because Conny McCormack couldn't come this time. You are used to seeing her. A new face.

Elections officials feel like we are the target in all of this. I hope I can be considered a trusted source in regard to not only the 19 years of election experience I have had, but also the fact that I spent 6 years here on Capitol Hill working for Senator Culver and Senator Dodd.

When I went to the Board of Elections in North Carolina in Guilford County, North Carolina, I was hired by a Republican Majority board, and throughout the 19 years I have served under both Democratic and Republican Majority boards. I left Washington with a very deep level of confidence and respect for our political system, and the last 19 years of my life have been dedicated to preserving that.

That same attitude is held by the vast majority of elections officials in this country. It is our job to maintain the integrity and the accuracy and the openness of our elections system, and we are committed to that.

I don't know of any local election official who does not fully support these goals of accuracy, integrity, and security in elections. Contrary to the bill's implications, our election process today contains substantial portions of these ingredients already. I would argue that it contains more than it ever has in the history of our democracy.

Having said that, I will jump straight to my conclusions. I think the most effective thing that this Congress could do to improve all of these approaches to all of these goals is to promote rapid technological development to strengthen the areas of weakness in our current system. H.R. 811 not only fails to accomplish that, but it effectively forecloses that option. By mandating the manual counting of paper ballots as the ultimate official record, the bill effectively locks everyone into technology that became obsolete in the 19th century. Nothing has changed in the last hundred years that makes managing or counting paper any more secure or any more accurate than it was in the 1890s.

The chief historical weakness of DRE voting systems has been the lack of a secure independent ballot record for each voter's vote. The chief weakness of the paper voting systems, be they punch cards, optical scan or just a plain piece of paper, is the fact that there are frequent ambiguous votes cast on those ballots.

In North Carolina in 2006, we tried the paper solution of an independent backup for electronic ballot records. Attachment 1 of my prepared testimony documents the rate—I would say not surprising—high rate of printer failure. We feel that we can reduce that rate, but no printer that I have ever heard of or anyone has ever conceived of is going to eliminate the failure of those printers to produce some of the ballot records. The experience in North Carolina in Attachment 2, I show that we lost roughly 2 percent

of our audit records as a result of that. To make the paper record the official ballot would simply throw out those ballots which we know voters legitimately cast.

This experience was not isolated in North Carolina. Roughly half or more of the States have already adopted some form of a paper trail, and in every case the chief impact was to introduce another point of failure into the voting system.

My attachments 3 and 4 document the ballot-marking errors. When we talk about the ambiguous votes that are cast on optical scan systems, one of the mantras in our industry is there is no such thing as a perfect voting system. And it is true. It always will be true. So I want you—if you guys will look at that and see that we don't have a panacea that we can fall back on here.

If you calculate the time it would take to count those ballots manually, which I have demonstrated also in my attachments, you basically see that what happened in Florida in 2000 is that they were asked to do the impossible; and that is, to count millions of votes by hand in too short a period of time.

Ms. LOFGREN. We will make all those documents part of the record, thank you. Dr. Felten.

Mr. FELTEN. Thank you Chairwoman Lofgren, Chairwoman Millender-McDonald, Ranking Member McCarthy, and Congressman Ehlers for the opportunity to testify today and give you my perspective on electronic voting and H.R. 811.

Computers clearly have a role to play in our elections, but figuring out their appropriate and best use is a difficult question. We don't need to choose between an all electronic system and a paper system. Instead, we should use computers and paper together so that each one can do what it does best and each can compensate for the drawbacks of the other. Such a system combines paper and electronic elements and can be easier to use, more reliable, and more secure than either an all electronic or all paper system.

The starting point for understanding what kind of system we should use is to ask which things computers do well and which things are better done on paper. Computers do several things well. They report election results quickly. They can be accessible to disabled people. And they can help voters find and fix errors before the ballot is cast. Though these promises are not always met in practice, they are reason enough to give computers a role in our elections.

But the one thing that today's computers cannot do is provide a simple and transparent way to record and store votes. What happens inside an electronic voting machine is very complicated and cannot be inspected directly by the voter or in most cases, indeed, by independent experts.

Because electronic records lack transparency, systems that rely on them are subject to security attacks that can modify votes undetectably, as with the the voting machine virus my colleagues and I demonstrated in Diebold touch-screen voting machines. Even in the absence of a security attack, problems in all electronic systems are very hard to diagnose.

Our elections system must therefore be software independent, meaning that its accuracy does not rely on the correct functioning of any software system. Thus far, computer scientists haven't found

any way to ensure the correctness of computer software programs, whether in a voting machine or in a personal computer. And instead of pretending that we are able to ensure the correctness of software, we need instead to have a system that records and counts the votes accurately even if the software malfunctions and the only practical way to do that today is to use paper ballots.

By comparison to electronic records, paper ballots are much more transparent. A properly designed paper record conveys the voter's intent clearly and the voter can confirm this by inspecting the paper record. Blind voters can do this with the help of assistive technology. And unlike a volatile electronic record, a durable paper record will not change unexpectedly and mysteriously.

So looking at the strengths and weaknesses of electronic and paper-based systems, we can draw two conclusions. First, the primary record of a vote should be paper, because paper recording is more transparent and voter verifiable.

Second, computers can sensibly be used for other parts of the voting process, such as entering the votes, providing a quick count subject to auditing, and helping reduce voter error. This is the blueprint that H.R. 811 follows. It requires the use of a durable voter-verified, private paper ballot. But beyond this, it gives States and localities a choice of whether and how to use computers in their elections.

Different jurisdictions will use computers differently. Some will use a DRE touch screen with a ballot under glass paper trail. Some may use optical scan. Some may use ballot-marking devices. There are different kinds of paper trail systems, even within each of these categories. As long as there is a suitable ballot and appropriate technical standards are met, each jurisdiction can use its own approach.

Computers can count and tabulate ballots quickly, so many jurisdictions will want to get quick electronic counts when the polls close. But because the paper ballots are the primary records, we need to make sure that the paper records and the electronic records match. The solution to this is a random audit in which we count a large enough random subset of the paper ballots and compare the results to the corresponding electronic count. This, again, is the approach taken by H.R. 811.

There will be times, unfortunately, when the paper record is lost or corrupted. This will be very rare in a well-designed system, but we need to have a fallback in case that happens. That is why it is appropriate to say if there is a suitable showing with respect to problems or failures with the paper record, we can switch to the electronic and use it as the most accurate component.

Improving our elections is going to cost some money, but I think this is a bargain if it brings our elections up to the level of security, reliability, accessibility, and privacy that all citizens deserve. Computers cannot only stop being a liability in election security, but they can become an asset if we use them correctly. And passing H.R. 811 would be an important step in realizing that promise. Thank you.

Ms. LOFGREN. Thank you very much.

[The statement of Mr. Gilbert follows:]

Testimony of George Gilbert  
Director of Elections  
Guilford County, NC

Before the Subcommittee on Elections  
Of the  
Committee on House Administration  
United States House of Representatives  
March 23, 2007

I am Director of Elections for Guilford County, NC (Greensboro, High Point) with roughly 310,000 registered voters. I have been in this position since February, 1988. Throughout my tenure, Guilford County has used direct electronic voting systems. We currently use the ES&S iVotronic with a state mandated paper trail. 2006 was the first year the paper trail has been required. In my former life, I was a Legislative Assistant to Senator John Culver (IA.) from 1976-1980 and Senator Chris Dodd (CT) from 1981-1982. In recent years I have served on the Election Center's Task Force on Election Law and have participated regularly in National Academy of Science and American Association for the Advancement of Science workshops on electronic voting and Federal Election Assistance Commission working groups on election management guidelines.

As an election official with 19 years of electronic voting experience, I am a strong advocate of "independent" backup and audit mechanisms for DRE voting equipment. I am extremely concerned that the "rediscovery" of paper ballots is going to remind us of all the reasons New York and other large jurisdictions began, in the 1890's, employing mechanical vote recording and tabulation systems. I am absolutely convinced that a paper based backup and audit requirement will, probably sooner rather than later, produce a recurrence of the 2000 fiasco in Florida where, as you will recall, several major jurisdictions were unable to complete a timely manual recount of their (paper) ballots. I am equally convinced that far more reliable alternative technologies, be they electronic, audio or video, can be made brought to commercial viability promptly if the Congress does not statutorily exclude these options. It is my hope that the Congress will not only keep the door open to much needed progress in voting system development but would actively promote such development.

When I sat in those seats behind you during the late 1970's and early 1980's, I often heard your predecessors recite the mantra, "We don't think it is wise to legislate the technology used to achieve these goals." Being young and sure that I knew the best way to do things, I did not fully understand their concerns at the time. Today I no longer know the "best" way to do anything. I do know that, in elections you had better give yourself plenty of time to prepare, train for and test any new system or procedure.....especially going into a presidential election.

Simply put, presidential elections push the election administration process to near its limits. In Guilford County, North Carolina, I have a staff of 12 full time and 2 additional ¾ time employees. Next year we will, once again, recruit, train, supply and support more than 2,000 precinct officials working at 180 locations.

My core staff will average 60 hour weeks for the 4-6 weeks leading up to the November, 2008, election. Some will significantly exceed that. Those 2,000+ precinct officials, whose average age is near 70, will work an average of about 16 hours on Tuesday, November 4<sup>th</sup>. Together we will issue ballots and record the votes of well in excess of 200,000 county citizens.

As you might imagine, we will have more than a few opportunities to make errors. My admonition to my staff and precinct officials for the past 19 years has been, "Try not to make an irrevocable error." It is with this admonition in mind that every election administrator chooses and develops the technology and procedures for conducting your elections.

Among the chief historical weaknesses in many direct electronic voting systems has been the lack of a secure, independent ballot record for each voter's vote.

Among the chief weaknesses of paper voting systems, whether punch card or optical scan, is the frequency of casting ambiguous votes.

North Carolina's experience in 2006 graphically illustrates both these points.

Attachment 1, VPAT Printer problems in North Carolina, shows the rate of VPAT ("verifiable paper audit trail") printer failures we experienced across the state during the 2006 general election. Of the more than 5,000 DRE voting machines used in the state for that election, more than 550 experienced problems. The impact of this fact alone on the verification of the tabulation from the paper record is clear.....it cannot be done to the level of accuracy needed in elections.

I believe it is important to note that, the primary impact of the VPAT system mandated by the NC General Assembly for 2006, was the introduction of another point-of-failure into the voting process.

One final note on printer performance. This was not Guilford County's first experience with backup printers on DRE voting machines. The voting system we used from 1990 through 1999 also had a backup printer. It was not visible to the voters and it was not a thermal printer. Its failure rate was closer to 20%. Fortunately, most printer failures did not stop the voting machine and went unnoticed until tapes were retrieved after an election.

The impact of such printer failures is demonstrated in Attachment 2 – "Guilford County, NC, November 7, 2004, General Election, Manual Audit Results." Of the 9

machines included in our state mandated audit<sup>1</sup> four experienced printer problems. Fifteen votes were not recorded on the paper tapes. This constituted 2% of the total votes cast in the two precincts that were audited. In one case, the printer jams resulted in our not being able to detect that two voter's ballots had been canceled after being printed but prior to being cast. As a consequence, our manual count indicated two more votes than were electronically recorded on the machine. We learned of the two vote cancellations when we contacted the precinct officials.

This experience demonstrates both the danger of declaring, as the "Official Count," the manual count of the paper record and the requirement of outside auditors. VPAT printer records will be destroyed due to printer failures. North Carolina law recognizes this by stating that the paper record "shall control, except where paper ballots or records have been lost or destroyed or where there is another reasonable basis to conclude that the hand-to-eye count is not the true count."

Outside auditors, unfamiliar with the election's process, will not always know what questions to ask or to whom those questions should be addressed. I would also note that every election administration unit I know of has bipartisan oversight built into its management structure. Enron had professional auditors. I think we do better.

The problems created by reliance on manual tabulations of paper are not confined to DRE VPAT systems. Optical scan voting systems have their own set of issues. As noted above, ambiguous or mismarked ballots are chief among the weaknesses of optical scan systems. Attachment 3, "Error Rate Comparison of Manual Audit by Voting System", and Attachment 4, "Ballot Errors Reflected in Manual Audit," provide an unambiguous example of this. While manual counting of both VPAT records and optical scan ballots experience unresolved tabulation errors, by far the largest source of discrepancy between the automated tabulations and the manual resulted from detection or interpretation of voter intent during the manual audit of the optical scan ballots. Fully 90% of the scanned vs. manual count discrepancy was attributed to ballot marking errors by voters. While this may indicate a need for manual review of optical scan ballots prior to a recount, it demonstrates that a manual "audit" of such ballots will seldom yield the same result as the automated scan. In reality, the manual process exists as an alternative to the scanning process, not as a means of auditing the integrity of the tabulation software.

I am sure you are all aware of the stories of the lost electronic votes in Carteret County, North Carolina, in the 2004 election. You also need to be aware of the ballot box , in the same election and state, of 200+ optical scan ballots that, when

---

<sup>1</sup> State Statute mandates a "statistically significant" number of precincts to be included in the audit. The audit design was developed by Dr. William Kalsbeek of the University of North Carolina, Chapel Hill. His audit evaluation report of the spring, 2006, primary is included as Attachment 7.

accidentally left in the polling place (a fire station) overnight, was irretrievable sent to the county dump the next day.

Perhaps the greatest weakness of reliance on manual paper tabulation is its consumption of the resource of which we are generally in shortest supply – Time! Attachment 5, "NC—2006 Sample Audit Time" reflects a tremendous disparity between the fastest and slowest audit rates in terms of seconds per ballot. The extremes are likely accounted for by reporting or interpretation errors, nevertheless, at even the average rates manual tabulation is a slow process.

Guilford County was near the average manual tabulation rate for DRE with VPAT systems. Had we been required to perform a manual recount of all 101,271 ballots cast in the November, 2006, general election, it would, at that rate, have taken us 723 hours....that is 90 days! With two counties teams perhaps we could cut that to 45 days....with three, 30 days....with 10, perhaps 9 days. Of course, the 201,000 votes cast in the 2004 presidential election would double all these time/counting team projections.

I don't know how many competent simultaneous counting teams could be managed effectively, maintaining quality control. Generally such teams are made up of experienced election personnel....the same personnel I alluded to earlier who had just completed four to six consecutive 60 hour weeks and the precinct officials who have seen all the ballots they care to see for another four years.....or forever.

This human factor in manual tabulation is clearly depicted by the recent report on the Cobb County, Georgia, "Pilot Project on Voter Verifiable Paper Audit Trail." (See Attachment 6). Perhaps the best example, however, derives from a case with which we are all familiar....Florida, 2000. Keep in mind, not every Florida county failed to complete its manual recount. But apparently not every county has to come up short. As we see in Attachment 6, there is great diversity in election administration circumstances and capabilities. Setting a deadline does not always get everybody there on time.

In comparison, when I recounted the 200,000+ electronic audit records (individual electronic ballot records) from our 2004 election it took 14 seconds to retabulate the entire ballot once the audit records had been imported into the computer.

Some of the problems revealed by the 2006 North Carolina and Georgia experiences were the result of inexperience. Some were the result of new products being rushed to market due to stringent statutory timetables (both state and federal). Some can be ameliorated. Some cannot. Yet, as election administrators, we are charged with the effective conduct of every election....and election day is not negotiable.

Election officials will do everything possible to conduct effective, fair and accurate elections. However, as the law imposes shorter timetables and more failure prone technology, more jurisdictions will fail.

You may have noted that I began my testimony with an endorsement of independent backup and audit mechanisms for electronic voting and tabulation systems. I then proceeded to detail the inevitable failure of paper as a viable means of meeting this goal.

I would like to close my statement with a brief discussion of alternatives. If you give us no alternatives, we will eventually suffer the consequences inherent in reliance on paper records and manual tabulation. This is where HR 811, as the election community sees it, would leave us. Even if you amend some of the provisions others have pointed out as most objectionable, and retain a 2008 effective date, there will be failures which could well be widespread.

My experience is primarily in DRE voting and I will not presume to propose solutions for perceived optical scan system problems. Keeping in mind that the same software generally tabulates the votes for both types of systems, similar, voter verifiable electronic backup and monitoring systems could likely be developed for both.

The December 1, 2006, NIST report to the Technical Guidelines Development Committee (TGDC) established by HAVA stated:

“The approach to software-independence used in op scan is based on voter-verified paper records, but some all-electronic paperless approaches have been proposed. It is a research topic currently as to whether software independence may be able to be accomplished via systems that would produce an all-electronic voter-verified, independent audit trail (known as *software IV* systems). In cryptographic E2E voting systems, there may be no audit trail in the sense of what exists with op scan or DRE-VVPAT, but the correctness of the election results can still be proven via the cryptographic protocol that the system is based upon. E2E systems are an active research topic and one E2E approach has been marketed<sup>2</sup>”

Further:

“The STS believes that current paper-based approaches can be improved to be significantly more usable to voters and election officials, and that other kinds of all electronic IV (software IV) and E2E cryptographic systems may possibly achieve the goal of secure paperless elections.”

Among the TDGC recommendations arising out of this were:

- Requiring software-independence in future voting systems – this means that future voting systems must use verifiable voting records for independent audits, and
- Creating a process to include new and innovative voting systems with greater usability, accessibility, and security.

---

<sup>2</sup> See <http://www.votehere.com>.

HR 811, as currently written, appears to preclude the use of voter verifiable electronic audit mechanisms. As NIST and the TGDC note, voter verifiable elections audit systems need significant improvement. This will only happen through research and development.

North Carolina is currently working toward a test, in the fall of 2007, of the most advanced voter verifiable independent electronic audit system currently available using open source software. Such tests should be encouraged to insure continued progress in the development of improved verifiable voting technology.

Some of the advantages of electronic audit systems include

- o Equally accessible to all voters regardless of disability
- o Can provide accurate and efficient recounts, in addition to audits, in the event a voting system tabulation error is discovered
- o Can be integrated into the voting process so that voters do not have to perform double ballot verifications
- o Can offer open source code without impinging on the security or proprietary nature of the voting system software
- o Minimizes impact of human error in audit or recount processes
- o Enables audits and recounts to be completed in a timely manner

Realistically, the requirements of HR 811 cannot be implemented in 2008 without further destabilizing the conduct of our elections.

Manual tabulation of paper is a technology that became obsolete in the larger jurisdictions in the 19<sup>th</sup> Century. Nothing has changed during the past 100+ years to revive it to a more reliable status than it had then.

Machines and systems upon which our lives depend are ubiquitously backed up and monitored electronically. Their reliability is not based on computer scientists' assurances that these systems are perfect....that they are defect free. These systems are extensively tested for reliability and carefully monitored by other systems to detect any threat to their proper performance.

Such electronic backup and monitoring systems can be ready for widespread implementation by 2010 if the Congress supports rather than forecloses their development. That is the same timetable that is realistic for the currently proposed paper mandate. I strongly urge you to, not only keep this door open but to open it wide with your active support. Without your support for continued innovation in elections technology, we will suffer major setbacks in our efforts to open the election process to all persons on an equal footing and we will have failed a century of progress.

Ms. LOFGREN. And, finally, Dr. Norris.

#### STATEMENT OF DON NORRIS

Mr. NORRIS. Madam Chairperson, members of the committee, good morning. A very special good morning to Congressman Ehlers whom I haven't seen in about 30 years. How are you?

I am very pleased to give testimony this morning on H.R. 811. If I still lived in Grand Rapids, he would be my Congressman.

In the available time I will address what I believe are serious limitations of the bill. My written testimony goes into greater detail. First let me say I think the intent of the bill to require voter verification of ballots cast is a noble and worthy one. Unfortunately, I think the methods set forth in the bill to achieve this is quite flawed—the paper trail requirement.

In effect, as the bill is written it would require all the United States to return to using paper ballots in elections. It would put an end to electronic voting and it would significantly stifle or indeed kill innovation in voting technology. I have heard that from vendors.

Paper ballots are notoriously susceptible to fraud. One of the main reasons we moved to machine voting in the 1900s was because of fraud with paper. Paper ballots can and frequently have been lost, stolen, or damaged. Entire ballot boxes lost, stolen, or stuffed. And I would expect that we would have other problems of a similar nature if we go back to paper again.

As a political scientist—I am not a computer scientist but I have a long background in IT—I am far more concerned with the probability of election fraud with paper than with an electronic system, in part because it takes far less skill to steal a paper ballot, to counterfeit a paper ballot and stuff a ballot box than it does to diddle with a DRE.

Ordinary people can tamper with paper. It takes specialized knowledge and skills about computer hardware and software to do that with electronic voting.

One of the reasons that proponents give for wanting to return to paper ballots is that, quote, the people are demanding verification. In studies that I have done and studies that I have seen, the evidence does not support that claim. People—observable behavior, people go vote. They vote on the equipment that we are giving them. They do not indicate that they have a crisis of confidence in voting systems. And again there are surveys and observable voting behavior to demonstrate this.

There is evidence, however, that voters do not want to and probably will not verify their votes when given the opportunity to do so, evidence from actual elections and from usability studies. Evidently people simply want to vote and get out of the voting booth.

There are different ways to add paper to the election mix. One is the VVPAT and the another is the optical scan. Both have limitations. Indeed, as one of the speakers on this panel said, there is no perfect elections system, regardless of technology.

Adding paper, whether VVPAT or optical scan, increases time, it increases complexity, it increases the difficulty of election administration and the probability of equipment malfunction and so on and

so forth. It also requires more training for people in the field who are actually managing elections.

Mr. NORRIS. Printers regularly jam and fail, optical ballot systems can fail due to calibration problems, can and have failed due to calibration problems.

I am not against, by the way, any of these technologies. I am merely pointing out that they all have limitations.

Another reason proponents give for paper ballots is the need to audit elections and recount and do recounts. In nearly every election where recounts have been undertaken with paper ballots, the voting tally that is completed manually by human beings—that is, by us—produces inconsistent and sometimes conflicting findings. Think of Florida 2000, think of Washington State 2004.

Further, the claim that electronic systems are inherently insecure is based on a faulty assumption that goes something like this: Yes, computers can be diddled, but the assumption is, given the right tools, the right amount of time and unfettered access to an electronic voting machine, a knowledgeable person can insert malicious software and produce erroneous results or do other bad things. It is a far-fetched scenario, and it is not something that has happened in an actual election to date.

Security around electronic systems is far from perfect, but it can be improved and made very, very robust.

I guess I have got just a few seconds left, so let me just wrap up by saying that I don't believe there is a compelling technical reason to abandon electronic voting. I don't think there is a compelling policy reason to require paper. I think it would be far better for this bill to require independent voter verification, but to remove all references to any particular technology and let the State and local governments and the marketplace figure out how best to do this.

Thank you very much.

Ms. LOFGREN. Thank you. We are going to limit ourselves to 3 minutes on the questions, so we can get to the final panel; and I will start with my 3 minutes, which is to Dr. Felten.

I still talk about the testimony you gave before this committee last September, about how easy it is to hack a computer and the key from the minibar. I remember it was Benedict Arnold who beat George Washington in your display.

Can you describe what the concern is as a computer scientist on these computer systems?

Mr. FELTEN. Sure. The concern is that these things, being computers, will do what they are programmed to do; that is, they will do what the person who created the program wants them to do.

And what we were able to demonstrate is that with as little as 1 minute of access to a Diebold touch-screen voting machine and with this key which is for sale on the Internet, you can inject malicious software into a Diebold voting machine which causes it—that causes it to count the votes incorrectly. And I demonstrated this live, as you referred to, before the full committee at a hearing in the fall.

So the concern is that these machines are vulnerable to tampering. And I would add that in every election since New Jersey has adopted electronic voting, I have had private access to the vot-

ing machines used in my precinct. I could not have lawfully opened them and tampered with them, but if I had I wanted to, I could have.

Ms. LOFGREN. And how hard would it be for—I mean, is this creation of a virus so difficult that only—you know, really is not something to worry about in your judgment? Could you students do it?

Mr. FELTEN. Yes. Students did—our students did, in fact, create the virus that I demonstrated. Any skilled computer scientist, computer programmer, would be able to do that. It is no more difficult than making a virus for a PC. There are many thousands of people, especially in your district, that have all of the knowledge.

Ms. LOFGREN. I think I have heard from every one of them.

With that, I am going to yield to Mr. McCarthy for his question.

Mr. MCCARTHY. Well, I thank you very much.

To Mr. Gilbert, if I may: You are an elections officer, and I raise this question to the author of the bill because I do have some letters I want to submit for the record.

Ms. LOFGREN. Without objection.

[The information follows:]



March 19, 2007

Dear Member of Congress:

The National Conference of State Legislatures (NCSL) and the National Association of Counties (NACo) urge you to oppose H.R. 811, S. 559 or other legislation that would require dramatic changes in state and local election laws, technology and procedures.

State law controls the processes and administration of elections for federal, state and local office and the procedures and technology vary greatly across the nation. States have been extremely aggressive in addressing concerns about the security of our voting systems that arose as a result of the mandates that Congress imposed as part of the Help America Vote Act. In addition, counties are going to great lengths to ensure administrative practices that protect the security of the voting systems and ensure the transparency of audit processes. **This legislation would exacerbate, rather than assist states and counties in addressing, these challenges which could lead to disastrous unintended consequences in the 2008 presidential election.**

H.R. 811 and S. 559 are a one-size-fits all approach which would rush new voting technology to market that has not even been developed without testing or certification and without adequate time for pollworker training and voter education. Twenty-seven states have already passed paper trail laws and thirteen more are considering this approach in their current legislative sessions. In total, forty states have either passed or are considering the question of whether a paper audit trail is right for their state. States that have passed laws have done so in unique and varied ways to best meet the needs of their constituents. The pending federal legislation seeks to undermine the hard work of our nation's state legislatures and is deeply flawed.

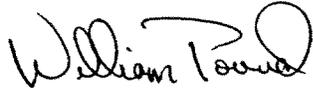
Even if the requirements of this legislation were realistic within the specified deadline, state and local governments are understandably skeptical of promises of federal funding for a new, multi-billion-dollar federal mandate for additional election technology and practices. Congress has repeatedly failed to live up to its fiscal commitments under the Help America Vote Act. It neither provided timely resources to the Election Assistance Commission and the National Institute of Standards and Technology to adopt voting

systems standards as promised nor fully funded grants to the states for purchase of accessible voting equipment.

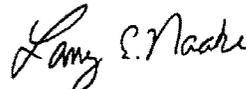
The Help America Vote Act achieved implementation of new voting equipment and procedures within a four-year timeframe without disastrous unintended consequences only because Congress carefully crafted its provisions through extended consultation and significant input from organizations representing state and local elected officials and election administrators.

To pursue a more reasoned approach on this issue, please have your staff contact or Alysoun McLaughlin with the National Association of Counties at 202-942-4254/ amclaughlin@naco.org or Susan Frederick with the National Conference of State Legislatures at 202-624-3566/susan.frederick@ncsl.org.

Sincerely,



William T. Pound, Executive Director  
National Conference of State Legislatures



Larry Naake, Executive Director  
National Association of Counties

Written Statement of William Pound, Executive Director

National Conference of State Legislatures

For the House Committee on House Administration

Friday, March 23, 2007

I am submitting the following statement for the record of the House Committee on House Administration regarding H.R. 811. The National Conference of State Legislatures (NCSL) represents the 50 state legislatures of the United States and its territories, commonwealths and the District of Columbia. We pride ourselves on our intergovernmental, bipartisan approach to issues with state-federal implications.

We apply the same test to all pending federal legislation and regulations. That is, NCSL firmly believes that state sovereignty and authority merits preservation and protection on all issues unless a federal solution to a perceived national problem is essential. NCSL further believes that any activity mandated upon state and local governments to carry out a public policy solution to a nationally-recognized problem should be funded by the federal government. Furthermore, given the bevy of existing and prospective state-federal partnerships, programmatic and administrative flexibility to achieve policy objectives and deliver services is key. The legislation before the House Administration Committee, H.R. 811, violates each and every one of our enduring policy principles.

NCSL's election reform policy clearly states that state law controls the processes and the administration of matters pertaining to federal, state and local elections in this country. It

logically follows that NCSL should be at the center of any national debate on election administration. NCSL's policy also states that it is important in resolving problems in the elections systems that there be a federal, state, and local partnership where each party is an equal partner to the discussion. Finally, our policy states that federal legislation and any funding attached to it should be based on broad principles, not upon specific mandates which would lead to a one-size-fits-all approach. The intent behind this policy is obviously to preserve state flexibility because it should be generally recognized that what works in one state is not necessarily workable in others. This is sound federalism policy and promotes good governance at both the state and federal levels.

H.R. 811, in light of these guiding principles just enumerated, is the antithesis of state flexibility and the entire idea of an inter-governmental partnership. It is important to remember as the Committee deliberates this bill that the goal of the Help America Vote Act, recognized by Democrats and Republicans alike, was and is to promote state flexibility not hinder it. NCSL was fully supportive of this approach and contributed the ideas and values of state legislators into the debate over HAVA. It is therefore troubling that state policymakers were not consulted prior to the introduction of H.R. 811. This bill has a significant state impact and would require more than half of the state legislatures to modify their existing laws. This lack of process runs counter to our longstanding inter-governmental partnership with the Committee on House Administration on election reform issues. During the drafting of HAVA, state and localities were considered key stakeholders whose opinions were valued by both the majority and the minority side of this Committee.

When a bill such as H.R. 811 which has such a preemptive impact on state election processes is contemplated, it is in the best interest of every level of government to consider its across-the-board impact. H.R. 811 micromanages states to such a degree that it effectively preempts over half our states and imposes an unfunded federal mandate of unknown proportions. Why unknown? Because the voting systems this bill requires states to use by November, 2008 haven't been invented yet. No voting system in America can do what H.R. 811 would require. H.R. 811 is so proscriptive, it even dictates to states the type of paper that must be used in voting machines to create the paper trail.

Anyone who is in state government and who was around after the passage of the Help America Vote Act knows that outfitting an entire state with new voting machines is a very costly endeavor. Everyone who works in a legislative capacity at any level of government also knows that authorized funding in a bill never equates to appropriated sums. This bill authorizes, but does not appropriate a random sum of money for states to outfit themselves with voting machines that don't yet exist. Testing and standards on voting machines that would meet the requirements of H.R. 811 are not due until 2010. H.R. 811 would therefore require states to purchase new equipment before testing and standards are even available.

States have, for the last several years, been largely on their own with respect to funding the changes in their elections processes and systems required by the Help America Vote Act because nearly five years after HAVA's passage, it has yet to be fully funded.

H.R. 811 does not break new ground. States have been passing paper audit trail legislation for the last several years. H.R. 811 would preempt state laws governing paper trail and audit requirements in over half the states because what this bill proposes does not reflect current practices in any state. Over the last several years, 27 states have passed laws addressing the paper trail issue. In addition 13 states have taken up measures in their 2007 legislative sessions to deal with the paper audit process. These laws and proposals reflect thoughtful deliberation and consideration of all of the pros and cons of instituting a requirement of this nature, and speak to the responsiveness of the states in ensuring fair and full elections in this country.

In sum, states are concerned that their hard work to craft workable solutions to election administration issues that arose during and after the 2000 presidential elections will be undone or severely compromised if H.R. 811 becomes law. The 2008 compliance date is unrealistic, there is no consideration of current state laws and practice recognized in the bill and there has been no discussions with state policymakers on the true impact of this legislation on the states. NCSL urges you to conduct extensive public hearings on this matter, engage state elected officials in further debate on legislation like H.R. 811, and then move forward if necessary, with legislation that strengthens rather than impedes and uproots our nation's elections systems. NCSL asks that this legislation be tabled and that meaningful consultation with state and local policymakers on the feasibility of the provisions of H.R. 811 be duly considered by the Committee. NCSL looks forward to working with the Committee on this, and other election reform issues.

Mr. MCCARTHY. One is the National Conference of State Legislatures, the National Association of Counties. In opposition, we had the Executive Director of—the National Association of Election Officials are opposed to this bill, and I am just trying to get your feedback as to what would you think the rationale—why the majority would be opposed.

Mr. GILBERT. I think the majority of them are opposed to it on two grounds. One is the feasibility of actually executing what it purports to do and the second is the cost.

We are very concerned that implementation date of 2008 would actually collapse the election system. We do not believe that it would be feasible nationwide to implement the kinds of changes, both procedural and technological, that this bill proposes by 2008.

In terms of the paper trail, all you have to do is go out there and try to count paper ballots sometime, and you will see why we are opposed to it. We are the ones who do that. We have counted paper ballots by hand before, and we know how difficult—it is the most difficult aspect of conducting an election.

You think we have complicated electronic technology; well, electronic technology actually simplifies things. It simplifies things at the precinct, it simplifies things for the administration of elections in the office. When you start throwing paper in, and particularly manual tabulation of paper, it becomes much, much more harder. And we know we can't do it accurately; I think that is the fundamental reason.

Mr. MCCARTHY. Well, I thank the whole panel for their time.

Ms. LOFGREN. Madam Chairwoman.

The CHAIRWOMAN. I, too, Madam Chair, have a letter from Conny McCormack. If I could please submit this for the record.

Ms. LOFGREN. That will be added, without objection.

[The information follows:]



COUNTY OF LOS ANGELES  
**REGISTRAR-RECORDER/COUNTY CLERK**  
 12400 IMPERIAL HWY. - P.O. BOX 1024, NORWALK, CALIFORNIA 90651-1024

**CONNOR B. McCORMACK**  
 Registrar-Recorder/County Clerk

March 21, 2007

Via FAX, email and U.S. mail

Honorable Juanita Millender-McDonald  
 Chair, Committee on House Administration  
 United States House of Representatives  
 1309 Longworth House Office Building  
 Washington, D.C. 20515-6517

**RE: Hearings regarding H.R. 811**

Dear Chair Millender-McDonald:

During the past week, two hearings have occurred and another is now scheduled on Friday before the House Administration Subcommittee on Elections regarding provisions contained in H.R. 811, the Voter Confidence and Increased Accessibility Act. H.R. 811 would mandate, by the 2008 elections, sweeping changes to many significant aspects of how elections are administered throughout the country without appropriate assessment of likely unintended consequences. As such, I am very concerned that none of the witnesses invited to appear at these hearings by the majority political party have included election officials at the local level. The practitioner perspective, which only local election officials who administer elections "on the ground" can provide, is crucial to the successful implementation of any changes Congress contemplates regarding laws impacting the conduct of the election process.

I have always admired your commitment to tangible and workable solutions toward improving the electoral administration process and to the need for greater public participation in elections. I greatly appreciated meeting with you on January 5, 2007 in your office in Washington, D.C. when we discussed the many challenges facing election administration today - including voter education, complex voting procedures and new voting equipment. Additionally, the town hall meeting you convened in Los Angeles on September 18, 2006, at which you invited members of the U.S. Election Assistance Commission, a representative of the National Institute of Standards and Technology and me to share vital information regarding voting equipment and procedures in preparation for the November 6, 2006 General Election, revealed your passion for voters to be informed on these complex and vital issues.

With regard to H.R. 811, consensus has emerged among local election officials across the country that many of the bill's far-reaching provisions are simply unworkable. Examples include instituting new, complex voting equipment requirements in time for the imminent 2008 election cycle. Additionally, several of the detailed procedural requirements contained in the bill are alarming, such as prescribing how and when to deliver voting equipment in advance of elections, various types and processes of election audits, etc. While election officials currently conduct auditing processes in a manner that is open to public observation during the vote canvass period prior to certification of official election results, the provision in H.R. 811 that

Hon. Juanita Millender-McDonald  
March 21, 2007  
Page 2

would transfer authority and security of voted ballots from local election officials to a state board, prior to certifying election results, is ill-conceived. Such a process would break the chain of custody of ballots during ongoing vote tabulation and could delay the release of final election results. Culling the experiences of other local election officials throughout the country would offer additional insights into the specific proposals contained in H.R. 811 and strengthen the continuing development of this legislation.

By contrast to the speed at which H.R.811 appears to be moving, one of the strengths of the Help America Vote Act of 2002 (HAVA) was that its complex provisions were painstakingly developed and thoroughly assessed - in collaboration with numerous local election officials - in order to consider the consequences of major new requirements. Additionally, a key wisdom of HAVA was the 2006 implementation date. This allowed a 3-year lead time which was instrumental in widespread successful implementation as there was time to make adjustments due to lessons-learned prior to administering the traditionally highest voter turnout election in the four-year cycle, the November Presidential Election.

In summary, elections are fragile and, under the best of circumstances, election administration is complex and difficult. Mandating additional major changes in voting equipment and procedures during the short time remaining prior to the 2008 election cycle invites significant problems. The unintended result could de-stabilize the elections process, erode voter confidence and increase the likelihood of challenges to the legitimacy of electoral outcomes.

I look forward to the opportunity to discuss these concerns further with you in the near future.

Sincerely,



Conny B. McCormack  
Registrar-Recorder/County Clerk

c: Honorable Zoe Lofgren, Chair, Subcommittee on Elections

The CHAIRWOMAN. She too, has strong concerns about this bill and implementation.

I also have a letter from Judy Duffy, the Chair of the Advocacy Committee of the League of Women Voters of the United States, raising her concerns as well.

Ms. LOFGREN. That also will be added to the record.

[The information follows:]



LEAGUE OF WOMEN VOTERS®  
OF THE UNITED STATES

March 22, 2007

*President*  
**Mary G. Wilson**  
Albuquerque, New Mexico

*Vice Presidents*  
**Marlys Robertson**  
Boulder, Colorado

**Sarah Diefendorf**  
San Francisco, California

*Secretary-Treasurer*  
**Elaine Wiant**  
Dallas, Texas

*Directors*  
**Judith Davis**  
Upper Saddle River, New Jersey

**Judy Duffy**  
Birchwood, Minnesota

**Xandra Kayden**  
Los Angeles, California

**Donna Lauffer**  
Overland Park, Kansas

**Odetta MacLeish-White**  
Gainesville, Florida

**Elisabeth MacNamara**  
Atlanta, Georgia

**Carole Mullan**  
Lubbock, Texas

**Carol Reimers**  
New York, New York

*Executive Director*  
**Nancy E. Tate**

The Honorable Juanita Millender-McDonald  
Committee on House Administration  
1309 Longworth House Office Building  
Washington, D.C. 20515-6167

Dear Chairwoman Millender-McDonald,

Thank you for your inquiry and request for the League of Women Voters' comments on HR 811, the "Voter Confidence and Increased Accessibility Act of 2007," also known as the Holt Bill.

In general, the LWV finds the provisions within the bill that call for voter-verified paper ballot systems consistent with the LWV position. We do suggest that careful consideration be given to the interaction of federal and state law under the bill and how each element will operate in practice.

With respect to the portion of the legislation that establishes a requirement for a mandatory audit, the LWVUS has never conducted a study of such details as what percentage of votes would constitute a statistically appropriate random audit or whether such audits should be conducted by a state entity that has no prior expertise in vote counting. The LWV does support routine audits in randomly selected precincts in every election, and believes that the results should be published by the jurisdiction. However, we do have questions about the complexities of the audit requirements within H.R. 811 and their ramifications with existing laws in individual states.

Overall, the LWV also has concerns about implementation by 2008.

Attached, please find an analysis of H.R. 811 from the LWV perspective.

The LWV is supportive of the spirit of H.R. 811 but does have concerns as the bill is currently written. Thank you for the opportunity to provide our perspective.

Sincerely,

/ s /

Judy Duffy, Chair  
Advocacy Committee  
League of Women Voters of the United States

The CHAIRWOMAN. And, Madam Chair, with so many questions to raise and so little time, I am just going to ask for unanimous consent that my statement be submitted for the record.

Ms. LOFGREN. Without objection, so ordered.

[The statement of Ms. Millender-McDonald follows:]

**CHA subcommittee on Elections Hearing on  
HR 811, Voter Confidence and Increased Accessibility Act of 2007**

**March 23, 2007**

**9:30 AM  
1310 Longworth House Office Building**

**OPENING STATEMENT OF  
REP. JUANITA MILLENDER-MCDONALD**

Good morning Members, witnesses and guests. I want to thank the Subcommittee Chair for calling this very important hearing on HR 811, the Voter Confidence and Increased Accessibility Act of 2007 sponsored by my colleague, Rush Holt.

The electoral process is not perfect. Improvements to the electoral process itself still need to be made. Fortunately, the Help America Vote Act of 2002 (HAVA) is a solid foundation upon which we can institute further electoral improvements. HAVA made it easier for voters to cast a ballot and harder for people to knowingly commit fraud, which is why I am still seeking the remaining \$800 million dollar balance, which was authorized in Title II of HAVA, to fully fund the states, and give HAVA a chance to work.

One of the hallmarks of HAVA was to remedy the inherent problems with lever and punch card machines that have plagued elections for a number of years. This issue was brought to light during the 2000 Presidential election in Florida. Now much of the focus has been on the perceived

problems with Direct Recording Electronic (DRE) voting machines and their need for a Voter Verifiable Paper Trail (VVPT). These machines allow for persons with disabilities, particularly the blind, to vote privately and independently.

Last week, I hosted a voting machine forum which not only included DRE machines with and without a paper trail, but optical scan and hybrid machines that members and staff were able to put into practice for more than the 5 minutes voters usually spend with voting machines on election day.

While this is a very important matter, I also believe that other aspects of the voting process need to be addressed, which is why I fully intend to convene full committee hearings in the near future to examine these concerns.

Thank you again, Madam Chairwoman, for convening this hearing. I look forward to hearing the testimony of all the witnesses.

Ms. LOFGREN. Mr. Ehlers.

Mr. EHLERS. Thank you, Madam Chair. I spent only a minute in my last round. I am going to spend a few more this time.

First of all, Mr. Gilbert, thank you very much for your comments. It is what I have been saying all along and perhaps because I have had much the same experience you have had.

Dr. Felten, have you ever sat down and counted ballots? Have you ever served as an election official?

Mr. FELTEN. I have not, no.

Mr. EHLERS. Okay. Let me, just to shorten things, express concern.

I totally agree with the comments of Mr. Gilbert and Mr. Norris that paper lends itself to fraud. That is the history of elections with paper, and that is why we developed mechanical voting machines.

Now we are in a different era; we are trying to develop good electronic voting machines. I agree with you that we haven't done that yet, Dr. Felten, but I am confident we can do much better than we have, certainly with a mechanical lock, if nothing else. I am sure we can do a little better.

I am surprised that you are willing to put much more faith in a mechanical system, such as a printer, unless voters are actually required to sit there and read through and verify. I would still put more confidence in the computer, on average, than I would on a mechanical printer. And I am just making that observation, and I am not trying to set up an argument here.

I appreciate your comments, Mr. Norris. I do question your wisdom in leaving Michigan going to Maryland, but that is a separate issue.

Mr. NORRIS. That alone should probably disqualify my testimony.

Mr. EHLERS. You had a lot of common sense in your comments, and I appreciate it. I have no problem setting up the dual trail requirement. I do have a problem in seeing that the paper trail is the record for precisely the comments made by Mr. Gilbert.

You know, I sat there and calculated—pardon me, counted ballots. It is a very unsure operation. Humans are not particularly good at that, and it is very, very difficult to get accurate results with any large number of ballots.

So I am not—as I said before, I am not opposed to the bill, but I would like to make some changes in it, and I will propose those changes at some future time.

Ms. LOFGREN. Thank you, Mr. Ehlers.

And thanks to this panel. It has been a long morning, but we appreciate your sticking with us to give us your advice.

Now we will ask Noel Runyan, Dr. Harold Snider, Warren Stewart and Commissioner Gail Mahoney to join us. And we are going to ask—since we are going to be called to the floor for a considerable period of time in a very short period of time, I wonder if we could ask each of these witnesses to give their statement within 3 minutes, as we have limited ourselves. Then we will know that we will get to hear everyone, and your official statements will be made part of the record.

I would just note that Warren Stewart is the Policy Director for Vote TrustUSA, which is a nonpartisan organization, and he has been published in the Harvard Law & Policy Review.

Commissioner Gail Mahoney is from Jackson County, Michigan, the Chair of the National Association of Counties, an organization I once belonged to as a member of the Santa Clara County Board of Commissioners, and a distinguished leader in our Nation.

And—I will now run through my cheat sheets here—Noel Runyan from my neck of the woods is an engineer, and he has designed and manufactured the Audapter speech synthesizer and has worked with the Santa Clara County Voter Access Advisory Committee; and Dr. Harold Snider, President of Access for the Handicapped.

**STATEMENTS OF NOEL RUNYAN, PRESIDENT, PERSONAL DATA SYSTEMS; DR. HAROLD SNIDER, ACCESS FOR THE HANDICAPPED, INC.; WARREN STEWART, POLICY DIRECTOR, VoteTrustUSA; AND COMMISSIONER GAIL W. MAHONEY, JACKSON COUNTY, MICHIGAN, CHAIR, NATIONAL ASSOCIATION OF COUNTIES**

Ms. LOFGREN. We will call first on Noel Runyan for his abbreviated statement to be followed by Dr. Snider.

**STATEMENT OF NOEL RUNYAN**

Mr. RUNYAN. Madam Chairman—

Ms. LOFGREN. Could someone turn on the mike, please? Thank you so much.

Mr. RUNYAN. Madam Chairman and members of the board, I would like to sincerely thank you for inviting me to testify today on improving access to voting systems.

As an electrical engineer and computer scientist, I have spent 36 years of working on human factors and access to systems for people with disabilities. I have also spent the last 4 years working on accessibility of voting systems.

When the HAVA bill was introduced, I thought it was really exciting times for us because it would get rid of hanging-chads over-voting, and it would allow a lot of folks to have the kind of accessibility that we had learned to use on our own computer systems and other information systems. And they promised that the systems would be rigorously, federally tested to make sure that they were secure and accessible and accurate.

So when I first went to vote in Santa Clara on the Sequoia electronic voting machines about 3 years ago, I was very disappointed when they—after 45 minutes of diligently working, calling tech support, poll workers were not able to get the system working with audio output so that I could use it, I had to have somebody else vote for me.

Out of five elections now, in which I have used the Sequoia voting system, in three of those, the poll workers were never able to get the system working by themselves. And in fact, in one of them, my wife asked for and was loaned the manual so that she could read the manual and figure out how to get the system working with audio for me. It seems that we shouldn't all have to have a very brilliant wife that is a computer scientist to go along with us to vote.

So I got very involved in studying the accessibility of these systems, and very concerned about both their access and security; and

found that there were a lot of folks that weren't getting full access to these systems, in some cases because they were too complicated for poll workers and, in others, because of very limited design capabilities for providing accessibility—accessibility for people with physical disabilities, cognitive disabilities, or with special or alternative language needs.

And, as an example, many of them did not even have simultaneous audio and visual or large print magnification, so important for so many elderly folks that need to use it.

Ms. LOFGREN. Right. Mr. Runyan, we are going to have to ask you to wrap up so we can hear all four of you.

Mr. RUNYAN. I will try to wrap up very quickly here.

Ms. LOFGREN. Thank you.

Mr. RUNYAN. But as we found, the systems needed to be made more secure, and so we ended up having to look at using paper which was not accessible.

It turns out that over the years, now we have developed accessible ballot marking systems and that those are usable and I would like to submit both my report—my access report and a letter today, which we have had several people join onboard to say, we as people with disabilities do support accessible paper voting systems.

Ms. LOFGREN. Mr. Runyan, we will make both those statements part of the official record. And now we will call on Dr. Snider.

[The statement of Mr. Runyan follows:]

WRITTEN TESTIMONY OF Noel H. Runyan  
BEFORE THE COMMITTEE ON HOUSE ADMINISTRATION, ELECTIONS  
SUBCOMMITTEE  
U.S. HOUSE OF REPRESENTATIVES  
MARCH 23, 2007

Madame Chair and members of the Committee, good morning and thank you for the opportunity to speak to you on the topic of "Improving Access to Voting".

My name is Noel Runyan. I am an electrical engineer and computer scientist with over 33 years experience in design and manufacturing of access technology systems for people with disabilities. For the last four years I've been concentrating on the accessibility of voting systems.

For many of us, the passage of the Help America Vote Act of 2002 held tremendous hope and promise for secure and reliable voting; a guarantee that every voter would have access to the voting process.

However, in my own voting experiences, the poll workers were not by themselves able to get the audio access feature working in three of the five times I've attempted to vote on our county's Sequoia Edge II electronic ballot systems. These frustrating voting experiences led me to get more involved in understanding voting systems and working to improve their accessibility.

Like many others, I trusted that "federal testing" would assure security and accessibility, but we have found that we've been misled. DRE (Direct Recording Electronic) systems did not turn out to be as secure, reliable or accessible as promised. There also turned out to be no actual "federal testing" by federal labs or "independent testing authorities" (ITAs). Instead, the "federal testing" was conducted by private labs that received payments from the voting machine vendors themselves, thereby creating an inherent conflict of interest.

Currently, there is no proper testing of the accessibility of voting machines, and there is no standard for comparison of results from accessibility, usability and accuracy testing.

Clearly, the ITA labs' testing of DREs and previous federal certification do not assure that voting machines are truly accessible to those with disabilities.

Electronic ballot systems such as the DRE machines (formerly called "touch screens") now in use have proven to be neither fully accessible to all voters nor secure and accurate methods of recording, tallying, and reporting votes. While the goal of private voting has been achieved by some voters, this has often been without meaningful assurance that our votes have been counted as cast. Additionally, many other voters have been disappointed and frustrated because we have not been able to vote privately and independently as we had hoped and as voting system vendors had promised.

As my recently published "Improving Access to Voting" report details, many of the DREs in use today do not fulfill the promise of accessibility for the majority of voters with disabilities.

Our recent national experience with new election technology has also taught us that, in order to guarantee reliability and security in our elections, it is necessary for the voter to be able to truly verify the accuracy of his or her ballot—the ballot that will actually be counted. The only voting systems that permit truly accessible verification of the paper ballot are ballot marking devices. These non-tabulating devices, either electronic or non-electronic, assist the voter in marking and verifying votes on paper ballots that can be either optically scanned or hand-counted.

A few years ago, when paper ballot systems were proposed to assure software independent verification, there were not good methods for accessibly marking and verifying paper ballots for voters with disabilities or alternative language requirements. This caused a lot of opposition from most of the community of voters with disabilities. However, times have changed and we now have ballot marking systems that are accessible for a wide spectrum of voters with disabilities.

People are discovering that a voting machine interface can provide a private voting experience for the voter, regardless of whether the votes are stored electronically or printed on paper. In fact, there are now ballot marking systems that even use touch screens and print paper ballots without storing votes electronically.

Because of this new technology, many disability voting rights advocates now accept the notion that access and security are both important and not incompatible, and this is resulting in a steady movement toward support of paper-ballot-based voting systems.

Neither accessibility for all voters nor the security of the vote can be sacrificed for the sake of the other. Fortunately, true accessibility and security can both be achieved; there is no inherent incompatibility between voting system accessibility and security. In fact, several leaders in the accessible voting field have recently signed on to a position statement reflecting this new perspective. I'd like to ask for this position statement and its list of signatories to be included in the record for this hearing.

There are several types of ballot marking systems now available. Some are truly accessible; some are not. For example, the Avante OS ballot marking system used in New York and the InkaVote used in Los Angeles would not be desirable, as they do not include any method for voters to truly access and verify their vote selection markings on the paper ballot. It is crucial that voters be able to truly verify their votes from the vote selections on the paper, rather than merely performing a pseudo-verification from electronic memory.

On the other hand, there are already two ballot marking devices available that allow the voter to accessibly verify their votes from their printed vote selections.

It is possible that some DRE voting machines that have already been purchased may be adapted to be used as ballot marking devices, assuming that their accessibility can be preserved or improved and that they would allow verification of the vote selections from the paper ballot.

Rural precincts might find it cost-effective to provide a single computerized BMD (Ballot Marking Device) to be used by any voter in the polling place to give overvote warnings, so a precinct count optical scanner would not be necessary. The BMD would, of course, also provide accessible voting for voters with disabilities or alternate language requirements.

An alternative to the current accessible and verifiable BMDs might be a stand-alone unit for scanning paper ballots and verifying their votes accessibly. Alternatives such as this stand-alone scanner/verifier and other improved BMD systems should be encouraged, but with the reasonable expectation that they will not be ready for fielding before the 2008 elections.

There may be an opportunity to promote improvements in accessible paper ballot verification systems by earmarking some of the research funds included in HR811 to offer a prize in a competition to design an improved accessible ballot marking and verification system.

The numbers of voters needing access to voting systems with alternative languages is very large, even when compared to the number of voters with disability-related access needs. Accommodating access to voting systems in alternative languages has relatively clean and simple technical solutions and does not need to become a messy nationwide issue. It does need a major effort on the part of advocates and election officials to become well informed and press for available good solutions.

Some advocates for alternative-language voting access have the mistaken impression that DRE voting systems are the best and only way to handle alternative-language voting needs. This is simply wrong, for two main reasons. First, computerized BMDs can offer flexible alternative language interface options for voting systems just as well as those offered by DRE systems. Second, states, such as California, have already demonstrated that it is possible to provide many choices for alternative languages on optical-scan paper ballot systems.

Although the HR811 bill has many good improvements to elections law, I feel that it is very important to make sure that some of the wording be changed for assuring better accessibility. In particular, I recommend the "conversion to accessible media" section be changed to read something like:

"b) Accessibility and Ballot Verification for Individuals With Disabilities-

(1) IN GENERAL- Section 301(a)(3)(B) of such Act (42 U.S.C. 15481(a)(3)(B)) is amended to read as follows:(B)(i) satisfy the requirement

of subparagraph (A) through the use of at least one voting system equipped for individuals with disabilities at each polling place; and(ii) meet the requirements of subparagraph (A) and paragraph (2)(A) by using a system that--(I) allows the voter to privately and independently verify the permanent paper ballot through the presentation, in accessible form, of the print vote selections from the same print information that would be directly used for any vote counting or auditing, and(II) ensures that the entire process of ballot verification and vote casting is equipped for individuals with disabilities, and (III) shall not preclude the use of Braille or tactile ballots."

When considering HR811 and other elections reform bills, it is important to be aware of the difference between independence and privacy in voting procedures.

Independence is not essential to guaranteeing privacy before a voter starts marking their ballot. Independence is required to assure privacy during the process of marking the ballot but is not essential for guaranteeing privacy after the ballot has been deposited into, and protected by, a privacy sleeve. Absolute independence is not required for the parts of the voting process that come before and after vote selection, ballot marking and deposition into a privacy sleeve.

If completely independent handling of paper ballots and voter ID cards is decided to be absolutely necessary for complying with access requirements, then DRE and BMD voting system manufacturers will be forced to redesign their products to offer automated handling of ballots and cards for this special class of voters or redesign the systems to not use any physical ballots or ID cards. The impact of such changes on voting hardware costs and voting system security may be so high that it might be better to invest the same resources in improving other aspects of the accessibility of voting systems, including physical access to polling places.

Manufacturers should be encouraged to improve their voting machinery accessibility to minimize independent-handling issues for voter cards and paper ballots.

The ideas I've presented here today are described in quite a bit more detail in my recent report, entitled "Improving Access to Voting", and I'd like to ask that it also be included in the record with my testimony.

In conclusion, I want to emphasize that security and accessibility are not incompatible, if they are both included in the design from the very beginning. A properly designed system using the readily available access technology, along with software independent verification of paper ballots, would be broadly accessible, reliable, and secure.

Thank you again for allowing me to testify today.

Noel H. Runyan

## **Americans with Disabilities Call for Election Systems Featuring Both Accessibility and Security**

March 19, 2007

Voters with disabilities, sensory impairments, and special language needs have long been disenfranchised in large numbers as a result of lack of access to the voting process. For many of us, the passage of the Help America Vote Act of 2002 held tremendous hope and promise for secure and reliable voting, a guarantee that every voter would have access to the voting process.

Electronic ballot systems such as the direct record electronic (DRE) machines (formerly called "touch screens") now in use have quickly proven to be neither fully accessible to all voters nor secure and accurate methods of recording, tallying, and reporting votes. While the goal of private voting has been achieved by some voters, this has often been without meaningful assurance that our votes have been counted as cast. Additionally, many other voters have been disappointed and frustrated because we have not been able to vote privately and independently as we had hoped and as voting-system vendors had promised.

It is now clear that in order to guarantee reliability and security in our elections, it is necessary for the voter to be able to truly verify the accuracy of his or her ballot--the ballot that will actually be counted. The only voting systems that permit truly accessible verification of the paper ballot are ballot marking devices. These non-tabulating devices, either electronic or non-electronic, assist the voter in marking and verifying votes on paper ballots that can either be optically scanned or hand-counted. (Some DRE voting machines that have already been purchased may be adapted to be used as acceptable ballot marking devices, assuming their accessibility can be preserved or improved.)

The technology for inexpensively providing good accessibility to voting systems has been commonly available for more than a decade, and it can and should immediately be required for and applied to all modern voting systems.

This is clearly illustrated by the report "Improving Access to Voting: A report on the Technology for Accessible Voting Systems," by Noel Runyan, posted at VoterAction.org and Demos.org. ([word version](#) | [pdf version](#) | [large-print version](#) | [braille version](#)) Design of new systems must include, from the beginning, accommodations to allow private and independent voting by individuals with a broad range of access needs. These systems must simultaneously ensure secure elections.

We leaders and members of the disability rights community assert that neither accessibility for all voters nor the security of the vote can be sacrificed for the sake of the other. Fortunately, true accessibility and election security can both be achieved; there is no inherent incompatibility between voting system accessibility and security.

We recognize that electronic ballot systems are inappropriate for use, because these systems make it impossible for voters to verify that their votes will be counted as cast.

We call upon all disability rights groups, other civil rights groups, election protection groups, and elected officials to recognize the necessity for an immediate ban on any voting system that fails to meet the twin requirements of full accessibility and election security.

---

*List of signatories as of 3/19/07 (affiliations are listed for identification purposes only):*

Noel Runyan, Voting access technology engineer member of Santa Clara County Voter Access Advisory Committee, and author of "Improving Access to Voting"

Roger Petersen, member, Santa Clara County Advisory Commission for Persons with Disabilities and Santa Clara County Voter Access Advisory Committee

Bernice Kandarian, President, Council of Citizens with Low Vision International

Robert Kerr, ACB Maryland

Shawn Casey O'Brien, KPFK-FM in Los Angeles, and California Secretary of State's Ad Hoc Touch Screen Task Force member

Suzanne Erb, Chairperson of the Philadelphia Mayor's Commission on Disabilities

Mike Keithley, Editor of the Blind Californian

A. J. Devies, Past President, Handicapped Adults of Volusia County (HAVOC); Charter Member, Daytona Beach Mayor's Alliance for Persons with Disabilities; Disability Consultant and Board Member, Florida Fair Elections Coalition.

Marta Russell, independent journalist and author

Judith K. Barnes, Life Member, Council of Citizens With Low Vision; Former President, Silicon Valley Council of the Blind

George Moore, Accessibility Advocate, Californians for Disability Rights.

Mike May, President, Sendero Group

David Andrews

Ruthanne Shpiner, Pushing Limits Radio 94.1 FM, Northern California ADAPT

Jean Stewart, Writer

Mike Godino, President, American Council of the Blind of New York, Systems Advocate, Suffolk Independent Living Organization

Louis Herrera

Dawn Wilcox, BSN RN, Past President Silicon Valley Council of the Blind, Board member CCCLV

Margaret Keith, VP, Monterey Co. Chapter, Californians for Disability Rights

Adrienne Lauby, Host/Producer, Pushing Limits, disability program on KPFA fm

Barry Scheur, Scheur & Associates

Tom Fowle, Rehabilitation Engineer, The Smith-Kettlewell Rehabilitation Engineering Research Center, San Francisco

Robert Lusson

Christopher Voelker

Amy Ruell

Bob Hachey, President, Bay State Council of the Blind

Susan Clarke, ENHALE, Environmental Health Advocacy League.

Karen Jo Gonzales

Danica Nicolette O'Brien

Lida Rodriguez-Taseff, Esq. Miami Dade Election Reform Coalition

Emily Levy, VelvetRevolution.us; former chair, City of Santa Cruz Accessibility Committee

**STATEMENT OF HAROLD W. SNIDER, PH.D.**

Mr. SNIDER. Thank you, Madam Chairman. It is a privilege and an honor to speak before the subcommittee, and I am very grateful for your invitation to do so.

First of all, I want to repeat what I said to Congressman Holt outside this hearing, not since the passage of the Americans With Disabilities Act have we had a Member of this House reach out to the disability community to take input on an issue as we have had with Congressman Holt on H.R. 811.

I said to him that I have substantial disagreements with him about H.R. 811, that are outlined in my testimony; and I will look forward to involving in engagement with his staff to try to work some of those out. We may be able to do it, we may not, but there is a good-faith effort certainly on my part and I am sure on his part to get that done. So I commend him strongly for his efforts.

The real problem with H.R. 811 is, it unnecessarily slows down the process of enfranchisement of people with disabilities into the voting process by requiring that DRE, touch-screen, machines also generate a verifiable paper trail that can be verified by disabled and blind, visually impaired voters.

In the 30 years that I voted in almost 30 elections, two every 2 years or so between 1972 and 2002, I met more illiterate and ignorant poll workers who couldn't accommodate my needs and who discriminated against me in the most horrible ways you could imagine. And HAVA changed the playing field for me and for other people with disabilities.

While I was an employee of the Republican National Committee, I worked with disabled voters who were completely apathetic about the voting process because accessibility was denied.

The problem with H.R. 811 is, it slows down the implementation of the provisions of HAVA to the extent that people with disabilities won't get accessible voting until perhaps the middle or end of the next decade of this century.

Ms. LOFGREN. Dr. Snider, you only have about 30 seconds left. I wanted to warn you.

Mr. SNIDER. And what concerns me most, people don't have confidence in the technology that exists in the 21st century.

I hope that the Congress will keep the promise of HAVA while fixing some of the problems which exist.

Thank you, Madam Chairwoman.

Ms. LOFGREN. Thank you very much.

[The statement of Mr. Snider follows:]

COMMENTS FOR THE HOUSE COMMITTEE  
ON ADMINISTRATION

Subcommittee on Elections Hearing on Election Reform: Machines and Software H.R. 811

Delivered by:

Harold W. Snider, Ph.D.

March 23, 2007

My name is Harold Snider and I am President of Access for the Handicapped, Inc., 4921 Bel Pre Road, Rockville, MD 20853, telephone 301-460-4142, Email hlsnider@earthlink.net. Beginning in 1978, this consulting company has provided services to the Government and Private Sector on a wide variety of disability issues. We have represented a number of disability organizations in testimony before Congressional Committees.

I also serve as Executive Director of Services for the Visually Impaired, Inc. (SVI), 8720 Georgia Avenue, Suite 210, Silver Spring, MD 20910, Telephone 301-589-0894, Email hsnider@servicesvi.org. Since 1958 this non-profit agency has been one of the two major providers of services to blind and visually impaired people in the Metropolitan Washington, D.C. area. For purposes of this testimony, SVI sells a variety of high-tech devices, and also provides training on computers and other high-tech devices to blind and visually impaired people. I have invented several high-tech products for blind and visually impaired people, such as a menu driven totally electronic newspaper delivery service, which delivers its product to more than 60,000 readers over the telephone using synthetic speech.

The purpose of this testimony is to speak in opposition to H.R. 811, introduced by Congressman Holt and Co-Sponsored by Congressman Petrie. From 1988 to 1990, I served as Director of Outreach for People with Disabilities at the Republican National Committee (RNC) where I served on the personal staff of the Late Chairman, Lee Atwater. Subsequent to his retirement because of a fatal illness, I was offered and accepted a political appointment as Deputy Executive Director of the National Council on Disability (NCD) from 1990 to 1992, in the first Bush Administration. One of my primary tasks while employed at the RNC was to encourage disenfranchised people with disabilities to vote. I also assisted in the drafting of sections of the Americans with Disabilities Act of 1990 at the behest of members of Congress and in cooperation with the Domestic Policy Council in the White House.

H.R. 811 unnecessarily slows down the process of enfranchisement of people with disabilities into the voting process by requiring that DRE (touch screen) voting machines also generate a verifiable paper trail. Having grown up in a politically active family in Jacksonville, Florida, I am acutely aware of the need to count every vote. As a blind person, I have been the victim of discrimination at the polling place because of illiterate

and ignorant Election Judges and party workers. I found this discrimination to be intolerable and unnecessary. I could recite horror stories forever, but they would quickly become tedious and boring to the members of the subcommittee.

While working at the RNC, I discovered that people with disabilities were totally apathetic about the election process. This apathy was caused by the facts that the election process itself, and polling places in particular, were substantially inaccessible. People with disabilities were experiencing discrimination by poll workers in the voting process and were unable to vote privately and independently, thus being disenfranchised. The Help America Vote Act (HAVA) substantially changed the playing field for people with disabilities. For the first time, I was able to vote privately and independently in Montgomery County, Maryland using the accessibility features found on the Diebold touch screen voting machines. Not only was I enabled to vote, but I was able to confirm my ballot, and I have sufficient confidence in the technology to believe that my vote was counted.

I am very proud of the fact that I was able to complete a Doctorate at Oxford University in 1974, where I studied 19<sup>th</sup> Century British History. I learned that in early 19<sup>th</sup> –Century England, a group of people called Luddites attempted to destroy early industrial production machinery because they perceived it as a threat, and had no confidence in it. I believe that the same is true with those who favor H.R. 811. In the 21<sup>st</sup> Century there are still people who have no faith in modern technology and in its ability to deliver a secure electronic voting process.

The current Diebold machines have the potential of producing a verifiable paper trail, but at what cost? An add-on box and firmware are now available which will enable people with disabilities who cannot use their hands to manipulate the functions of this machine for less than \$500 per unit. In contrast, the major ballot marking machine is not functional for people without the ability to use their hands because such people cannot independently insert or remove the ballot from the machine. Therefore, these people with disabilities cannot vote privately and independently.

I would like to point out to the Subcommittee that people who are blind or visually impaired are substantially unable to read or verify a paper ballot generated by a voting machine, therefore their ability to vote privately and independently is compromised and their votes are far from secure. After all, to a blind person, one piece of paper feels exactly like another. To take this example to its extremes, a device exists which will put Braille characters and ink print characters on the same page. It is manufactured by Nippon TeleSoft in Japan and costs approximately \$35,000.00. Only 10 percent of blind people read Braille and it seems to me that such an expenditure is not justifiable to achieve a verifiable paper trail. I believe it is doubtful that inexpensive technology can be developed in the near future which will enable people with disabilities to read a paper trail in an accessible manner.

H.R. 811 helps those Americans who believe it is necessary to have a verifiable paper trail in order to achieve a secure voting process. I believe that the costs of doing so are not

justifiable. H.R. 811 hurts people with disabilities because it substantially delays the day when private and independent voting will become available throughout this country. A mandated study which should be completed in 2010 substantially delays this process. H.R. 811 therefore delays private and independent voting for people with disabilities well into the next decade. Such a delay is unconscionable. H.R. 811 contains an underfunded mandate for accessibility which many jurisdictions will find difficult to overcome. I believe that it is vital for the Congress to keep its promise to the disability community that voting should be accessible, private and independent. The requirement for verifiable paper trails only diverts and delays this promise.

It seems to me that a perfect election is impossible. We know that it is impossible to get an accurate hand count of paper ballots. There are those who believe that without a paper trail, electronic voting cannot possibly be accurate. People with disabilities are unfortunately caught in the middle of this argument, now when our enfranchisement as voters is really viable for the first time. I believe that DRE machines provide people with disabilities, and all voters, the ability to vote privately, independently and securely. I urge members of the Subcommittee, the Committee itself, and the Congress to reject H.R. 811.

Ms. LOFGREN. Mr. Stewart.

**STATEMENT OF WARREN STEWART**

Mr. STEWART. Madam Chairwoman, distinguished ranking member, members of the subcommittee, thank you for inviting me to address you on this very important hearing on H.R. 811.

The most critical components of this bill are the requirement for a voter-verified paper ballot of every vote cast; the establishment of routine random hand-counted audits; the requirement that the audits be completed before the Federal race is certified; and the increased transparency and public oversight of the testing of voting machines that the bill promotes.

Responding to widespread concern about the design of existing audit trail printers, H.R. 811 would require that the paper records be printed on durable paper capable of withstanding multiple counts and recounts; and the bill also would require a verification that the voter's selections on the paper record be accessible to voters with disabilities. All of these requirements are more—are desperately needed to restore, protect and preserve the integrity of our elections; and it is absolutely critical they be implemented in time for the 2008 elections.

It is essential that the authorization in this bill be sufficient to cover the cost to counties of implementation. I have developed a cost projection to determine the authorization necessary for States to meet the proposed requirements, section 2 in H.R. 811; and I would be happy to discuss that with the members of the committee at any time. In preparing my cost projection, I organized the Nation's approximately 187,000 voting precincts into three broad categories based on the voting system employed last November for in-precinct voting.

In the first category were those precincts in which voters marked paper ballots by hand, or with ballot marking devices provided for compliance with the disability access requirements of HAVA. There were just over 46,000 such precincts in 35 States, including every precinct in 17 States. These precincts would not be required to make any changes to comply with the requirements of 811.

In the second category were those precincts where all voters voted on direct recording DRE voting systems, just over 74,000 precincts in 27 States. I'm sorry about all the numbers. To meet the requirements of 811, these precincts would need to either replace their entire voting system with a paper-ballot ballot marker system or retrofit their DREs with compliant durable and accessible voter verified paper audit printers.

Finally, there were precincts in which most voters used a paper ballot system and a DRE was provided merely for HAVA compliance, and that is about 50,000 precincts in 23 States.

There would be basically three approaches for precincts in the second two categories to meet the durability and accessibility requirements of 811. One approach would be to replace DRE systems with paper ballot optical scan systems and ballot markers. In all DRE precincts, this would require the purchase of one paper-based optical scan scanner per precinct and one ballot marker. In mixed precincts, they would only require the purchase of a ballot marking device.

The language of H.R. 811 allows the use of DREs, but only if they are equipped to provide every voter with the opportunity to review a software independent record of their votes. Technology required for such printer exists, but there are currently no add-on printers for DREs that meet these requirements.

A third approach would be to take advantage of the accessible features allowed by the computer interfaces of DRE and attach printers that would generate durable paper ballots that could then be scanned for counting and also for the special needs verification for voters that need them.

I am going to be very quick.

I base my projection on a cost average—on an average cost of 5,000 per precinct optical scanner and \$5,000 for ballot marking device. It is impossible to anticipate with certainty the cost of compliant add-on printers for existing DREs since they are not currently on the market, but each such printer would likely cost less than the cost of a precinct scanner.

Ms. LOFGREN. Mr. Stewart—

Mr. STEWART. I will be quick, sorry.

However, DRE voting systems require multiple voting machines in each precinct, compared to only one scanner. So the costs are roughly the same.

Let me just jump to the critical question here.

Ms. LOFGREN. The study would be very useful and we would like to make that a part of the record if we could.

Mr. STEWART. Just quickly to conclude. Based on my research, the costs of bringing every precinct in the country into compliance with the requirements of 811 would be more than double the \$3 million that is currently authorized in the bill; and in order to ensure that States have everything they need to meet the requirements, I urge the subcommittee to increase the bill's authorization to \$1 billion.

Ms. LOFGREN. Thank you very much.

[The statement of Mr. Stewart follows:]

WRITTEN TESTIMONY OF WARREN STEWART  
POLICY DIRECTOR, VOTETRUSTUSA  
BEFORE THE COMMITTEE ON HOUSE ADMINISTRATION,  
ELECTIONS SUBCOMMITTEE  
U.S. HOUSE OF REPRESENTATIVES  
MARCH 23, 2007

Congresswoman Lofgren, Ranking Member McCarthy, members of the subcommittee, thank you for inviting me to address you in this very important hearing. I am Warren Stewart, Policy Director for VoteTrustUSA, a national non-partisan organization serving citizen based state and local election integrity groups across the country. We believe it is essential that Congress immediately address the serious shortcomings of the electronic voting systems currently used in our federal elections. VoteTrustUSA recommends the prompt passage of Voter Confidence and Increased Accessibility Act of 2007 (HR 811) because we believe it will significantly improve the accuracy and enhance the transparency of federal elections.

The most critical components of H.R. 811 are the requirement for a voter verified paper ballot for every vote cast, which will serve as the vote of record in all recounts and audits; the establishment of routine random hand counted audits of the electronic tallies in every federal race, with more ballots audited in closer races; the requirement that the audits must be completed and discrepancies addressed before any federal race is certified; and the increased transparency and public oversight of the testing of voting machines that the bill promotes.

Responding to widespread concern about the design of the current generation of audit trail printers, HR 811 requires that the voter verified paper ballot be printed on durable paper capable of withstanding multiple counts and recounts and preserved in a manner that would not compromise the privacy of any voter. The bill would also require that the verification of the permanent paper record be accessible to voters with disabilities.

All of these requirements and more are desperately needed to restore, protect and preserved the integrity of the electoral system in the United States, and it is absolutely critical that they be implemented in time for the 2008 elections. It is essential that the authorization in this bill be sufficient to cover the cost to counties of implementation. I have developed a cost projection to determine the authorization necessary for states to meet the proposed requirements in Section 2 of HR 811.<sup>1</sup>

#### **Methodology**

In preparing my cost projection, I organized the nation's approximately 187,000 voting precincts into three broad categories based on the voting system employed last November for in-precinct voting: those employing all paper ballot voting systems, those employing all direct recording electronic (DRE) voting systems, and those in which most voters used a paper ballot system and a DRE was provided primarily for compliance with the disability access requirements of Sec. 301 in the Help America Vote Act (2002).<sup>2</sup>

In last November's general election, just over 46,000 precincts in 35 states employed paper ballot optical scan voting systems with ballot marking systems for compliance with HAVA Sec. 301 for in-precinct voting in some jurisdictions.<sup>3</sup> Such systems were employed statewide in 17 states. These precincts would not be required to make any changes to their voting systems to comply with the requirements of HR 811.

In the same election, just over 74,000 precincts in 27 states used direct recording electronic (DRE) voting systems for in-precinct voting exclusively.<sup>4</sup> To meet the requirements of HR 811, these precincts would need to either replace their entire voting system with a paper ballot optical scan system with ballot marking systems or retrofit their DREs with compliant durable and accessible voter verified audit printers.

Around 50,000 precincts in 23 states and the District of Columbia employed paper ballot voting systems for most voters and provided a DRE for HAVA compliance.<sup>5</sup> These precincts, which I will refer to as "mixed precincts", would require the replacement or retrofit of the DRE only to comply with the new requirements of HR 811.

The DREs in around 30,000 of the all-DRE precincts (13 states) were equipped with voter verified paper audit trail printers, but these printers would not meet the HR 811 requirements for durability nor accessible verification.<sup>6</sup> Similarly, DREs used for HAVA compliance in almost 27,000 of the "mixed" precincts (14 states) were equipped with voter verified paper audit printers that would not meet the requirements of HR 811.<sup>7</sup>

#### **Approaches for 811 Compliance**

There would be three basic approaches to meeting the durability and accessibility requirements of HR 811 are currently available.

One approach would be to replace DRE systems with paper ballot optical scan voting systems with ballot marking devices for HAVA compliance. In all-DRE precincts, this would require the purchase of one precinct based optical scanner per precinct and one ballot marking device. In "mixed" precincts this would only require the purchase of a ballot marking device.

The language of HR 811 allows the use of DREs, but only if they are equipped to provide every voter with the opportunity to review a software independent record of their votes that can be hand counted in post-election audits to verify the accuracy of software generated vote tallies. The technology required for such printers exists but there are no add-on printers for DREs currently available that meet these requirements. Available methodologies for printed text/character recognition with audio read-back, including off the shelf technological solutions currently marketed, could be examined for feasibility as an interim measure of providing reliable audio read-back of voter-verified paper record printouts.

A third approach would be to take advantage of the accessible features allowed by computer interface of the DRE and attach printers that would generate durable paper

ballots that could then be scanned for counting and to provide voters with special needs a means of verifying their selections on the ballot. This would have the effect of converting existing DREs into ballot marking devices that could also serve as ballot-on-demand systems.

I have based my cost projection on an average cost of \$5,000 for a precinct based optical scanner and \$5,000<sup>8</sup> for a ballot marking device. It is not possible to anticipate the cost of HR 811 compliant add-on printers for existing DREs. Each such printer would most likely cost less than the cost of a precinct optical scanner. However, DRE voting systems require multiple voting machines in each precinct, as compared to only one scanner. The cost of retro-fitting existing DREs with printers would most likely be comparable to the cost of conversion to paper ballot optical scan systems with ballot marking systems. Based on my research the cost of bringing every precinct in the country into compliance with the requirements of HR 811 would be more than double the \$300 million that is currently authorized in the bill and, in order to ensure that the states have everything they need to meet the new requirements, I urge the Subcommittee to increase the bill's authorization to \$1 billion.

The individual purchasing decisions and contract negotiations of counties combined with increased competition in the market for ballot marking devices and alternative accessible systems, including non-computerized systems will likely reduce this cost projection, but I strongly recommend that the authorization in this bill be increased to reflect the anticipated cost of implementation.

#### **Review of Options**

Optical scan or "marksense" voting systems employ a mature, familiar, and trusted technology that is used for every state lottery and has been used for decades in standardized tests.<sup>9</sup> It has been used in voting systems since the 1970s.<sup>10</sup> Every county in the country uses optical scanner to count absentee ballots. Michigan, Minnesota, Alabama and 15 other states employ paper ballot optical scan systems statewide. Transitions to such statewide optical scan systems are being contemplated in Florida, Iowa, and several other states. A resolution recommending optical scan voting systems was recently passed unanimously by the New York City Council.<sup>11</sup> Last year, both Connecticut<sup>12</sup> and New Mexico<sup>13</sup> abandoned initial plans to use DREs in favor of paper ballot optical scan systems.

Optical scan voting systems have been used successfully in facilitating early voting in many states and at least one vendor is developing an optical scanner that will feature expanded capacity for urban jurisdiction and vote centers that require the storage of an even greater number of ballot styles. Paper ballot optical scan voting systems have also proven to be significantly less expensive to operate and easier for pollworkers. Beyond the initial investment in equipment,<sup>14</sup> the inflated ongoing costs of servicing, storing, programming, and maintaining DRE voting systems that have fallen on cash-strapped counties is well documented.<sup>15</sup>

Since the passage of HAVA, innovative ballot marking systems have been developed to provide voters with disabilities and language minority voters the opportunity to privately and independently mark paper ballots, allowing jurisdictions in 33 states to retain entirely paper-based voting systems. I am aware of at least one new ballot marking device that has been submitted for EAC certification and two others that are under development. Further development of such systems is encouraged and I am pleased that authorization for the study of accessible ballot verification mechanisms is included in HR 811.

VoteTrustUSA strongly advocates the use of voter-marked paper ballot voting systems, which are fully compliant with the requirements of HR 811. HR 811 would provide funding for counties that choose to convert from DRE systems to paper ballot optical scan systems.

As for the alternative option of retrofitting DREs with printers that produce a durable paper ballot that allows accessible verification, the technology required for such printers exists but there is no add-on printers currently available that meet these requirements. Available methodologies for printed text/character recognition with audio read-back (text to speech), including off the shelf technological solutions currently marketed, should be examined for feasibility as an interim measure of providing reliable audio read-back of voter-verified paper record printouts. Such usability issues will take into account available printout designs from existing voting systems, as well as issues of privacy and secrecy of the ballot.

### **Conclusions**

Dedicated and hard working county and state level election officials across the country recognize the importance of safeguarding the security and integrity of our election process. They are justifiably concerned about federal mandates that are not accompanied by adequate funding. We applaud the chairwoman of the full committee for her call for appropriation of the Help America Vote Act authorization and we urge that a substantially increased authorization be included in H.R. 811 and that, upon passage of the bill, Congress take immediate action to appropriate the full sum and disburse it to the States to ensure that they have the time and resources to implement the essential safeguards that will be mandated by in HR 811.

In closing, I also want to bring to the attention of the Subcommittee the statement former EAC Commissioner Ray Martinez to the Financial Services Subcommittee of the House Appropriations committee at a hearing two weeks ago,<sup>16</sup> in which he described his experience in overseeing the conversion of New Mexico's electoral system from a paperless DRE system to a paper-ballot-based optical scan voting system in less than one electoral cycle. I understand that the Committee has heard from the National Association of Secretaries of State, and the National Association of Counties, each of which have argued that it is not possible to make this conversion by 2008. I think it is plainly self-evident that making such a conversion in one cycle is entirely realistic, and the example set by Governor Richardson, former Commissioner Martinez, and the State of New Mexico, demonstrates that unquestionably.

You have the power to restore, preserve and protect the integrity of the 2008 elections, and I urge you to increase the funding in this bill and ensure that it will be reported to the Floor for a vote as expeditiously as possible.

Thank you for the opportunity to address the Subcommittee.

<sup>1</sup> The most recent version of the spreadsheet containing the data used for my research is available at [http://www.votetrustusa.org/index.php?option=com\\_content&task=view&id=2339&Itemid=1222](http://www.votetrustusa.org/index.php?option=com_content&task=view&id=2339&Itemid=1222). I want to thank Verified Voting.org and Common Cause for their assistance in gathering data for this ongoing project.

<sup>2</sup> For the purposes of this cost projection it is assumed that the 15,710 precincts in New York and 637 precincts in Connecticut that used lever machines in November, 2006 will use their previously allocated HAVA funds to purchase HR 811 voting equipment and so are not included. Massachusetts recently announced their intention to use HAVA funds to purchase ballot marking devices and that state is treated, for the purposes of this study, as if they had purchased the equipment for use in November, 2006.

<sup>3</sup> States using entirely paper ballot systems statewide – Alabama, Idaho, Maine, Michigan, Minnesota, Montana, Nebraska, New Hampshire, New Mexico, North Dakota, Oklahoma, Oregon, Rhode Island, South Dakota, and Vermont. When they complete their HAVA purchases, Connecticut and Massachusetts with have statewide paper ballot systems. States with some jurisdictions using entirely paper ballot systems – Arizona, California, Colorado, Illinois, Indiana, Iowa, Kansas, Mississippi, Missouri, North Carolina, Ohio, Pennsylvania, Texas, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

<sup>4</sup> States using DRE systems exclusively for in-precinct voting statewide – Delaware, Georgia, Louisiana, Maryland, Nevada, South Carolina, Tennessee, and Utah. States in which some jurisdictions used DRE systems for all in-precinct voting – Arkansas, California, Colorado, Florida, Illinois, Indiana, Iowa, Kansas, Kentucky, Mississippi, New Jersey, North Carolina, Ohio, Pennsylvania, Texas, Virginia, Washington, West Virginia, and Wisconsin.

<sup>5</sup> States employing paper ballot voting systems and DREs for in-precinct voting statewide – Alaska, District of Columbia and Hawaii. States in which some jurisdictions employed paper ballot voting systems and DREs for in-precinct voting – Arizona, Arkansas, California, Colorado, Florida, Illinois, Indiana, Iowa, Kansas, Kentucky, Missouri, North Carolina, Ohio, Pennsylvania, Texas, Virginia, Washington, West Virginia, Wisconsin, and Wyoming. For the purposes of this analysis, “mixed” precincts do not include precincts in Connecticut and New York that employed lever machines and an accessible BMD or DRE (see note 2 above).

<sup>6</sup> States using exclusively DRE with VVPAT printer for in-precinct voting – Nevada and Utah. States in which some jurisdictions used exclusively DRE + VVPAT printer for in-precinct voting – Arkansas, California, Colorado, Illinois, Mississippi, New Jersey, North Carolina, Ohio, Washington, West Virginia, and Wisconsin.

<sup>7</sup> States with “mixed” precincts, employing DREs with VVPAT printer for in-precinct voting statewide – Alaska, and Hawaii. States with “mixed” precincts employing DREs with VVPAT in some jurisdictions – Arizona, Arkansas, California, Colorado, Illinois, Missouri, North Carolina, Ohio, Washington, West Virginia, Wisconsin, and Wyoming.

<sup>8</sup> These estimates are based on discussions with representatives of voting equipment and a survey of available actual costs incurred by several states in purchasing precinct based optical scanners and ballot marking devices from various manufacturers and third party vendors.

<sup>9</sup> [http://en.wikipedia.org/wiki/Optical\\_scan\\_voting\\_system](http://en.wikipedia.org/wiki/Optical_scan_voting_system)

<sup>10</sup> A discussion of optical scan voting technology can be found in the EAC testimony of Michael Clingman, Oklahoma Election Director, [www.eac.gov/docs/June%20%20Optical%20Scan%20-%20Clingman.doc](http://www.eac.gov/docs/June%20%20Optical%20Scan%20-%20Clingman.doc).

<sup>11</sup> [www.nycouncil.info/issues/intros\\_act.cfm?intro=Res%200131-2006](http://www.nycouncil.info/issues/intros_act.cfm?intro=Res%200131-2006)

<sup>12</sup> See [http://www.sots.ct.gov/releases/2006/9-13-06-](http://www.sots.ct.gov/releases/2006/9-13-06-25TownsChosenToUseOpticalScanMachinesThisYear.pdf)

[25TownsChosenToUseOpticalScanMachinesThisYear.pdf](http://www.sots.ct.gov/releases/2006/9-13-06-25TownsChosenToUseOpticalScanMachinesThisYear.pdf)

<sup>13</sup> [www.freenevmexican.com/news/40228.html](http://www.freenevmexican.com/news/40228.html)

<sup>14</sup> [www.nyvv.org/doc/AcquisitionCostDREvOptScanNYS.pdf](http://www.nyvv.org/doc/AcquisitionCostDREvOptScanNYS.pdf)

---

<sup>15</sup> <http://www.votersunite.org/info/costcomparison.asp>,  
<http://www.votersunite.org/info/MiamiInitialReportfromSoE.pdf>, [http://www.utahcountvotes.org/US/EhrlichLetter\\_20060215.pdf](http://www.utahcountvotes.org/US/EhrlichLetter_20060215.pdf)

<sup>16</sup> The transcript has been requested from the financial Services subcommittee for submission for the record of this hearing.

Ms. LOFGREN. And now we are going to turn to our last witness. Commissioner Mahoney, thank you so much for being here.

**STATEMENT OF COMMISSIONER GAIL W. MAHONEY**

Ms. MAHONEY. Thank you and to both Chairwomen and to Ranking Member McCarthy, and certainly to Congressman Ehlers from the great State of Michigan where I come from.

My name is Gail Mahoney, and I am representing the National Association of Counties today, all of your constituents back home; and it is my pleasure to be here and to have the opportunity to speak for NACo. To be the cleanup woman at the end, I really should be allowed just a couple extra minutes, but as long as—

Ms. LOFGREN. Until the bell rings.

Ms. MAHONEY. My testimony is in the record and all of the documents that we have asked to be entered into the record. I am just going to applaud, first of all, your leadership and concern for trying to ensure public confidence in our democracy.

I do support the goals of H.R. 811. Every voter must have confidence that their vote counts, that the candidates that they have chose will be counted, and that those things can be audited. We do support it.

But the main thing is that the intent is going to totally bring results that we don't want. I think voter confidence will totally be eroded, because this bill, being rushed at this point, will cause people to think less of the voter system if we rush this for 2008.

There is no way the counties have the money; it is an unfunded mandate.

I am from the great State of Michigan, like I said, and certainly the State of Michigan cannot fund again. We do use optical scan in Michigan, but right now there are counties that have the DREs. There is no way by 2008 that those systems can be changed to meet this deadline.

So we certainly do not want a *deja vu* to occur. The deadlines that proceed the standards, the National Institute of Standards and Technology would be issuing guidelines for experimental new forms and ballot scanning technology 2 years after it reaches the polling places in America, which requires starting to use the equipment before it has even been mandated.

So we just want to ensure public confidence in the next generation of voting equipment. We urge you to try to slow down this legislation and give us an opportunity to have HAVA to work as it was intended. And had HAVA had the support financially and the time frame that was originally intended, we would not be here today. We would not be attempting to scrap billions of dollars of equipment that cannot feed your constituents back home.

So, certainly, the waste of tax dollars. We will not be ready.

And so we would just like finally to urge you to—a uniform ballot and standard voting equipment would be impractical. It will stifle innovation for the future and greatly magnify the efforts of unintended consequences.

Our Nation should not look for a single dramatic solution, but for a sustained effort to make improvements and eliminate sources of error.

Thank you very much for the opportunity to testify before you today on behalf of NACo.

Ms. LOFGREN. Thank you so very much.

[The statement of Ms. Mahoney follows:]

Chairwoman Lofgren, Ranking Member McCarthy and Members of the Subcommittee on Elections:

My name is Gail W. Mahoney. I am a county commissioner from Jackson County, Michigan. I am pleased to provide testimony today on behalf of the National Association of Counties.

I applaud your leadership and concern for ensuring public confidence in our democracy. I support the goals of H.R. 811. Every voter must have the confidence that their vote is counted for the candidates of their choice and it is important to be able to audit our elections.

But this bill will do the opposite of what you intend. It will destroy public confidence because the presidential election of 2008 will be a disaster.

I would like to insert into the record a copy of a letter we recently sent to every member of Congress and a letter from both the National Association of Counties and the National Conference of State Legislatures citing our deep concerns with this legislation.

Had the Help America Vote Act worked as intended, you would not be considering legislation to scrap more than a billion dollars of voting equipment and start over. The Election Assistance Commission was supposed to issue voting systems in 2004 that would have allowed counties to make decisions about voting equipment for 2006 based on standards and independent testing.

But they did not have the resources to do so.

As a result, NACo supported legislation more than two years ago to postpone the implementation deadline for the Help America Vote Act. I would like to insert a copy of that legislation and our letter of support into the record.

And more than a year and a half ago we joined with VoteTrust USA and others represented here today in calling for a temporary reprieve on enforcement of the Help America Vote Act until the Election Assistance Commission could complete research, standards development and testing of voting equipment. I would like to insert a copy of that letter into the record.

I wish we could turn back the clock and ensure that federal standards for new voting equipment had been written and sufficient time had been provided for states to test and certify equipment before Congress required its use in elections for federal office. We cannot. But we can learn from the experience. I have asked that these materials be inserted into the record because “those who fail to learn from the mistakes of their predecessors are destined to repeat them”.

H.R. 811 would be déjà vu. Deadlines would precede standards. The National Institute for Standards and Technology would be issuing guidelines for experimental new forms of ballot scanning technology two years after every polling place in America would be required to start using the equipment.

If you want to ensure public confidence in the next generation of voting equipment, please do not require counties across the nation to purchase another round of equipment when we don't know what we're buying and will probably have to junk it again before the next federal election.

Even if there were no requirement for next-generation technology, it would be impossible for counties that are currently using DREs to replace their voting equipment by 2008. There simply is not enough time to enact state conforming legislation, do testing and procurement, develop training materials and train election officials, pollworkers and voters in how to use equipment they have never used before.

This legislation is a one-size fits-all approach that will not fit all. And by requiring states and counties to make dramatic, cumbersome and often completely unnecessary changes to their laws and procedures in time for the 2008 election it also increases opportunities for some parts of the system to fail.

It would also impose an enormous unfunded mandate on counties. I would like to insert into the record a copy of written testimony from my colleague who could not be here today, Commissioner Ray Feikert from Holmes County, Ohio. In many counties in this nation you will be replacing an entire fleet of voting equipment for the second or third time in less than a decade. And if you require every polling

place to buy some sort of new ballot scanner, then the federal government issues standards two years later, you will likely be replacing those scanners again before the presidential election in 2012. This is a complete waste of taxpayer money that does little to bolster confidence in our elections. We can't feed people with those machines after we junk them.

Finally, I would like to submit for the record a report of the National Commission on Election Standards and Reform issued six years ago in the aftermath of the 2000 Presidential election. This Commission was formed by NACo and the National Association of County Recorders, Election Officials and Clerks. Many of our recommendations were adopted as part of the Help America Vote Act of 2002. I urge the committee to review and consider the remaining recommendations.

I close with a quote from that report:

A uniform national ballot or standard voting equipment would be impractical, stifle innovation for the future, and greatly magnify the effects of unintended consequences... Our nation should not look for a single dramatic solution but for a sustained effort to make improvements and eliminate sources of error.

Thank you for the opportunity to provide testimony on behalf of the National Association of Counties. I look forward to answering any questions.



**Testimony of Commissioner Gail W. Mahoney  
Jackson County, Michigan  
Chair, NACo Finance and Intergovernmental Affairs Committee**

**Before the U.S. House of Representatives  
Committee on House Administration  
H.R. 811**

**March 23, 2007**

Chairwoman Millender-McDonald, Ranking Member Ehlers, and members of the House Administration Committee:

My name is Gail W. Mahoney. I am a county commissioner from Jackson County, Michigan and a member of the Board of Directors of both the Michigan Association of Counties and the National Association of Counties (NACo). I have served for more than a decade and am currently the chair of NACo's Finance and Intergovernmental Affairs Committee, which has jurisdiction on NACo policy regarding election reform.

I am pleased to provide testimony today on behalf of the nation's counties.

Established in 1935, the National Association of Counties (NACo) is the only national organization representing county governments in Washington, D.C.

Thank you for holding this hearing. I applaud your leadership and concern for ensuring public confidence in our democracy. County officials, members of Congress and American voters all want the same thing: to ensure public confidence in the accuracy and integrity of our elections. However, H.R. 811 will undermine public confidence in our elections by imposing impractical requirements under unrealistic deadlines and will needlessly subject counties to tremendous financial burdens. And county election officials must cope with these changes in the face of the fast-approaching and critical election of the next President of the United States.

Had the Help America Vote Act worked as intended, this committee would not likely be considering legislation to scrap more than a billion dollars of voting equipment and start over. But the Election Assistance Commission did not have the resources to issue voting

system standards in 2004 despite a statutory requirement to do so in the Help America Vote Act.

As a result, NACo supported legislation introduced more than two years ago, H.R. 3163, that would have postponed the implementation deadline for the Help America Vote Act. This legislation would have allowed counties to make decisions about voting equipment based on federal standards and independent testing. I would like to insert a copy of that legislation and our letter of support into the record.

And more than a year and a half ago the National Association of Counties, along with the California State Association of Counties, the County Commissioners Association of Pennsylvania and the Texas Association of Counties joined with VoteTrust USA and others represented here today in calling for a temporary enforcement reprieve until the Election Assistance Commission could complete research, standards development and testing of voting equipment. I would like to insert a copy of that letter into the record.

I wish we could turn back the clock and ensure that federal standards for new voting equipment had been written and sufficient time had been provided for states to test and certify that equipment before Congress required its use in elections for federal office. We cannot. But we can learn from the experience. I have asked that these materials be inserted into the record because, as it has often been said, "those who fail to learn from the mistakes of their predecessors are destined to repeat them."

In this respect H.R. 811 would be *déjà vu*. Deadlines would precede standards for voting equipment. Section 2(b) directs the National Institute of Standards and Technology to issue guidelines for experimental new forms of ballot scanning technology by 2010, but every polling place in America would be expected to start using the equipment in 2008.

H.R. 811 also replicates another shortcoming of the Help America Vote Act – it would result in confusion and litigation over how to interpret vague statutory mandates. Section 2(c) adds a long list of new requirements for voting equipment to Title III of the Help America Vote Act. But it does not provide for any federal guidance, before these requirements would take effect in 2008, on such questions as the starting point for documenting the chain of custody for voting system hardware and software or the definition of archival quality paper. Nor does it provide flexibility for each state to determine its own answers to these questions.

If you want to ensure public confidence in the next generation of voting equipment, please do not require counties across the nation to purchase another round of voting equipment before we know what we're buying. Work with the Election Assistance Commission, the National Institute of Standards and Technology and the states to write standards and test and certify voting equipment before you require that it be used to conduct an election for President of the United States.

Even if there were no requirement for next-generation technology – and this legislation simply required every state to use optical scan ballots and ballot-marking equipment that

other states are already using – several county election officials have told me that it would be impossible for them to replace their existing voting equipment by 2008. There simply is not enough time to enact state conforming legislation; meet testing and procurement requirements; develop training manuals; and train election officials, pollworkers and voters in the use of new voting equipment.

Deadlines and ambiguity are not our only concerns with H.R. 811. Neither is funding – although this legislation certainly presents an enormous unfunded mandate as Commissioner Feikert will testify. A third major area of concern is that this legislation offers a one-size-fits-all approach that simply would not fit all. There is no reason for legislation to require that a particular sign in the polling place be printed in boldface or in all upper-case letters. And a requirement for transparent audits and a random hand count of a percentage of ballots need not specify 14 pages of detailed, federally-mandated procedures. This kind of specificity is not just unnecessary but stifles innovation. By requiring states and counties to make dramatic, cumbersome and often completely unnecessary changes to their laws and procedures, it also increases opportunities for some part of the system to fail.

I would like to submit for the record a copy of a recent letter that we sent to every member of Congress. It includes the full text of our recent resolution opposing H.R. 811. I would also like to submit for the record a letter from both the National Association of Counties and the National Conference of State Legislatures citing our deep concerns with this legislation.

As that letter indicates the requirements of H.R. 811 are impractical and its deadlines are unrealistic. This legislation would:

- Erode the integrity of the voting process and diminish voter confidence;
- Rush new voting technology to market without testing or certification, and without adequate time for pollworker training and voter education;
- Exacerbate the spiral of escalating election administration costs that, for many counties, have doubled or even tripled in the last five years; and
- Undermine existing efforts by the National Institute of Standards and Technology and the Election Assistance Commission to develop meaningful federal standards for voting equipment and provide for independent testing and certification of voting systems.

Finally, I would like to submit for the record a report of the National Commission on Election Standards and Reform issued six years ago in the aftermath of the 2000 Presidential election. This Commission was formed by NACo and our affiliate organization that represents county election officials, the National Association of County Recorders, Election Officials and Clerks. Many of our specific recommendations were adopted as part of the Help America Vote Act of 2002. I urge the committee to review and consider the remaining recommendations, such as ongoing federal funding for the administrative costs of federal elections and a reduced postal rate for election mail.

The National Association of Counties would support legislation to ensure the accuracy and integrity of voting systems and the transparency of election audits that was developed in consultation with county officials across the nation who are responsible for administering federal elections. But I close with a quote from our 2001 report:

“The Commission recommends that reform should be undertaken within the present system rather than by creating new systems or imposing nationwide procedures on states and local governments.... [A]ttempts at nationwide uniformity, such as a uniform national ballot or standard voting equipment, would be impractical, stifle innovation for the future, and greatly magnify the effects of unintended consequences... [O]ur nation should not look for a single dramatic solution but for a sustained effort to make improvements and eliminate sources of error.”

Thank you for the opportunity to provide testimony on behalf of the National Association of Counties. I look forward to answering any questions.



**Testimony of Commissioner Ray Feikert  
Holmes County, Ohio**

**Before the U.S. House of Representatives  
Committee on House Administration  
H.R. 811**

**March 23, 2007**

Chairwoman Millender-McDonald, Ranking Member Ehlers, and members of the House Administration Committee:

My name is Ray Feikert. I am a county commissioner from Holmes County, Ohio, a county with 17,845 registered voters situated midway between Columbus and Cleveland. I serve on the Board of Trustees of the County Commissioners Association of Ohio. I also serve on the Finance and Intergovernmental Affairs Committee of the National Association of Counties, which has jurisdiction over NACO policy on election reform and on unfunded mandates in general.

Commissioner Mahoney has discussed our substantive concerns with the requirements of H.R. 811. I would like to focus on the cost.

The Help America Vote Act has doubled and tripled the costs of running elections in counties across the country. The funding that we received in Ohio for the Help America Vote Act paid for the up-front costs of purchasing equipment. It did not pay for personnel, training, storage, or service contracts on the equipment. Before the Help America Vote Act, we used to be able to run an election in Holmes County for approximately \$8,000. Now that cost is well over \$20,000.

I doubt that any of you intend for H.R. 811 to become an unfunded mandate on counties across the nation. And I assume this committee will dramatically increase the funding level in this bill before you send it to the floor of the House of Representatives. But every college student who has ever taken a political science class knows that the authorized funding amount is not worth the paper it's printed on.

I wonder whether the United States Congress has the political will to pay for this mandate once it has been passed and signed into law. Other witnesses have testified today that the costs of simply replacing voting equipment that does not provide a durable paper ballot

will be at least \$1 billion. And that does not include the costs of replacing more than a single DRE or precinct-scanner per polling place, of counting up to 10 percent of the ballots in every federal election by hand, indirect costs or expenses for federal agencies such as the Election Assistance Commission and the National Institute of Standards and Technology. Where will that money come from? What programs will you cut or taxes will you raise between now and the next election to pay for it?

The National Association of Counties and the National Conference of State Legislatures agreed to support the Help America Vote Act in part because the leadership of the House of Representatives offered a promise to state and local governments that Congress would provide the full authorized funding level for the Help America Vote Act. But states and counties had to beg for funding for the first two years and never received any funding for the third year. And we have not heard of any promises being made to fund H.R. 811.

In fact, this is not simply an unfunded mandate. It is a waste of taxpayer money that does little to bolster confidence in the integrity of our elections. In many counties in this nation you will be replacing an entire fleet of voting equipment for the third time in less than a decade. And if you require every polling place in the country to buy some sort of new ballot scanner, and then the federal government issues standards two years later, you will likely be replacing those scanners again before the presidential election in 2012.

There were counties using electronic voting equipment long before the Help America Vote Act. But there are also counties that were leery of electronic voting from the beginning. Many of the officials in those counties had hoped the controversy over electronic voting equipment would lead Congress to take a step back and allow more cost-effective ways of voting. This might be done without taking away the ability for visually impaired voters to vote privately or independently if, for example, counties could instead provide guaranteed transportation or home delivery of audio voting equipment, or develop more low-cost voting equipment such as tactile ballots.

But we seem to be going in the opposite direction.

I thank you for the opportunity to testify and look forward to answering any questions.

Ms. LOFGREN. And we are going to limit ourselves again, if we could, to 3 minutes of questions; and I will ask Mr. Runyan, who is from my county, what you would recommend be deployed in those precincts that have paperless DREs currently deployed.

Mr. RUNYAN. What would be deployed in terms of Holt or what would be—

Ms. LOFGREN. What do you recommend in terms of accessibility as well as accountability?

Mr. RUNYAN. Well, I think, as Secretary of State Debra Bowen had pointed out, that one of the better solutions today is a blended solution with optical scan and accessible ballot marking systems; and that would be, as is in my report, my general recommendation for most areas.

Ms. LOFGREN. And do those systems already exist?

Mr. RUNYAN. Yes. Right. There are systems like this. They have been tried. They are certified and they have been used in several different States.

A good model is New Mexico, where they completely threw out the DRE machines and replaced them; and it was actually cheaper than what they were going to have to do to upgrade their systems.

Ms. LOFGREN. I am going to yield to Mr. McCarthy in view of the time.

Mr. MCCARTHY. I just want to thank all the panelists for coming and testifying. I do want to thank the Chairwoman for holding this examination of H.R. 811 and for the panels that we had earlier this week and last week.

I think something that I take from this, kind of from all the witnesses, whether they support or oppose, there is still work that needs to be done on this bill.

Ms. MAHONEY. Absolutely.

Mr. MCCARTHY. For it to be more money, for it to be what you mandate. And it sounds like everybody wants to work towards it, that, yes, there is a place people want to get to, but it doesn't seem like this bill is done yet. And we have an election fast approaching.

And what is an interesting point—and one of our first individuals that was testifying today was the Governor of Florida, and as he begins to move on the improvements he has made down there, regardless of where this bill goes, he is moving up his election. And to make a dramatic shift prior to an election, especially when you have a Presidential election—you have a lot of the States moving their primary up—I do think we have a goal of what to work towards.

The bill has some concepts in there I think people want to work on, and I look forward to working with everyone, trying to produce a bipartisan bill and something that everybody can agree to.

Ms. LOFGREN. Madam Chairwoman.

The CHAIRWOMAN. First of all, I would like to have everyone who is here today know that this panel has submitted a letter to the appropriators, asking for the remaining \$800 million; and of course, as we have heard today, that may just be a drop in the bucket. But at least this committee has gone forward with the whole notion of trying to get the rest of the money from HAVA.

Mr. Stewart, in your testimony, you stated that the jurisdictions would be able to implement these changes before 2008. What are

you basing that on? Whereas Conny McCormack, the Registrar Recorder/County Clerk in my County of Los Angeles, sent me a letter stating that mandating major changes to the 2008 election cycle would invite significant problems.

Mr. STEWART. I would point to the fact that Governor Crist is intending to make changes which are like the H.R. 811 changes before his primary in February. The fact that New Mexico switched from DRE voting to optical scan in the course of about 2 months, it is not optimal. They received their scanners in August of 2006, and they were using them in early voting in October.

I would point to—in my written testimony, I make reference to the former EAC Commissioner, Ray Martinez, who spoke to the Financial Services Subcommittee of the Appropriations Committee a couple of weeks ago and described his experience. He was engaged as a consultant for the State of New Mexico in overseeing that implementation. It wasn't optimal time, but they did succeed and had a successful election in doing that.

I would also look at other States that have made that change relatively quickly. I would say, moving to a less complicated system like an optical scan system, which is easier for poll workers to be trained to use, would also facilitate the implementation of this bill.

The CHAIRWOMAN. Just a statement: Commissioner Mahoney did say that there would be challenges if this bill would come into play for 2008, especially for county election officers.

Thank you, Madam Chairwoman.

Ms. LOFGREN. Mr. Ehlers.

Mr. EHLERS. Thank you, Madam Chair.

First of all, I want to apologize to the panel for rushing your testimony. We don't like it that way, but the floor rules around here. When we have to be down there to vote, we have to be down there to vote.

I do appreciate the comments and the testimony offered. We had a couple of hearings on this bill last year. We have now had this hearing. I think we have heard ample testimony. It is pretty clear what the different individuals and groups think, and it is also very clear that this is something that is going to be very difficult to rush just because of the difficulty of implementing something like this very quickly, particularly since we haven't even ended paying for the last changes made.

Given our current budget situation, it is going to be hard to scrape up a lot of money out of the Congress to rush this through. That doesn't mean it can't be done, but it is going to take State and local money to do it if you want it done by that date. The direction, I think, is pretty clear.

As I mentioned earlier, I will be preparing some amendments or a substitute to try to include a number of the comments that have been made here. Thank you to all of you for being here. Thank you, especially, Commissioner Mahoney; we appreciate you being here and representing the great State of Michigan.

Actually, I am amazed at how well we have done in Michigan under HAVA with the optical scan. The only problem I know of last year was caused by the incompetence of a certain city clerk who then proceeded to lose her own election. So incompetence has its own reward.

So we appreciate the work you have done. We appreciate your comments and that applies to everyone who is here. Thank you very much.

Ms. LOFGREN. Thank you very much.

The CHAIRWOMAN. Madam Chair, I have a point of personal privilege.

Thank you so much for this hearing today. We had excellent panelists, and I agree with the Ranking Member of the full Committee in saying they had to rush through, but we got the idea. So thank you very much for this.

Ms. LOFGREN. Thank you very much. And I just appreciate everyone who has taken their time to share their expertise.

And I would note, Mr. Stewart, the analysis that you have done will be enormously helpful. I am not aware of anyone else who has done that, and we don't actually have a hard copy of it, so if we could get that from you, that will be so useful.

Mr. STEWART. Would you prefer it on disk or by e-mail? Anyway, I can work it out with your staff.

Ms. LOFGREN. Thank you very much and thanks to all of you.

The subcommittee will hold the record open for 5 days for members and witnesses who wish to submit additional materials in writing.

And, again, thank you so much. The hearing is adjourned.

[Whereupon, at 12:17 p.m., the subcommittee was adjourned.]

[The information follows:]

Insert:

I am writing to ask you to oppose the Holt Bill in its entirety. HR 811 contains many dangerous provisions that, if implemented, will subvert our democratic processes and our ability to have citizen oversight over our elections:

- It has a huge unfunded mandate (estimated \$4 billion to pay for the text conversion device alone) that will send our cities and towns deeply into debt.
- It mandates nonexistent, untested and uncertified equipment (text conversion device) for use in the 2008 elections.
- It makes permanent the EAC and thereby centralizes electoral regulation and control, giving unprecedented and undemocratic power to the White House over the nation's elections.

The EAC as an entity composed of four presidential appointees, even in an officially non-regulatory role wields inappropriate power over our national elections through its voting equipment certification program and its "voluntary" voting system guidelines. According to a recent GAO report, up to 44 states require compliance with federal voting system guidelines, which effectively makes the EAC program regulatory. In addition to the affront this manifests to our concept of decentralized power, the EAC voting system guidelines and certification program place an emphasis on technology over democracy, proposing high tech, high cost, pie in the sky solutions that are unworkable and will destabilize our election systems nationwide. This is a national security threat we can not afford. The EAC must be abolished per the HAVA directive to sunset it in 2006. Any necessary and positive functions it serves can be reassigned as shown below.

The untenable and unworkable nature of the Holt Bill proposals are evidenced in its universal rejection by all state and local election officials as represented by the National Association of Secretaries of State, the National Conference of State Legislators, and the National Association of Counties. They unilaterally understand the unfunded costs required to implement this bill, the unrealistic timelines, and the threat it represents to state sovereignty.

One analysis indicates that in order for our state to comply with the EAC-recommended and Holt-mandated text conversion requirement, it would have to do some or all of the following in time for the 2008 elections:

- Completely redesign its ballot, possibly in a technology-friendly but non-voter-friendly manner
- Revise its election laws to support the new ballot design and technology
- Purchase entirely new election equipment for the entire state

The destabilizing effect these actions would have on the state of New Hampshire and the ability of its citizens to exercise their Constitutional right to vote in free, fair, and open elections would be multiplied as each state across the nation attempts to comply with these requirements according to its own particular election configurations.

Although I am not your constituent, I am asking you to represent the nation by opposing this bill completely, to not offer any amendments, but rather to work with us on better and more realistic solutions that will further election integrity for our nation.

Suggestions for alternate legislation may be found in the references below.

Sincerely,

NANCY TOBI.

The EAC's functions, as described on its website, are listed here in bulleted format, with suggested handover to other entities in ALL CAPS:

\* Generate technical guidance on the administration of federal elections.—HAND OVER TO NIST & STANDARDS BOARD

\* Produce voluntary voting systems guidelines.—HAND OVER TO NIST & STANDARDS BOARD

\* Research and report on matters that affect the administration of federal elections.—HAND OVER TO STANDARDS BOARD & CITIZENS GROUP

\* Otherwise provide information and guidance with respect to laws, procedures, and technologies affecting the administration of Federal elections.—HAND OVER TO STANDARDS BOARD & CITIZENS GROUP

\* Administer payments to States to meet HAVA requirements.—HAND OVER TO GENERAL SERVICES ADMINISTRATION

\* Provide grants for election technology development and for pilot programs to test election technology.—ELIMINATE THIS FUNCTION

\* Manage funds targeted to certain programs designed to encourage youth participation in elections.—HAND OVER TO FEC

\* Develop a national program for the testing, certification, and decertification of voting systems.—HAND OVER TO NIST & STANDARDS BOARD

\* Maintain the national mail voter registration form that was developed in accordance with the National Voter Registration Act of 1993 (NVRA), report to Congress every two years on the impact of the NVRA on the administration of federal elections, and provide information to States on their responsibilities under that law.—HAND OVER TO FEC

\* Audit persons who received federal funds authorized by HAVA from the General Services Administration or the Election Assistance Commission.—HAND OVER TO GAO

\* Submit an annual report to Congress describing EAC activities for previous fiscal year.—HAND OVER AS APPROPRIATE TO ENTITIES PICKING UP FUNCTIONS AS DESCRIBED ABOVE

References:

Request by Voters: Alternate legislative recommendation <http://www.wethepatriots.org/HAVA/requestbyvoters.pdf>

Concept proposal for federal election reform legislation <http://electionarchive.org/ucvInfo/US/EI-FedLegProposal-v2.pdf>

Nancy Tobi podcast interview with Bob Fittrakis of Ohio's FreePress.org: (Audio podcast: Why mandated equipment in Holt does not exist and will not exist in time for their mandated 2008 timeline and what this means to the nation) <http://www.democracyfornewhampshire.com/node/view/3661>

Why the Election Assistance Commission must be abolished: Centralized executive power and bloodless coups <http://www.democracyfornewhampshire.com/node/view/3657>

What's wrong with the NEW Holt Bill (HR 811)? (13 bulleted points) <http://www.democracyfornewhampshire.com/node/view/3572>

National Association of Counties and National Conference of State Legislatures urge Congress to oppose federal election reform (why state and local election officials and legislators oppose the bill) <http://www.democracyfornewhampshire.com/node/view/3687>

NASS Approach to Federal Legislation (why top state election officials oppose Holt) <http://www.democracyfornewhampshire.com/node/view/3687>

**REQUEST BY VOTERS:  
To amend the bill formerly known as H.R. 550 (aka the "Holt bill") with  
remedies and recommendations for removing obstacles to democratic  
elections**

January 3, 2007

Dear Honorable Representative \_\_\_\_\_,

i. We are a coalition of national and local individuals and groups working on meaningful election reform. We understand that the bill formerly known as H.R. 550 and other proposed election reform legislation are targeted for passage in the upcoming congressional session starting on January 4, 2007. We believe there is a need to amend the bill formerly known as H.R. 550, of which you are a sponsor.

ii. Congressman Holt has indicated that he is amenable to changing the language of this bill. As of the date of this letter, those proposed changes have not been made public. Unless these proposed changes address our concerns, our recommendations regarding this or any other proposed legislation to address election problems remain as stated herein.

iii. **A recent Zogby poll shows that 92% of the American public wants the right to view vote counting and obtain information about it**, making a very strong case *for* transparency and *against* secret vote counting outside the observation of the public. We believe that fiscally responsible and secure solutions will ensure transparency and restore full validity to all future election results for millions of voters across America.

iv. **Whereas HAVA and many proposed legislative amendments are written to enable technology-based elections, our remedies are written to enable democratic elections. The question of if and how technology is integrated into elections must build off of this foundation, and not vice versa.**

v. We wish to acknowledge your and Congressman Holt's support for election integrity that led to the development and co-sponsorship of H.R. 550 to amend HAVA in early 2004. However, in the years since H.R. 550's first introduction, revelations about electronic voting and HAVA outcomes undermine the bill's original purpose. We describe these in detail below.

vi. In light of our work in the area of election integrity, we ask you to consider the strategy as described below. We have submitted our remedies and recommendations to some of the most experienced election officials in the nation, and have received their support. Our proposal reflects years of work to restore the democratic processes required to support the American Republic as envisioned in the U.S. Constitution. Your leadership in enacting the remedies described below is an important first step towards this goal.

## VII. REMEDIES

- 1) **PAPER BALLOTS** – Amend HAVA to require durable voter-marked, paper ballots, *which are defined as those ballots used in the first count*, as the legally defensible gold standard for determining voter intent. The voter-marked paper ballot is auditable, durable, observable, efficient, and reliable. Federal law (the Voting Rights Act) requires voting records be kept for 22 months following every federal election. The use of electronic voting machines severely hinders our ability to comply with this mandatory retention of voting records. States that choose, in the administration of their elections, to follow federal HAVA leadership, will then be able to quickly implement sane and sensible checks and balances into their voting systems.
  - a. This amendment shall also encourage states, through appropriate incentives, to implement checks and balances appropriate to democratic elections such as parallel hand-count verifications on election night, and financially feasible and accessible recounts.
  - b. Additionally, paper ballots for all voting systems are required in order for states to comply with existing federal law regarding information technology (IT) disaster recovery plans. Pursuant to the E-Government Act of 2002, Pub. L. No. 107-347, 44 U.S.C. 3531 et seq., Title III, Federal Information Security Management Act (FISMA), all states must have viable disaster recovery plans for all IT-based systems. Paper ballots requirement shall include language to enforce this existing law.
  
- 2) **FREEDOM OF ACCESS TO ELECTIONS INFORMATION** – Amend HAVA to require elections-related information at the local, state and federal levels be made available to any person under the civil rights principles embodied in the Freedom of Information Act in a way that addresses the special circumstances in elections.
  - a. All information necessary to validate elections must be produced by the voting system and its accompanying elections procedures;
  - b. When information to validate the election is requested, it must be provided *before* recount and contest periods have expired;
  - c. The information must be provided in a usable and cost-effective manner;
  - d. There will be no restrictions imposed by proprietary claims, nor shall access to information be placed outside of governmental custody.
  
- 3) **RESTRUCTURE THE ELECTION ASSISTANCE COMMISSION (EAC)** – The EAC was established in the Help America Vote Act to help implement the Act through 2006. There is no longer any meaningful purpose in continuing to fund and maintain the EAC. Remove the Commissioners and the inherent political nature of the Agency. Turn the Agency over to the 50-state representational Standards Board, rename it the National Election Standards Board, hire a new administrative staff, and add a 50-state citizens' representational body to jointly assume most of the functions currently filled by the EAC.<sup>1</sup>

## VIII RECOMMENDATIONS

- 1) **ACCOUNTABILITY STUDY** – We recommend a comprehensive GAO report to assess HAVA, monies spent and disbursed, and subsequent end results. This report will provide an analysis of vote tabulation systems including both hand-counted paper ballot and electronic systems (such as DRE touch screen and optical scan). This report will also include a study of the applicability of e-voting products for the nation’s election systems, and the efficacy of the Election Assistance Commission (EAC) Certification program.
- 2) **CONGRESSIONAL COMMITTEE** – We recommend a congressional committee to study the election crisis and hold public hearings. This special committee would work closely with a 50-state representational task force including state and/or local election officials, and an equal number of individuals and representatives from interested citizen groups. This committee would issue a report recommending state-based electoral reforms.

ix. *New information available since the original introduction of H.R. 550 includes the following:*

- **Discoveries by computer security experts that the nation’s e-voting systems are vulnerable to unacceptably high rates of failure as well as unacceptable exposure to the insertion of malicious programming.**<sup>2</sup>
- **Evidence that software can be configured to create an electronic recording of a result that is different from that shown on the “paper trail” generated from a printer attached to a DRE.**
  - The Election Science Institute (ESI) study of Cuyahoga County, Ohio’s primary election showed 1.4% of Voter Verified Paper Audit Trail (VVPAT) cartridges exhibited missing ballots; 16.9% of VVPAT tapes showed a discrepancy of one to five votes between the tally of ballots and the electronically recorded results; and 2.1% showed a discrepancy of over 25 votes.<sup>3</sup>
  - In the same ESI study, team members discovered that of 40 VVPAT tapes, 9.6% were either destroyed, blank, illegible, missing, taped together or otherwise compromised.
  - In Denver County, Colorado VVPATs contained gibberish instead of legitimate voter choices, and that printer jams rendered VVPAT unsuitable for use in recounts or audits.<sup>4</sup>
  - Doug Jones, Associate Professor of Computer Science, University of Iowa, testified that paper trails are sufficiently unreadable that only a small fraction of voters can actually view them.<sup>5</sup>
  - Additionally, the use of DREs routinely disenfranchises voters, through DRE failure, or just because the limited availability of DREs per jurisdiction is a cause of long voter lines and limited access to voting.<sup>6</sup>
- **Evidence that the e-voting solutions implemented to address voter disabilities do not do so.** Providing an accessible voting system for persons with disabilities was a major rationale for HAVA. Noel Runyan, an accessibility engineer, testified in the Colorado lawsuit<sup>7</sup>

that *none of the major voting system vendors' VVPAT systems met federal disability requirements, particularly for voters with visual disabilities.*

- **Preliminary recommendations by the National Institute of Standards and Technology (NIST) to universally decertify paperless and DRE paper trail technologies in the federal 2007 voting system guidelines, citing the non-auditability and high risk factors for DRE touch screens.** Legislation supporting investment in a voting technology that is soon to be obsolete, and is proven insecure, is fiscally irresponsible.
- **Statistical evidence that audits of only 2% of all precincts, as recommended in HR 550, even if properly executed, fail to catch misdeeds or mistabulations by voting machines.**<sup>8</sup> The H.R. 550 audit language further fails to address even the most fundamental procedural issues. Election night parallel hand-count verifications offer a better solution than relying exclusively on post-election audits. Accessible and financially feasible recounts provide security and integrity for a given voting system.
- **Questions concerning the composition and authority of the EAC.** The EAC consists of Presidential appointees and is vulnerable to partisan appointments made by the Executive Branch. Legislation authorizing the EAC to delegate core governmental electoral functions to private vendors eliminates the critical decentralized checks and balances necessary for U.S. democracy.
- **The failure to address the public's right to know.** The current status quo within the e-voting industry, supported by EAC Certification procedures, violates fundamental civil rights as defined in the Freedom of Information Act (FOIA) by allowing industry stances of proprietary solutions and the use of nondisclosure agreements, and fails to recognize the right of the citizenry to access information to validate their own elections.
- **The EAC Certification Program has created a system in which every jurisdiction, beginning in 2007, must replace or use uncertified voting equipment.** In 2007 jurisdictions adhering to federal guidelines must comply with the EAC's 2005 Voting System Guidelines, rendering all current and existing voting equipment uncertifiable. The EAC Certification Program has three fundamentally fatal flaws, which expose our elections to unacceptable risk and present two unacceptable choices: 1) replace computer-based election equipment every two years while implementing repeated testing for same at exorbitant financial expense, or 2) use un-certifiable computer-based equipment. The three flaws are as follows:
  - **The EAC Certification Program creates a situation wherein elections are run using substandard and highly vulnerable equipment.** The EAC approves certification guidelines at least two years before products meeting the guidelines are released to market. As a result, election officials end up using sub-standard equipment. As well, the published certification guidelines, detailing all of the existing vulnerabilities to be addressed by future products, provide a virtual blueprint for tampering with election equipment in current use.
  - **The business model on which the EAC Certification Program is based is unrealistic.** Software and hardware development requires significant upfront financial investment. Once the product is delivered to market, preliminary testing on a broad scale is needed to identify and fix bugs. However, the

election market environment makes this technological testing impossible. The public market can neither afford to subsidize computer-based product development, nor – because there are fixed timeline requirements for elections – provide the necessary testing. The unacceptable result is that costs continue to rise as our national elections are effectively used to test the product.

- o **The Certification Program creates a situation wherein it is virtually impossible, without considerable expense, for election officials to use certified equipment.** The 2005 EAC Voluntary Voting System Guidelines (2005 VVSG) require election software to be registered in the National Software Reference Library (NSRL) with any ensuing modifications to the registered software to be re-tested and re-certified. *The typical scenario for elections more often than not will call for modifications to the certified software because of ballot design requirements and “patches” for fixing bugs in the software.* When these inevitable changes occur, states have three choices: 1) run uncertified software that has not undergone the required post-modification testing, or 2) incur unacceptable financial expense for repeated testing, which itself may or may not even be feasible depending on the nature and timing of the modifications, or 3) request a “grandfather” waiver from the EAC Certification Program, which, if granted, renders the entire certification process moot since such a practice leads to the de facto nullification of the NSRL requirement.

x. Included with our letter to you is a copy of the recently published book *Hacked! High Tech Election Theft in America ~ 11 Experts Expose the Truth*. Each chapter in this book portrays the raw truth about our dangerously diminished right to vote and have it correctly counted in the age of electronic voting. **On pages 189 - 193, you will find our specific concerns regarding the February 2005 version of H.R. 550 presented in detail.**

xi. Given the new information we are presenting to you, we ask that you join us in exploring real solutions for restoring integrity to our election process. We have supplied you with evidence indicating that adding a “paper trail”, audits and an empowered EAC to an insecure, non-transparent voting system does not offer the necessary meaningful reform necessary to repair our broken election systems. We are hopeful that you will engage in healthy debate and provide the leadership to legislate changes to truly rebuild a democratic election system. We wish to thank you for your help and support with this most serious matter.

Sincerely,

Abbe Waldman DeLozier, Austin, Texas – abbe@austin.rr.com  
 Bev Harris, Seattle, Washington – bev@blackboxvoting.org  
 Vickie Karp, Austin, Texas – karp@mail.com  
 Paul Lehto, Everett, Washington – lehtolawyer@hotmail.com  
 Nancy Tobi, Milford, New Hampshire - ntobi@democracyfornewhampshire.com

## EARLY SIGNERS OF REQUEST FOR VOTERS – January 3, 2007

### ORGANIZATIONS: Name, Address, City, State, Zip Code

David Caputo Holyoke MA 1040  
 "Candidate for Congress CA District 12 Libertarian Party 2004 & 2006" Harland Harrison CA  
 "Co-founder AUDITAZ (Americans United for Integrity and Transparency in Elections) - Co-Chair Pirna County Democratic Party Election Integrity Committee - Liaison to Arizona State Democratic Party Election Integrity Committee" Sandra Spangler Tucson AZ 85704  
 "Committeeperson Pinellas County Democratic Party" Wanda Scherer Belleair Beach FL 33786  
 "H D # 27 Chair Jeffco Democrats Jefferson County - Arvada Peace & Justice - Middle School American History Teacher 34 years - Arvada United Methodist Church" Mary Patee Arvada CO 80004-5247  
 "local Democratic Party executive committee State central committee local parish executive committee " Jeanie Williams-West MER ROUGE LA 71261  
 "People Who Give a Damn Inc " Benjamin Melançon  
 "Precinct Chair 14 Democratic Party of Collin County North Texas" Camille Khattar Hedrick Plano TX 75024  
 "Producer - Atlantic Media Ltd." Nancy Beach Portsmouth NH 3801  
 "Senator NH District 6" Jacalyn L. Cilley Concord NH 3301  
 Black Box Voting, Bev Harris, Seattle, Washington  
 Chair 30th District Democrats Larry L. Jackson Federal Way WA 98023  
 Citizens to Stop Computerized Voting Richard Borkowski Seattle WA 98102  
 Co-committee person 8th Ward 24th Division Philadelphia; Philadelphians Against Santorum Faith Quintavell Philadelphia PA 19128-3827  
 Coloradoans for Voting Integrity CFVI Joel Leventhal Lakewood CO  
 Columbia County Democratic Central Committee - Columbia County Citizens for Human Dignity Julane Grant Portland OR 97056-0843  
 CONCENTRIC MEDIA - Documentary filmmaker Dorothy Fadiman Menlo Park CA 94025  
 Democracy for Colorado  
 Democracy for Flagstaff  
 Democracy for New Hampshire  
 Democracy for New Hampshire Fair Elections Committee  
 Democracy for Oklahoma City Co-coordinator - Democratic Precinct Chair - Oklahoma Democratic Party IT Committee member Linda Wade Oklahoma City OK  
 Democracy for Oregon  
 Democracy for Texas/Bastrop Co chapter Marsha Correira Elgin TX 78621  
 Election Defense Alliance  
 Election Integrity  
 Editor and Publisher - Totally Fixed and Rigged Magazine; President - Positronic Design  
 Editor/Publisher - Online Review of Books & Current Affairs J.F. Miglio  
 Founder - Presents for the Planet Andrea Emily Baer Kihei HI 96753  
 Freedom Socialist Party  
 Group Organizer for San Diego Democracy For America Carol Changus La Jolla CA 92037  
 Jackson Action Luke Lundemo Jackson MS  
 Jasper County Democrats Elliott Denniston Webb City MO 64870  
 JDC Jewish Service Corps Volunteer Ariella Brunwasser Skokie IL  
 Joan Brunwasser, Voting Integrity Editor, OpEd News  
 Karen Renick, founder, VoteRescue, Austin, TX  
 Latinos for America  
 Memphis Operation Election Integrity Ernest Andrew Jerome Withers MEMPHIS TN 38101  
 MEMPHIS OPERATION ELECTION INTEGRITY MINISTER Sukura A. Yahweh MEMPHIS TN 38126  
 Merrimack Town Democratic Chair - New Hampshire State Democratic Party Committee Member Andrew Sylvia Merrimack NH 3054  
 Midwest Minutemen  
 NH PIRG  
 Northeast Citizens for Responsible Media  
 OpEdNews  
 President of Minutemen Midwest Diane Evertsen Harvard IL 60033  
 Protect California Ballots  
 Sacramento For Democracy Bill Lackemacher IV Sacramento CA 95833  
 San Diego Democracy for America  
 Secretary-Treasurer of Minutemen Midwest Evert Evertsen Harvard IL 60033  
 Show me the Vote – MO  
 TrueVoteSanDiego [chair] - Election Integrity Task Force [chair] - San Diego Metro-Progressive Democrats of America Brina-Rae Schuchman San Diego CA 92120  
 Vote Rescue, Lessye Joy DeMoss, member Manor TX 78653  
 Vote Rescue, Donna Delvy, member, Austin, Texas"  
 White Bear Lake Peace Group Claire Benson N. Saint Paul MN 55109  
 Women for Democracy and Fair Elections Judith Erickson Chicago IL 60610-1538  
 Women Making a Difference - NH  
 YubaNet News Nevada City CA

## INDIVIDUALS IN ORDER OF HOME STATE

1. Martin Freed Fairbanks AK 23423
2. Ruta Vaskys Fairbanks AK 23423
3. Larry Edwards Sitka AK 99835
4. Jean Harris Montgomery AL 36109
5. JAMES PERRY HOLLIS ATHENS AL 35611
6. Armando Quesada Hartselle AL 35640
7. Tom Rodeffer Decatur AL 35603
8. Barbara Lightner Eureka Springs AR 72632
9. paula tyndale Eureka Springs AR 72632
10. kenneth j boyle bentonville AR 72712-7424
11. Virginia Garcia-Bunuel Prescott AZ 86303
12. Lesley Federgreen Scottsdale AZ 85255
13. Doug Prather Rio Verde AZ 85263
14. Dr Mary Ellen Aguirre Tucson AZ
15. Joshua Landess Rio Rico AZ 85648
16. James Torson Flagstaff AZ 86004
17. Dr. Margaret C. Gilmore Tucson AZ
18. Richard Rogers Peoria AZ 85383
19. Chuck Lakin Phoenix AZ 85020
20. Vickie Fairbourn Sun City AZ 85351
21. Richard Fairbourn Sun City AZ 85351
22. Kerry Jones Black Canyon City AZ 85324
23. Aaron J. Hicks Chandler AZ 85246
24. Surya-Patricia Lane Hood Phoenix AZ
25. Henriette Groot Cayucos CA 93430
26. Mark Golembiewski Pacifica CA 94044
27. christopher Hays La Canada CA 91011
28. Sandra Barbel Oakland CA 94608
29. Jane Allen san francisco CA 94108
30. Pet-Er Esainko Sacramento CA 95819-3924
31. "Michael B. ""Green Ph.D."" Los Angeles CA
32. Jim Sampair Santa Clara CA 95050
33. Paul Withers Los Angeles CA 90049
34. Phillip Edward Caine Jr. Sacramento CA 95831
35. Mary Ellen Harte Berkeley CA 94708
36. Mary Edwards Davis CA 95616
37. Meg Siddheshwan Sullivan Oakland CA 94608
38. Judy Ki Poway CA 92064
39. Mary Perry Poway CA 92064-6037
40. Richard Katz Nevada City CA 95959
41. Mark Zimoski Valley Glen CA 91401-4546
42. "David ""Teeters Architect"" Alameda CA 94501
43. Martha Simonds Alameda CA 94501
44. Karl Simon Weiss San Diego CA 92109
45. Ames V. Gilbert Grass Valley CA 95945
46. Nancy L Gilbert Grass Valley CA 95945
47. Sophie L Gilbert Grass Valley CA 95945
48. Lloyd Downs Magalia CA 95954
49. Linda Home Mill Valley CA 94941
50. John Patrick Wilson Los Angeles CA 90024
51. Stephen Heller Van Nuys CA 91406
52. Anna Naruta Oakland CA 94612
53. Mark Braly Davis CA 95616
54. "Robert B. ""Rogers Ed.D."" Ramona CA 92065
55. Richard H. Matthews Woodland CA 95776
56. Joan Magit Northridge CA 91325
57. Dean Bell Mountain View CA 94041
58. Scott Morgan San Francisco CA 94109
59. Jim Sampair San Jose CA 95110
60. Jim Eldon Brooks CA 95606
61. Richard Holmes Occidental CA 95465
62. Gary Fariss Saratoga CA 95070
63. Marilyn Clark Oakland CA 94606
64. Ronald Rattner San Francisco CA 94109-2206
376. Janet Batten Upper Marlboro MD 20772
377. Arlene Montemarano Silver Spring MD 20901-3024
378. Anne Ambler MD
379. Mark Klimek South Portland ME 4106
380. Alan P. Morse Phillips ME 4966
381. Lee Sharkey Vienna ME 4360
382. Al Bersbach Vienna ME
383. Matt Lucey Portland ME 4103
384. "George N. ""Appell Ph.D."" Phillips ME 4966
385. Maria Irrera Lincolnville ME 4849
386. John T Bednarik Montville ME 4941
387. Faith M. Willcox Westport ME
388. Thomas Janes Royal Oak MI 48073
389. Eleanor Payson Royal Oak MI 48073
390. James Chester Okemos MI 48864
391. Carl Weiler Ferndale MI 48220
392. Darcie Livingston St. Clair Shores MI 48080
393. Alexander MacInnis Ann Arbor MI 48104
394. Michael Williams pleasant lake MI 49272
395. David Scenga Lansing MI 48906
396. Michael Gillis West Bloomfield MI 48323
397. Robin Gillis West Bloomfield MI 48323
398. Patricia Lent Royal Oak MI 48067
399. Ken Pineau Pleasant Ridge MI 48069
400. Sara Sachs West Bloomfield MI
401. Jacob Kjorne Maple Grove MN 55369
402. Barb Olsen Duluth MN 55802
403. Donna McWilliams Albert Lea MN 56007
404. Audrey Warrus Anoka MN 55303
405. Jan Pederson Canby MN 56220-1507
406. Shannon A. Lee Minneapolis MN 55405
407. CHRISTOPHER T LOCH MINNEAPOLIS MN 55404
408. Carol Greenwood Minneapolis MN 55406
409. John Bussjaeger Roseville MN 55113-1611
410. David Smith Robbinsdale MN 55422
411. Pamela Hanson Arden Hills MN 55112
412. Jay Greene St. Paul MN 55106
413. Kevin Swallow Kansas City MO 64114
414. Rebecca Schedler Columbia MO 65203
415. Adna Kyne Littleton MO 1460
416. Nancy Koehler Glencoe MO 63038
417. Dale Koehler Glencoe MO 63038
418. Steve Hart Lake St. Louis MO 63367
419. William Nye Labadie MO 63055
420. Steve Phillips Kansas City MO 64116
421. Robert Griffin Clayton MO 63105
422. Greg McKinney Springfield MO 65807
423. Willam Monroe Columbia MO
424. Tressia A Fox MO
425. John F. Abbick MO
426. Steven Vallarian Tupelo MS
427. Patricia Herrick Gold Creek MT 59733.974
428. Chris Mills Chapel Hill NC 27516
429. John L. Tyrer Jr. Asheville NC 28806
430. Brian Block Greensboro NC 27401
431. Edward Robles "Franklin " NC 28734
432. Rochelle McColl Charlotte NC 28211
433. Mark McColl Charlotte NC 28211
434. Alice Coblentz Asheville NC 28803
435. Jerry Murphy Omaha NE 68144
436. Senator Jackie Cilley, NH District 6
437. Representative Andrew J. Edwards, Nashua, NH 03062
438. Representative Eileen Ehlers, Hooksett, NH

65. Cynthia Hudley Los Angeles CA 90016  
66. Edward M. Oberweiser Santa Cruz CA 95062  
67. Elaine B. Charkowski Santa Cruz CA 95062  
68. Lorna Moore Santa Barbara CA 93105  
69. Dan McGilvray Santa Barbara CA 93105  
70. Terry Tillman Santa Monica CA 90403  
71. Donald R Davis Calabasas CA 91302  
72. William Madden Hayward CA 94541-2442  
73. David H. Goggin Eureka CA 95501  
74. Severo M. Ornstein Woodside CA 94062  
75. Jose R. Ferrer So. San Francisco CA 94080  
76. Julie Machado Hayward CA 94541-2673  
77. Ron Watt Red Bluff CA 96080-2128  
78. James Shawvan San Diego CA 92104-1192  
79. Richard Shears Columbia CA 95310  
80. Susan Spector El Cajon CA 92020  
81. John Austin Canoga Park CA 91304  
82. Janice Austin Canoga Park CA 91304  
83. Charlotte Barry Beverly Hills CA 90211  
84. Julia Fulton Long Beach CA 90806  
85. Daniel Venzon San Diego CA 92104  
86. Peter DeSimone Point Arena CA 95468  
87. Steven McNichols San Francisco CA 94104-3503  
88. Richard Dawson Torrance CA 90504-5228  
89. Patricia Klotz Laguna Beach CA 92651  
90. John M. Glenn San Francisco CA 94114  
91. Howard Rosenberg Berkeley CA  
92. Walter Kinstler Sacramento CA 95833  
93. Joyce Kinstler Sacramento CA 95833  
94. Joyce Kinstler Sacramento CA 95833  
95. David Spero Spero San Francisco CA 94132-2353  
96. Joel Peshkin San Juan Capistrano CA 92675  
97. Suzanne Warden san jose CA 95117  
98. Gregory Rose San Diego CA 92117  
99. Dave Hodges Encinitas CA 92024  
100. Heidi Hodges Encinitas CA 92024  
101. Bill Cornelius Albion CA 95410-0057  
102. Ingrid Pratt Thousand Palms CA 92276  
103. Marcia Patt San Diego CA 92101  
104. David Sand Los Angeles CA 90018  
105. Roy Tuckman Los Angeles CA 90068  
106. Henry DeNicola Sebastopol CA 95472  
107. Jane Engelsiepen Carpinteria CA 93013  
108. Gwen Willows El Sobrante CA 99480  
109. Veronica Rowan sacramento CA 95826  
110. Craig Dekker El Segundo CA 90245  
111. Lee Miller Modesto CA 95354  
112. Tony Campillo Sacramento CA 95838  
113. Debra Hodson San Francisco CA 94105  
114. Chris Normile Belmont CA 94002  
115. Shireen Khera Belmont CA 94002  
116. Michael Davis Eureka CA 95503  
117. Nancy Kripe Studio City CA 91604  
118. Michael Mascioli san francisco CA 94114  
119. Gary Thomas Chrisler Janesville CA 96114  
120. Tung Ton San Diego CA 92116-2488  
121. Jeffrey Keimer Portola Valley CA 94028  
122. Marcia Keimer Portola Valley CA 94028  
123. Susan Crowe San Diego CA 92130  
124. Joshua Butler sacramento CA 95841  
125. Darell Slotton Davis CA 95616  
126. Peter Pallag San Diego CA 92124  
127. Nancy Freedom Pleasanton CA 94566  
128. Larry Dorshkind Redwood City CA 94061  
129. Jemal A. Lilly Riverside CA 92507  
130. Jesse Houts Santa Cruz CA 95062  
131. Andrew Lane Stockton CA 95204-5524  
132. JOHN R. TATHAM Irvine CA 92612  
439. Representative Lily Mesa, Manchester, NH  
440. Mayme J. Trumble Madbury NH 3823  
441. Lucy Edwards Northwood NH 3261  
442. Betty Hall Brookline NH 3033  
443. Kenneth P. Doolittle Portsmouth NH 3801  
444. Mary L. Till Manchester NH 3102  
445. Lorraine Eckland Somersworth NH 3878  
446. Jeanne Dietsch Peterborough NH 3458  
447. Dan Pike Rollinsford NH 3869  
448. Barbara G. Hilton Portsmouth NH 3801  
449. Mr. Kevin R OBrien Groveton NH 3582  
450. Joshua Dubnick Hopatong NJ 7843  
451. Allen H. Schneiderman Ridgewood NJ 7450  
452. Andre T. Parrish Hoboken NJ 7030  
453. Bernard Gilroy Princeton NJ 8540  
454. Jeanne Cambouris Bradbury Flemington NJ 8822  
455. Gerald Ryan Flemington NJ 8822  
456. Karen R Searle Berkeley Heights NJ 7922  
457. Herbert Goodfriend Elizabeth NJ 7202  
458. Janice Victor Caldwell NJ 7006  
459. Fred Weber Blackwood NJ 08012-5593  
460. Agnes Meo Hasbrouck Heights NJ 7604  
461. Melanie Lipomanis Bridgewater NJ 8807  
462. Gene Monahan Marlton NJ 08053-5555  
463. Loren Svetvlas west orange NJ 7052  
464. Lee Swain Westfield NJ 7090  
465. Bob Flisser Flemington NJ 8822  
466. Harry J. Conrow Westmont NJ 8108  
467. Stewart Lindenberger Princeton NJ  
468. "R. Philip ""Eaton M.D."" Albuquerque NM 87107  
469. Olga Eaton Albuquerque NM 87107  
A. Janine Burke Santa Fe NM 87505  
A. Janine Burke Santa Fe NM 87505  
470. David L. Burke Santa Fe NM 87505  
471. George Brown Santa Fe NM 87505  
472. Kelly Eagle Albuquerque NM 87111  
473. Allen Win Albuquerque NM 87123  
474. Dr. Jean-Paul Davis Albuquerque NM 87110  
475. Roland Silver Questa NM 87556  
476. Robert Martin Albuquerque NM 87111  
477. Louise Miller Albuquerque NM 87111  
478. Susan Yabumoto Alto NM 88312  
479. Matthew Calabaza Bernalillo NM  
480. "F Graham ""Hollister Jr."" Genoa NV 89411  
481. Janie Angus Henderson NV 89014  
482. Rene Snodgrass North Las Vegas NV 89084-2461  
483. Jenna DiFeo Incline Village NV 89451  
484. Sherry Noland Las Vegas NV 89113  
485. KEVIN T MCCORMACK FARMINGDALE NY 11735  
486. David Gilbert Nanuet NY 10954-2527  
487. Ron Kamen Rhinebeck NY 12572  
488. David Kosh New York NY 10033  
489. Joan Jarowski NYC NY 10023  
490. Karen Tarapata Upper Nyack NY 10960  
491. Cynthia Perlin Delmar NY 12054  
492. Helen Azzara New York NY 10003  
493. Brian Carey Syracuse NY 13215-1824  
494. Anne Fleurat Yorktown NY 10598  
495. Anna A. Marton New York NY  
496. Robert Woudenberg Valley Cottage NY 10989  
497. Patricia Goldsmith Island Park NY 11558  
498. Paul Grebanier Brooklyn NY 11223  
499. Elsa Rush New City NY 10956  
500. David Lund Staten Island NY 10301  
501. Lee Miller Slaterville Springs NY 14881  
502. Ray Beckerman Jamaica NY 11432

133. JOANNE TYSON TATHAM Irvine CA 92612  
 134. Esther Levy Sherman Oaks CA 91401  
 135. Virginia Gainer San Diego CA 92122  
 136. Jeanette Okaaki Sacramento CA 95822  
 137. Bart Dickens Carpinteria CA 93031  
 138. Mike Wertheim Oakland CA 94618  
 139. Roberta Frye Culver City CA 90230  
 140. Gene Deng Livermore CA 94551  
 141. Roger Hoffmore Folsom CA 95630  
 142. Amy Marie Szychowski Hollywood CA 90028  
 143. Susan Orenstein Pacific Palisades CA 90272  
 144. Walker Cunningham San Francisco CA 94117  
 145. David Lake Belvedere CA 94920  
 146. Pat Iampietro Watsonville CA 95076  
 147. Margaret M. Midling Grover Beach CA 93433  
 148. Judith J Valdez San Diego CA 92119  
 149. William Patrnck Mission Viejo CA 92692  
 150. Nancy Dwyer Susanville CA 96130  
 151. Margaret Lawrence San Diego CA 92122-2836  
 152. Judith L. richardson San Jose CA 95120  
 153. Ryan Colyer Irvine CA 92617  
 154. Gloria Gwynne Los Angeles CA 90026  
 155. Jone A Manoogian Palo Alto CA 94303-4752  
 156. Toni Mayer El Cerrito CA 94530-2544  
 157. Carl Van Patten Antelope CA 95843  
 158. Rusty Van Patten Antelope CA 95843  
 159. Christopher Law Newport Beach CA 92660  
 160. Evan Hurd Pacific Palisades CA 90272  
 161. Matthew Filler Downey CA 90242  
 162. MARY DENHAM Fair Oaks CA 95628-2931  
 163. Tracy Maisch Simi Valley CA 93065  
 164. Lee Maisch Simi Valley CA 93065  
 165. Juliana VIDICH Kelseyville CA 95451  
 166. Andrew Chandler Orangevale CA 95662  
 167. Brian Beker Los Angeles CA 90012  
 168. Bruce Jenkins Sunnyvale CA 94087  
 169. Teresa G. Jenkins Sunnyvale CA 94087  
 170. Janet Maker los angeles CA 90024  
 171. Amy Gorman Berkeley CA 94707  
 172. Darlene Little Cypress CA 90630  
 173. Keith Brien Hopland CA 95449  
 174. Burton Smith Sebastopol CA 95473  
 175. Nancy Klein San Ramon CA 94583  
 176. Mr. Daniel D. Frank Cottonwood CA 96022  
 177. Mrs. Daniel D. Frank Cottonwood CA 96022  
 178. Eric Schwartz Santa Barbara CA 93102  
 179. Robert Cotner Grover Beach CA 93483-0933  
 180. June Swan Corte Madera CA 94976  
 181. Dan Monte san anselmo CA 94979  
 182. Betty Supe' West Hills CA  
 183. Paul Waller Woodland Hills CA 91367  
 184. Eleanor Jackson Palm Springs CA 92262  
 185. Carlos Berguido Petatuma CA 94954  
 186. Michelle Medeiros San Francisco CA  
 187. Brad Beltane San Francisco CA  
 188. Vivian Hiatt-Bock Half Moon Bay CA  
 189. Maureen Perron Half Moon Bay CA  
 190. Giampaolo E Curreni San Francisco Ca  
 191. Isaac Smith Sonoma CA  
 192. Stephen Ludwig Pacifica CA  
 193. William Taylor San Francisco CA  
 194. Karen Archipley San Diego CA  
 195. Michael Finnigan Encino CA  
 196. Ray Bock Half Moon Bay CA  
 197. Michael Bishop Alameda CA  
 A. Louise Gilbert-Eisenhauer Manitou  
 Springs CO 80829  
 198. Paul Day-Lucore Denver CO 80230  
 199. Jerry Best Penrose CO 81240  
 200. Christopher Dugan Denver CO 80205  
 503. Kim Marie Papa brewster ny 10509  
 504. Brian Emmett East Meadow NY 11554  
 505. Jack Gordon Brooklyn NY 11229  
 506. Chris Saia Queens NY 11105  
 507. David J. Brady Carmel NY 10512  
 508. Doug Abramson Poughkeepsie NY 12601  
 509. Robert Distefano New York NY 10002  
 510. Karen Shatzkin New York NY 10025-5400  
 511. Wil Greenstreet Sloatsburg NY 10974  
 512. Ms Esther Marlowe New York NY 10009-1803  
 513. Dean Gallea Tarrytown NY 10591  
 514. BETTY MAZUR AMAGANSETT NY 11930  
 515. Charles Buchwald New York NY 10016  
 516. Paul Abbatepaolo Saint James NY 11780  
 517. Joel Huberman Buffalo NY 14222-1750  
 518. Lucinda Scott Manorville NY 11949  
 519. Marina Shpirt Albany NY 12203-3504  
 520. Julie Penny Sag Harbor NY 11963  
 521. Jeff Grann Oceanside NY 11572  
 522. Dennis Mitcheltree Brooklyn NY 11215  
 523. Alice Lovely New York NY 10019-1701  
 524. Stanley Hirsch Sea Cliff NY 11579  
 525. Leona Richman Bronx NY 10464  
 526. Kenneth Nilson Brooklyn NY 11215  
 527. Peter Bain Brooklyn NY 11215  
 528. Lucas Van Lenten Brooklyn NY 11215  
 529. John Jarvis Levittown NY 11756  
 530. Dave Roochvarg Hempstead NY 11550  
 531. Wendy Ginsberg East Norwich NY 11732  
 532. Laura Collins NY NY 10025  
 533. Michael Marston Altamont NY 12009  
 534. Jane Snow Spring Valley NY 10977  
 535. Donna Bryner Mummery Honeoye Falls NY  
 14472  
 536. Harnet J Helman Ronkonkoma NY 11779  
 537. Donna Cinelli Kingston NY 12401  
 538. Lissi Sigillo New York NY 10007  
 539. Claire Kahn Stony Brook NY 11790  
 540. Adam Armstrong Brooklyn NY 11231  
 541. Charles Danas Valley Stream NY 11580  
 542. Michael James Boutin Au Sable Forks  
 NY 12912  
 543. Judy Hildebrand North Branch NY 12766  
 544. Dr. Michael A Laderman New York NY 10003  
 545. John A. Crockett NY  
 546. Linda Atkinson New York NY  
 547. Noah Liben New York NY  
 548. Howard Kaufman New York NY  
 549. Leonard Quart NY  
 550. Harold Edward Ashton New York NY  
 551. Roger Yeardey Cincinnati OH 45230  
 552. Joseph R. Falkenstein Tallmadge OH 44278-  
 1674  
 553. Vanessa or John Pesec Concord OH 44077  
 554. Steven Lefevre Gahanna OH 43230-3061  
 555. Teresa Blakely Columbus OH 43202-1239  
 556. Michael Morgan Hilliard OH 43026-8940  
 557. Carol Jacot Mansfield OH 44903  
 558. Margie Jacot Mansfield OH 44903  
 559. Rich Matanowitsch Wickliffe OH 44092-1176  
 560. Leatrice Bard Tolls Cleveland Heights OH  
 44118  
 561. James McShane Hilliard OH 43026  
 562. Christian Mrosko Youngstown OH 44505  
 563. Richard Alan Stadler Jr. Columbus OH 43206-  
 1376  
 564. Linda Selvia Cincinnati OH 45223  
 565. Phillip Wiland Clinton OH 44216  
 566. Victor Blasutta Columbus OH 43235  
 567. Sue Gorsuch Columbus OH 43235

201. Joyce Owens Fort Collins CO 80521  
 202. Linda J. Buch Aurora CO 80012  
 203. Timothy James Brown Lakewood CO 80215  
 204. Michael Anderson CO 80236  
 205. Guy Mason Denver CO 80211  
 206. Jeffrey A Flood Aspen CO 81611-9651  
 207. Dan McCamman Denver CO 80210  
 208. Donna Bell Superior CO 80027  
 209. Melodee Hallett Salida CO 81201  
 210. Diane Dvorin Boulder CO 80304  
 211. David Furtney Boulder CO 80304  
 212. David Kimble Boulder CO 80301  
 213. Betty Tobias Boulder CO 80301  
 214. Michael Plichta Littleton CO 80127  
 215. Doug Davis Denver CO 80238  
 216. MICHAEL CICERCHI MD Denver CO 80237  
 217. Glenda Elaine Littleton CO 80161  
 218. Andrew Kokransky Cotopaxi CO 81223  
 219. Janice Cone Boulder CO 80306  
 220. "M Angela "McGehee Ph.D." CO  
 221. L. Lindsey CO  
 222. Crawford L. Elder Mansfield Center CT 6250  
 223. Carol Schinto Elder Mansfield Center CT 6250  
 224. Dorrit Thomsen Stamford CT 06905-1031  
 225. Larry Russick Bridgeport CT 6610  
 226. Susan Kulis Hamden CT 6518  
 227. Erik Gunther Branford CT 6405  
 228. "Liza "Grandia Ph.D." New Haven CT 6511  
 229. Reva Rubenstein Washington DC 20007  
 230. Bob Cohen Miami FL 33179  
 231. Sandra T. Thompson Orlando FL 32825-5603  
 232. Anthony Milone Plantation FL 33322  
 233. Rebecca Catanese Bradenton FL 34209  
 234. Arthur Dauer Gainesville FL 32601  
 235. Madeline M. Garcia Kissimmee FL 34743  
 236. Richard D. Vinson Wilton Manors FL 33311-2241  
  
 237. Marie Spacek JACKSONVILLE FL 32258  
 238. William B. Cushman Pensacola FL 32514-4922  
 239. Dave Janeway Dade City FL 33525  
 240. Nancy Hendrix Ft. Myers FL 33913  
 241. Rhonda Ann Mills Pembroke Pines FL 33028  
 242. Anthony Etches Tampa FL 33647  
 243. Mark Daniel Oddi merritt island FL 32952  
 244. Dr. Neville McJunkin Tallahassee FL 32303  
 245. Linda Townsend Titusville FL 32796-1136  
 246. Brandon Townsend Titusville FL 32796-1136  
 247. Edith Costlow Titusville FL 32796-1136  
 248. Armando Navarro Miami FL 33157  
 249. Glenn McGahee Hollywood FL 33020  
 250. Stephen Smith North Fort Myers FL 33903  
 251. Elizabeth Palmer Largo FL 33770  
 252. Arthur J. Palmer Largo FL 33770  
 253. Shelley Roitman Holiday FL 34691  
 254. Diane Brewer Deltona FL 32738  
 255. Kathryn Gadoury Lakeland FL 33815  
 256. Jose M Vega MIAMI FL 33145  
 257. Robert McLendon Tallahassee FL 32303  
 258. Kenneth Lawrence Snow pompano beach FL 33062  
 259. Steven J. Zeledon Ridge Manor FL 33523-9025  
 260. Gerry Hughan Ft Lauderdale FL 33315  
 261. sanders scheinberg CAPE CORAL FL 33904  
 262. IRENE RADKE Ft. Lauderdale FL 33312-5412  
 263. GEORGE RADKE Ft. Lauderdale FL 33312-5412  
 264. Pete Raemaekers Coconut Creek FL 33073  
  
 568. Justin White-Lowther Youngstown OH 44505  
 569. [Michal L. Christopher Camden OH 45311  
 570. John Pardee Amherst OH 44001  
 571. Tom Regan Cincinnati OH 45227  
 572. Paul Cooper OH  
 573. Andrew Brewer Claremore OK 74019  
 574. Heather Renee Cave Chickasha OK 73018  
 575. Bobbie Johnson Tulsa OK 74106  
 576. steven woodruff Eufaula OK 74432  
  
 577. Valeria Lindholm Duncan OK 73533  
 578. Elisabeth Ham Tulsa OK  
 579. Christina Fowler-Thias Oregon City OR 97045  
 580. Jon Ediger Tigard OR 97223  
 581. Patricia Knizek Gresham OR 97080  
 582. Susan Nash Milwaukie OR 97267  
 583. Ron Berti Portland OR 97225  
     B. Grant Law Portland OR 97231  
 584. Mary Holderness Clackamas OR 97015  
 585. John Holderness Clackamas OR 97015  
 586. John Holderness Clackamas OR 97015  
 587. Burton J. Tschache Vernonia OR 97064  
 588. charles currey portland OR 97201  
 589. Robert Martin West Linn OR 97068  
 590. Madeleine Drake Oregon City OR 97045  
 591. Candace Morrow Eugene OR 97404  
 592. Ian Honohan Portland OR 97214  
 593. Donald Long portland OR 97210  
 594. Albin Kampfer Rainier OR 97048-2020  
 595. Stanley Kaveckis Aurora OR 97002  
 596. Randall Rush Wayne Eugene OR 97403  
 597. William J. Powell Portland OR 97213  
 598. Winnie J. Powell Portland OR 97213  
 599. David Blackman phoenix OR 97535-7733  
 600. William Simpson Brownsville OR 97327  
 601. Neil Daugherty Eugene OR 97405-5615  
 602. Valerian Shirkoff Portland OR 97225  
 603. Susan Jensen Portland OR 97221  
 604. Paul Meyer-Strom Portland OR 97221  
 605. Jacquelyn M Bruni Newport OR 97365  
 606. Hans West Salem OR 97302  
 607. Scott S. Cooper Portland OR 97266-5241  
 608. Mary McGar Portland OR 97223  
 609. Arthur O'Sullivan Lake Oswego OR 97034  
 610. Kathleen Valdez Mt Angel OR 97362  
 611. Todd Farris Portland OR 97219  
 612. David A. Turnoy West Linn OR 97068  
 613. Jason Reed Coos Bay OR 97420  
 614. Mark Fritch Sandy OR 97055  
 615. Bonita Merchant Beaver Creek OR 97004  
 616. Susan Blatt Portland OR  
 617. Albyn C. Jones Portland OR  
 618. Robert Rees Portland OR  
 619. Frank Kolwicz OR  
 620. Porter Hedge York PA 17403  
 621. Richard Chamberlain Hatfield PA 19440  
 622. Michael J Doyle Upper Black Eddy PA 18972  
 623. Suzanne Erb Philadelphia PA 19103  
 624. Gillian Barker Lewisburg PA 17837  
 625. Jane E. Shull Lancaster PA 17602  
 626. Christine Clauser Bethlehem PA 18020  
 627. Michael Hellein Wilkesburg PA 15221  
 628. Eric Holte Haverford PA 19041  
 629. Kevin Smith PA  
 630. Mr. Lon R. Diffenderfer Thompsettown PA 17094  
 631. Tom Ulrich PA  
 632. Lisa Niebels Providence RI 2906  
 633. Richard Corso Providence RI 2908  
 634. Joseph E McDowell West Columbia SC 29170

265. William O. Jenkins Port St. Lucie FL 34953-2942
266. Gerrie DeVoe Pembroke Pines FL 33025
267. Lew Weige Ormond Beach FL 32174
268. Susanne Scott Winter Park FL 32792
269. Daniel J. Szymanski Cottdonale FL 32431
270. James P. Rhyne III Mims FL 32754
271. Margaret Richards Pensacola FL 32507
272. William H. Warrick III MD Gainesville FL
273. Sondra Miller Boynton Beach FL
274. Gerald Miller Boynton Beach FL
275. Josh K. Wardell Hampton GA 30228
276. E Victor Mereski "Savannah " GA 31406
277. Melissa Chaikof Atlanta GA 30350
278. Darin Arrowood Atlanta GA 30316
279. Margaret E. Roney Avondale Estates GA 30002-1420
280. Dr. Diane Kistner Carlton GA 30627
281. Greg Shaerer McDonough GA
282. Thomas M. Jenkins Athens GA 30605-3920
283. Claude Crider Alpharetta GA 30004
284. Dr Carroll H Lastinger Lawrenceville GA 30043
285. Catherine Browning Brunswick GA
286. John Fattorosi Kurtistown HI
287. Mark Greenberg Kapaa HI 96746
288. Shannon Rudolph houluloa HI 96725
289. douglas fox Honaunau HI 96726
290. Frank Belcastro dubuque IA 52001-6327
291. Adnan Codel Chicago IL 60607
292. Inga Kaminski Chicago IL 60605
293. Jeff Yamada Glen Ellyn IL 60137-7701
294. John Koch Chicago IL 60660-2523
295. Debra Poneman Evanston IL 60201
296. Paula Rule Joliet IL 60433
297. Mary Warren Wheaton IL 60187
298. Paul Borawski Jr. Hoffman Estates IL 60169
299. Christopher Schneberger Chicago IL 60647
300. Barry Hothersall Westmont IL 60559
301. Gregory Kruse Morrison IL 61270
302. Shawn Powell Rockford IL 61103
303. Marion S Morgan Chicago IL 60618
304. Sally Vering Chicago IL 60641
305. Lara Solonickne Arlington Heights IL 60004
306. Walter Bruun Glen Ellyn IL 60137
307. Susan DiPietro Barrington IL 60010
308. Jeffrey Felshman Chicago IL 60634
309. Laurence Nakrin Vernon Hills IL 60061
310. Mr. Hilary P. Nagrodski Orland Park IL 60462
311. Janet Berres Morton Grove IL 60053
312. Lorelei Hosler Byron IL 61010
313. Ignacio Fresas Monee IL 60449
314. Clara Caldwell Cong. District 17 IL
315. Penny Swartz Deerfield IL
316. Catherine Ansbro West Lafayette IN 47906
317. Shirley Jin Indian Harbour Beach IN 32937
318. Lynette Rowland Indianapolis IN 46208
319. Julie Anacker Indianapolis IN 46208
320. Pete Riffle Gary IN 46403
321. Marc Train Salina KS
322. David Davis Overland Park KS 66210-1127
323. Brenda Haverkamp Topeka KS 66604
324. Rebecca Brown Leawood KS 66206
325. Brenda Dageford Topeka KS 66606
326. Cim Roesener Manhattan KS 66502-3712
327. Steve Carter Wichita KS 67220-2552
328. Robert Wilson Shawnee KS 66216
329. roger schmanke oskaloosa KS 66066
330. Delbert Stitz Overland Park KS 66212
331. Barry Andersen Ft Thomas KY 41075
635. Katharine Brown Greenville SC 29615
636. Katherine Jean Dowbiggin Lupton City TN 37351
637. Jimmy Dollenmaier Knoxville TN 37920
638. Diane Blanche Franklin TN 37064
639. Joseph Scheibelhoffer Franklin TN 37064
640. Jeanette Woodward-Partridge Arlington TX 76013
641. Margaret A. Joseph San Antonio TX 78228-2915
642. Rebecca Riggs Houston TX 77035
643. Albert Riggs Houston TX 77035
644. Ann Pitcock Houston TX 77070
645. Joy Cunningham Austin TX 78704
646. David Boltz Houston TX 77054
647. Christyne Harris Canyon Lake TX 78133
648. John Harris Canyon Lake TX 78133
649. Sharon Heldenbrand Fort Worth TX 76120
650. Jodi Hendon Cedar Hill TX 75104
651. Kathy Coons Austin TX 78723
652. Grant Gurley Austin TX 78722
653. Gene Elder San Antonio TX 78205
654. Amy Conner Austin TX 78727
655. Steve Baugh Austin TX 78749
656. Bradley Kopp Buda TX 78610
657. Hal Guentert San Antonio TX 78230
658. Robert L. Blau Austin TX 78757
659. Steve Banyai Galveston TX 77554
660. Jane H. Cates Leander TX 78646
661. Roger L. Cates Leander TX 78646
662. Leslie Claire Pool Dripping Springs TX 78620
663. Kimberly Johnson Wichita Falls TX 76308
664. Eric Lawrence TX
665. Betsy Markman Austin TX
666. Johnny Worthen Sandy UT 84092
667. Dorothy napenas winchester VA 22602
668. Elizabeth H. Armstrong Chester VA 23831
669. Arthur Howard Swers Floyd VA 24091
670. Margaret J. Hausman Vienna VA 22181
671. Brian (Cricket) Rakita Louisa VA 23093
672. Vicki Dunaway Willis VA 24380
673. Lewis Yancey Midlothian VA 23112
674. Dr. F. Taylor Arlington VA
675. Deborah Kahn Montpelier VT
676. Jan Asch Middletown Springs VT 5757
677. Sandy Rounds Essex Jct. VT 5452
678. Dennis Morrisseau West Pawlet VT 5775
679. David Dodge Williston VT
680. Raymond C. Dawson Snohomish WA 98290
681. Jeanine A. Dawson Snohomish WA 98290
682. Donna McLain Kelso WA 98626
683. Dwight Rousu Redmond WA 98052-9427
684. Eva K. Millette Coombs Camano Island WA 98282
685. George Zuk BELLINGHAM WA 98229
686. Anne Zuk BELLINGHAM WA 98229
687. Caryl Trager Mill Creek WA 98012
688. Lee Crawford Brush Prairie WA 98606
689. Evalina Crawford Brush Prairie WA 98606
690. Ben Elfert Tacoma WA 98060
691. Pastor William H. Dudley Renton WA 98055
692. Anu Garg Woodinville WA 98072-9358
693. Dave Wright Spanaway WA 98387
694. Marlana Wnght Spanaway WA 98387
695. Jeffrey A. Freed Shoreline WA 98133-5120
696. Robert von Tobel Bellevue WA 98005-4036
697. Todd Lockwood Bonney Lake WA 98391-5466
698. Stonewall Jackson Bird "Mount Vernon " WA 98273
699. Elinor Kriegsmann Seattle WA 98112

332. Sandra Fowler Paducah KY 42001  
 333. Dedra Johnson New Orleans LA 70113  
 334. "Ed "Ward MD"" New Orleans LA 70119  
 335. Ken Goode Metairie LA 70001-4330  
 336. "Robert K ""Goode Sr"" Metairie LA 70001-4330  
 337. P. R. Kenney Folsom LA 70437  
 338. Jeremy Giroir Lafayette LA 70503  
 339. Howard Zinn Auburndale Massachusetts 02466  
 340. David Joseph Johnson Marlborough MA 1752  
 341. Jim Guinness Marlborough MA 1752  
 342. Nicholas Leighton georgetown MA 1833  
 343. Peggy Lane Rockport MA 1966  
 344. David S. Miller Cambridge MA 2138  
 345. Karen S. Miller Cambridge MA 2138  
 346. Ellen M. Ander Randolph MA 2368  
 347. Kathleen Williams Housatonic MA 1236  
 348. Johanna Kovitz Allston MA 02134-1717  
 349. Ted Compton Greenfield MA 1301  
 350. Carl Frederiksen Cambridge MA 2138  
 351. David Pendery Cambridge MA 2139  
 352. Anita Mabardy Needham MA 2492  
 353. Christina Beck Roxbury MA 2119  
 354. James M. Kramer Newton MA 2461  
 355. William Chirolas Newton MA 2462  
 356. Elizabeth Shulman Northampton MA 1060  
 357. Robert OBRIEN Lee MA 1238  
 358. Sheryl OBRIEN Lee MA 1238  
 359. Suzanne H. Costanza Malden MA 2148  
 360. Tobias Baskin Amherst MA 1002  
 361. Mark Gorman Malden MA 2148  
 362. William Worthington Truro MA 02666-0091  
 363. Mary Ann Szporluk Cambridge MA 2138  
 364. Barbara W. Burkart Amherst MA 1002  
 365. "Stephanie G. ""Wall MD"" Cotuit MA 2635  
 366. John E. O'Brien Lee MA 1238  
 367. Mathew Hostetter MA  
 368. Michael Berla Columbia MD 21044-2456  
 369. James L. LaGarde Pocomoke City MD 21851  
 370. Margaret Haven Ridgely MD 21660  
 371. John Fay Wheaton MD 20902  
 372. Alfred N. Milbert Germantown MD 20874  
 373. Lily Jensen Gaithersburg MD 20877  
 374. Christopher Gallaher Salisbury MD 21801  
 375. Adrienne Chapman Kensington MD 20895  
 700. Frank Gibson Breckenridge III Spokane WA 99203  
 701. David Jinks Olympia WA 98503  
 702. Chuck Pliske Seattle WA 98116  
 703. Reagan Middlebrook Seattle WA 98136  
 704. Larry Mandel Sammamish WA 98075  
 705. Leslie Eickemeyer Spokane WA 99223  
 706. Karen Hensley Renton WA 98057  
 707. John P. Brahe deer park WA 99006  
 708. Marilyn D. Alterman Seattle WA 98103  
 709. Elizabeth Walter Seattle WA 98109  
 710. RAYMOND FOX Seattle WA 98103  
 711. Richard Pelz Seattle WA 98101  
 712. Martha Jackson Seattle WA 98177  
 713. Anne L. Silberman Seattle WA 98103  
 714. Renee Bourgea "Vancouver " WA 98686  
 715. Kathleen Page Bellingham WA 98226  
 716. Walter Kendrick Tahuya WA 98588  
 717. Jeffrey Paul LaGasse M.D. Freeland WA 98249  
 718. Diane Snell WA  
 719. Evelyn Harrison Edmonds WA  
 720. Carol Pellett WA  
 721. Howard Pellett WA  
 722. Marilyn W. Derig Anacortes WA  
 723. Phyllis Huster Sammamish WA  
 724. Ron McChesney Vancouver WA  
 725. Seth Talley WA  
 726. Chns Kleppe Milwaukee WI 53213  
 727. Eric Paul Jacobsen Madison WI 53715  
 728. Inna Larsen Madison WI 53705  
 729. John Schroeder Madison WI 53726  
 730. Terry Carpenter Fitchburg WI 53711  
 731. Lon C. Ponschock Appleton WI 54914  
 732. Jordan Stein Madison WI 53704  
 733. Ellen Hanratty Milwaukee WI 53207  
 734. Maggie Jones Blue River WI 53518  
 735. Russell Novkov Madison WI 53705  
 736. Michael A. Brick madison WI 53711  
 737. David Steinhoff Waunakee WI 53597  
 738. Eric Hoffman Middleton WI 53562  
 739. Michael O'Leary Richland Center WI 53581  
 740. Chns Quandt Madison WI 53705  
 741. Thomas Kleewein Greendale WI 53129  
 742. Linda Kaehler Milwaukee WI 53214  
 743. Harold Bennett Madison WI 53705  
 744. Bruce Eggum Gresham WI 54128-8979  
 745. Karen Erb Silver Lake WI 53170  
 746. Bradley Ladwig Fall River WI 53932  
 747. Jill Rowland Shepherdstown WV  
 748. Jimmy Porter Dubois WY 82513

## ENDNOTES

<sup>1</sup> The EAC's functions, as described on its website, are listed here in bulleted format, with suggested handover to other entities in ALL CAPS:

- Generate technical guidance on the administration of federal elections. – HAND OVER TO NIST & STANDARDS BOARD
- Produce voluntary voting systems guidelines. – HAND OVER TO NIST & STANDARDS BOARD
- Research and report on matters that affect the administration of federal elections. – HAND OVER TO STANDARDS BOARD & CITIZENS GROUP
- Otherwise provide information and guidance with respect to laws, procedures, and technologies affecting the administration of Federal elections. – HAND OVER TO STANDARDS BOARD & CITIZENS GROUP
- Administer payments to States to meet HAVA requirements. – HAND OVER TO GENERAL SERVICES ADMINISTRATION
- Provide grants for election technology development and for pilot programs to test election technology. – ELIMINATE THIS FUNCTION.
- Manage funds targeted to certain programs designed to encourage youth participation in elections. – HAND OVER TO FEC
- Develop a national program for the testing, certification, and decertification of voting systems. – HAND OVER TO NIST & STANDARDS BOARD
- Maintain the national mail voter registration form that was developed in accordance with the National Voter Registration Act of 1993 (NVRA), report to Congress every two years on the impact of the NVRA on the administration of federal elections, and provide information to States on their responsibilities under that law. – HAND OVER TO FEC
- Audit persons who received federal funds authorized by HAVA from the General Services Administration or the Election Assistance Commission. – HAND OVER TO GAO
- Submit an annual report to Congress describing EAC activities for the previous fiscal year. – HAND OVER AS APPROPRIATE TO ENTITIES PICKING UP FUNCTIONS AS DESCRIBED ABOVE

<sup>2</sup> GAO Report on Election Equipment (September 2005)

<http://www.gao.gov/new.items/d05956.pdf>

Black Box Report: Security Alert (July 2005)

<http://www.blackboxvoting.org/BBVreport.pdf>

Security Analysis of the Diebold AccuBasic Interpreter (February 2006)

[www.ss.ca.gov/elections/voting\\_systems/security\\_analysis\\_of\\_the\\_diebold\\_accubasic\\_interpreter.pdf](http://www.ss.ca.gov/elections/voting_systems/security_analysis_of_the_diebold_accubasic_interpreter.pdf)

Security Assessment of the Diebold Optical Scan Voting Terminal (2006)

<http://voter.engr.uconn.edu/voter/Reports.html>

<sup>3</sup> [http://bocc.cuyahogacounty.us/GSC/pdf/esi\\_cuyahoga\\_final.pdf](http://bocc.cuyahogacounty.us/GSC/pdf/esi_cuyahoga_final.pdf)

<sup>4</sup> Conroy v. Dennis, Case No.: 06 CV 6072 filed in Colorado District Court

<sup>5</sup> <http://vote.nist.gov/threatworksummary.pdf>

<sup>6</sup> [http://www.pfaw.org/pfaw/dfiles/file\\_477.pdf](http://www.pfaw.org/pfaw/dfiles/file_477.pdf),

[http://www.votingintegrity.org/Testimony/EAC\\_Hearing5\\_5\\_04.html](http://www.votingintegrity.org/Testimony/EAC_Hearing5_5_04.html),

<http://www.nyvv.org/voterlines.shtml>

<sup>7</sup> Conroy v. Dennis, Case No.: 06 CV 6072 filed in Colorado District Court

<sup>8</sup> An End To "Faith-Based" Voting: Universal Precinct-based Handcount Sampling To Check

Computerized Vote Counts In Federal and Statewide Elections

<http://electiondefensealliance.org/files/UPSEndFaithBasedVoting.pdf>

## Thirteen Issues with the Holt Bill (HR 811) As Written

For more information contact: Nancy Tobi, [ntobi@democracyfornewhampshire.com](mailto:ntobi@democracyfornewhampshire.com), 603.315.4500

- 1) **Impossible timelines for implementation.** The timeline for 2008 implementation is unattainable by the federal government's very own guidelines with respect to the EAC Certification Program, Voluntary Voting System Guidelines (VVSG I), and any voting equipment that would be available, tested, and certified to that program's requirements. Because 39 states require some form of compliance with Federal Guidelines, they must use equipment to meet these EAC "voluntary" guidelines. However, there is no voting equipment on the market that can or will meet several of the guidelines and requirements under the EAC Certification Program by 2008, which are contained within the VVSG I, including the Holt Bill-mandated text conversion device (to convert ballot text to "Accessible Media") or its mandated VVPAT (archival quality paper).
- 2) **Loss of State-Guaranteed Privacy for Military and Overseas Voters.** The Special Rule for Votes Cast by Absent Military and Overseas Voters pre-empts state's rights to disallow fax and emailed ballots. States, such as NH, use state-issued paper ballots for the Military and Overseas voters in order to protect their voting privacy and the integrity of the State election. The Holt Bill overrides this State prerogative, enforcing a system that can not protect the ballot privacy for military voters.
- 3) **Unfunded mandate for new voting equipment.** The Conversion of Printed Content to Accessible Media is an unfunded mandate (estimated at up to \$4 Billion for nationwide implementation) for voting equipment that does not exist and probably will not exist until at the earliest 2012-2016. Jim Dickson, lobbyist for American Association of People with Disabilities, has publicly stated that the AAPD and other disability groups oppose the Holt Bill on these grounds.
- 4) **Impossible mandate for undisclosed software.** The prohibition of undisclosed software does not provide any exemption for COTS (commercial off the shelf) software. No existing voting equipment meets this requirement because they all use COTS, and many, if not all, use Microsoft software. Microsoft will never share its code, and this requirement would make every piece of voting equipment in use today illegal, requiring jurisdictions to run elections using illegal equipment or to replace existing equipment at a high cost, unfunded by HR 811. However, replacing equipment is equally problematic because none currently exists to meet this mandate or the EAC's VVSG I testing and certification standards.
- 5) **Unrealistic and unnecessary requirement for archival quality paper.** Durability requirements for paper ballots require archival quality paper. No equipment currently on the market will work with this requirement and it could take several years to develop. Federal law only requires the paper to last 22 months. Why require it to be archival? Again, this requirement would make every piece of voting equipment in use today illegal, requiring jurisdictions to replace equipment at a high cost, unfunded by HR 811. Again, the caveat -- as described

in item 5 above-- regarding the nonexistence of equipment to meet this mandate applies.

- 6) **Possibly illegal requirement for EAC payments to testing labs.** Procedures for conducting testing and payment of user fees that establishes an escrow account. The EAC has made it clear that they cannot pay the test lab under current law ("Miscellaneous Receipts") because the payment must come directly from vendor. On its face, the law appears to be illegal. If the law is changed to accommodate EAC payments to test labs, there is the additional risk of expanding EAC powers and authority. EAC is a four-person commission presidentially appointed, and expanded power to the Executive Branch in the oversight of federal elections is anathema to a healthy democracy.
- 7) **Expansion of Executive power over federal elections.** Extension of Authorization of the EAC. The EAC under HAVA should have been sunsetted in 2006, when their mandate to fulfill HAVA was complete. The EAC, through its testing and certification program already exerts de facto regulation over some 39 states, and additionally was granted regulatory authority in overseeing the National Voter Registration Act. Extension of this executive-appointed body raises the risk that Congress will expand the regulatory authority of the EAC, which expands the power of the Executive Branch over federal elections. This will result in a four-person Executive Commission, hand selected by the President, which has the power to effectively bypass Congress and create its own law pertaining to federal elections.
- 8) **Requirement for state audit function that may not exist or be appropriate.** Establishment of Election Audit Boards mandates a whole new state election function that may or may not exist in any given state, and which may or may not be suitable in any given state.
- 9) **Insufficient audit protocols.** Number of Ballots Counted Under Audits uses unreasonable auditing protocols that are insufficient to uncover any discrepancies, fraud or failure. This also creates the State Audit Board, which is non-existent in several states, and is another unfunded mandate.
- 10) **Impossible effective date for audits.** The bill mandates an impossible effective date for implementation among states for whom no such audit function currently exists, and which would need to create, from the ground up, an entirely new state function complete with appropriate staff, overhead, and legal infrastructure.
- 11) **Impossible effective date for implementing the entire bill.** The mandated 2008 effective date is also impossible for all the reasons given above with respect to available voting equipment to match HR 811 requirements.
- 12) **Broad reaching unfunded mandates.** The bill allocates \$300 million for its implementation, but estimates for accessibility devices alone reach \$4 billion. This does not even address the matter of new VVPAT equipment, or new state functions for auditing and certification of voting equipment.
- 13) **Requirement for state certification function that may not exist.** The bill repeatedly calls for an "appropriate election official" to make certification decisions, making an assumption that every state currently can identify that "appropriate" election official. However, many states do not currently have voting equipment certification offices in place. Funding such a state function can run up

to \$1 MIL/year, as is seen in Georgia with its Kennesaw Certification program budget. How quickly can states be expected to find that appropriate official, set up an office and fund it? This is not a one or two year process and asks more of our Secretaries of State, or some other entity that does not yet exist than has been expected to date.

The Election Assistance Commission's Voting Equipment Certification Program as a Ponzi Scheme

For more information contact: Nancy Tobi, [ntobi@democracyfornewhampshire.com](mailto:ntobi@democracyfornewhampshire.com), 603.315.4500

The Holt Bill perpetuates a failed system of electronic voting that was created in large part by the Help America Vote Act, which HR 811 amends. The Report "Voting Machines as a Ponzi scheme"

(<http://www.democracyfornewhampshire.com/node/view/3505>) explains this failure in an analysis of the EAC Voting Equipment Certification Program. The Report contends the Program is a Ponzi scheme in which American taxpayers are asked to invest in a never ending cycle of investment for a product that is, in fact, an illusion. The initial payback came in the form of HAVA disbursements, but is now a financial bleed.

The Report explains that the EAC system can not possibly work for the following reasons:

- a) **The guidelines in and of themselves are impossible to attain and contradict the standards of democratic elections.** The technology standards are above and beyond what is required for a voting system, and the complexities of the recommended technologies further obscure the vote casting and counting processes, which is in direct contradiction of transparency and citizen oversight required for democratic elections.
- b) **The timelines for implementation do not sync up with reality.** The 2005 EAC Voluntary Voting System Guidelines (VVSG I) becomes law in Dec. 2007, but EAC test labs will not have their test suites complete until at least 2010, the manufacturers will not have proper specs for their equipment until the test suites are available, at which time they will need time to develop, test and certify the products.
- c) **The financial model does not work.** Voting jurisdictions operate on a 10-15 year lifecycle for their voting equipment, but the EAC program is operating (on its face) on a 2-3 year cycle, in which new requirements are defined which obsolete all existing equipment. Voting jurisdictions can not financially afford this approach, and neither will the American taxpayers agree to continue to subsidize the voting industry, particularly in view of the poor record the industry has to date in terms of delivering reliable, accurate, and secure products.

### One-Page Concept Proposal for Federal Election Reform Legislation

We recommend splitting current election reform legislation into several separate bills which each address a few topics'. We agree with the National Association of Secretaries of State "NASS Approach to Federal Legislation"<sup>1</sup>. States should have flexibility in meeting or exceeding federal requirements." In the interest of brevity, a list of detailed comments follows this one-page list of recommendations.

#### Immediate Measures for True and Accurate Elections

1. **Manual Audits:** Require *sufficient* verifiable manual audits of election results to ensure that outcomes are correct for all federal races. Provide funds for Audits and **Auditable Voting Systems**. Require replacement of paperless un-auditable voting systems. Require **State Election Audit and Recount Committees**, and create a **U.S. Election Audit and Recount Committee** whose functions would include approving election audit and recount procedures for federal elections; and setting standards and reasonable time frames for state auditable, audit, and voter service reports (see item #5 and definitions).
2. **Security Precautions:** Outlaw Wide Area Network connections to, and wireless capability in, voting equipment; prohibit voting or transferring any voted ballots through any electronic network; and require states to make their security procedures available for public review and input.
3. **Prohibit Practices that Disenfranchise Voters:** See a specific list in "Detailed comments" section.

#### Sunshine Provisions and States' Rights

4. **Public Oversight Of Elections:** The public can help to ensure the integrity of elections and audits and prevent voter disenfranchisement only if the public has **Access to Election Data and Records**: In reasonable time frames, require election officials to make publicly available in original paper and electronic form all election data and election records that could reveal fraud or errors in elections or are necessary to verify voter service reports and manual audits, prior to certification of results; and **Public Right to Observe**: Require jurisdictions to allow citizens to observe all aspects of elections. **Election Monitoring Website**: Create a GAO website for publicly displaying the auditable, audit, and voter service reports from the states.
5. **Voter Service Reports:** Require states to submit timely reports of detailed election data that can be used to measure voter disenfranchisement and voter service levels.
6. **Reallocate the Functions of the US Election Assistance Commission (EAC):** Preserve states' rights and do not reauthorize the US EAC.

#### Long-Term Improvement Of Voting Technology<sup>iv</sup>

7. **Require Voting Technology with Disclosed Software, Security, Audit-ability, Privacy, and Independent Ballot Verification for Voters with Disabilities:** Allow ample time for standards-setting including public input and prioritization of possibly conflicting requirements; development of enforcement, testing, and monitoring systems; and for development, purchase, and training cycles; and for development and adoption of State Implementation Plans. To improve existing voting systems, the entire sequential process of setting standards, product development and implementation could take five to ten years, and federal requirements should enable jurisdictions to budget for voting equipment life-spans of at least 10 to 20 years.

#### Enforcement

After reasonable time frames, **provide swift and certain penalties** when an election jurisdiction fails in a transparency, auditing, or reporting obligation; or disenfranchises its voters. The goal is for election records and auditable, audit, and voter service reports to be available for public review and oversight prior to certification of election results and prior to swearing in of federal office-holders.

P. 1 prepared by **Kathy Dopp, National Election Data Archive**, [kathy@uscountvotes.org](mailto:kathy@uscountvotes.org) 3/29/2007  
Anyone may freely use, copy, or disseminate under the sole condition that it be properly attributed.

### Definitions

**Auditable Report:** In any field, the audited data must be committed first. I.e. An auditable report must be released publicly prior to the random selection of vote counts to audit so that the public can verify the audit. “Auditable report” means a report of detailed vote counts and ballots cast on each vote counting device in each precinct, for each election office, for each candidate and ballot contest, separately for each vote-type including Election Day, early, provisional, absentee, mail-in, military, etc. All ballot types must be tracked separately for that jurisdiction, from provisional to absentee to polling place electronic to polling place paper,... for each vote counting device for each race.

**Manual:** means a “hand-count” - a counting of the votes, wherein the handling of the voter verifiable paper records is done by human hand and the identification of each vote is determined by a visual inspection of said records by a human being.

**Sufficiently Statistically Valid:** means that enough machine vote counts are manually counted to give a fixed high probability (say 90% or 99%) of detecting at least one corrupt machine count if enough machine counts were corrupt to wrongly alter the outcome of a race.

**Scientific:** means that the amount of the manual audits are calculated using mathematical principles that will ensure that electronically counted election outcomes are correct, and that the random selection of machine counts is conducted so that each machine count has an equal probability of selection.

**Transparent:** means that an average non-technical citizen can observe and fully understand the procedures, well enough to determine if they are being done honestly and properly.

**Verifiable:** means that the public can verify for themselves that the information is correct. In an election audit, verifiable means the public can verify that manual counts match the machine counts that are used in the tabulation since an auditable report of all machine counts is made public prior to the random selection of machine counts to audit. *To verify election outcomes, election records must be publicly available.*

### Detailed Comments

1. **Manual Audits** There are several types of election audits conducted for various purposes such as voting machine audits, pre-election audits of ballot-definition files, manual audits of precinct or batch vote counts, and a thorough examination and verification of all the records associated with conducting an election. These comments discuss manual audits of precinct or batch vote counts. Audits must be sufficiently statistically valid, independent, transparent, verifiable, and scientific. Legislation should require audits to be completed prior to certification of election results. Specify a fixed minimum probability of detecting outcome-altering vote miscount (say 90% or 99%). The amount of vote counts to manually audit in order to detect outcome-altering vote miscount depends on the margin between candidates and other factors. If sufficient discrepancies are found between paper and electronic vote counts to possibly alter an election outcome, the manual audit must be sufficiently expanded. In the event that discrepancies are discovered between the counts obtained from electronic records and counts obtained from voter-verifiable paper records, the paper records shall be the true and correct record of the votes cast, except in the case where evidence exists that indicates that the paper record has been tampered with or damaged, in which case, if an outcome is in question, then a court will decide what the remedy should be. Election jurisdictions should count mail-in, overseas, absentee, or military ballots in batches that are approximately the same size as a median-size precinct count.<sup>vi</sup> The time between the announcement of the precinct, machine or batch vote counts to be audited and the actual audits should be minimized. Hand counted paper ballots may also be audited in the same manner to ensure accuracy, provided a secure chain of custody is maintained after the initial count. **Funds for Manual Audits:** The costs of auditing all federal elections would be approximately \$8 Million, but could cost more, depending on the method chosen to calculate audit sample size. See “Federal Election Audit Costs” <http://electionarchive.org/ncvAnalysis/US/paper-audits/FederalAuditCosts.pdf>. Fund only independent,

P. 2 prepared by Kathy Dopp, National Election Data Archive, [kathy@uscounvotes.org](mailto:kathy@uscounvotes.org) 3/29/2007  
Anyone may freely use, copy, or disseminate under the sole condition that it be properly attributed.

transparent, verifiable, sufficient, scientific, sufficiently statistically valid manual audits. **Auditable Voting Systems:** Require *replacement of all paperless electronic ballot voting systems*, replacing them with existing paper ballot optical scan equipment with ballot marking, ballot assist, or telephone voting devices for voters with disabilities. Fund only “fully-auditable” voting systems where all able-bodied voters can directly record votes on a durable paper ballot that is inherently voter-verified. Electronic ballot voting systems are not fully auditable. For information regarding how errors introduced by a post-facto paper record can corrupt manual audits see the Brennan Center report [http://brennancenter.org/dynamic/subpages/download\\_file\\_36343.pdf](http://brennancenter.org/dynamic/subpages/download_file_36343.pdf) Electronic ballot systems may be mis-programmed to introduce errors or omit races on electronically created paper ballot records and voters often do not notice. Fully-auditable systems would require federal funding for precinct-based optical scan systems using durable ballots which will keep voter marks and be suitable for recounts for 24 months. For voters with disabilities, so that they can vote privately and independently, economical voter assist devices like vote-PAD, telephone voting systems, or ballot printing devices like the AutoMARK or Populex, are available. Require that any paper record or paper ballot be sufficiently sturdy in form and marking to support handling for recounts and audits for a minimum of 24 months. In jurisdictions using electronic-ballot equipment, anyone who requests a paper ballot should be given one that can be tallied using the normal tallying process. Only voting systems that protect voter anonymity (do not store ballots in sequential order) should be funded. It must not be possible to determine the selections made in a provisional or mail-in ballot until after that ballot has been approved for counting.<sup>vii</sup>

**Funds for Replacing paperless DREs with Auditable Voting Systems:** Estimating that there are approximately 67,000 polling places with paperless DRE systems, requiring at least one ballot marking device (BMD)<sup>viii</sup> per polling place to provide accessible voting for voters with disabilities or alternative language requirements = 67,000 BMDs X \$5,000/machine = \$335 Million. Of the 67,000 precincts, approximately 44,000 do not currently use precinct based optical scanners (PCOS) and would need to purchase one PCOS per polling place = 44,000 precincts X \$5,000/machine = \$220 Million. This would make the total fiscal note approximately \$555 Million, a reasonable cost for implementing auditable voting systems that would improve the security and accuracy of elections.<sup>ix</sup> Note that this amount does not include all costs for implementing this equipment such as software configuration or recurring costs.

**State Election Audit and Recount Committee** members should include appropriate stakeholder representation, including citizen oversight groups, representatives of all political parties, liaison state and local election officials, and persons with at least Masters degrees in mathematics, statistics, quality assurance, and computer science, for overseeing audits and recounts and for creating any state audit and recount procedures that may be different than an already federally approved audit or recount procedure. State Audit Plans should include approved procedures for when to expand manual audits in response to discrepancies and how to resolve discrepancies whenever discrepancies are discovered between manual and machine counts. There are examples of how states resolve discrepancies found in the March 2007 Electionline report: <http://electionline.org/Portals/1/Publications/EB17.pdf> **U.S. Election Audit and Recount Committee (EARC):** The Vote Count Audit and Recount Committee should be under The National Institute of Standards and Technology (NIST) or the U.S. GAO. Its members should have at least a Masters degree in fields like statistics, mathematics, computer science, computer based security plus members who are election integrity activists, gaming experts, and non-voting election officials<sup>x</sup>. This committee would ensure that state audit, recount, and other policies and procedures are adequate to ensure accurate election outcomes and avoid voter disenfranchisement. **For more information** on election audits, see <http://Vote.nist.gov/ElectionIntegrityAudit.pdf> <http://electionarchive.org/ucvAnalysis/US/paper-audits/FourTierAudit/TieredElectionAudits.pdf> <http://electionarchive.org/ucvAnalysis/US/paper-audits/ElectionAuditEstimator.pdf> <http://electionarchive.org/ucvAnalysis/US/paper-audits/VoteCountAudit-UT.pdf>

2. **Security Precautions: Prohibit Network Connections** to all vote casting and counting devices; and require states to provide methods for making their procedures for conducting elections and for securing ballots and voting technology publicly available for citizen oversight, with passwords and encryption codes redacted.<sup>51</sup> No network access to central tabulating equipment could preclude non-critical functions during elections such as having exit pollsters obtain immediate election results before the public. Removable write-once physical media, checked for the absence of malicious code, can be used to transfer both election results and programs needed to upgrade systems. Do not fund voting systems that have network hardware.
3. **Prohibit Practices that Disenfranchise Voters:** For example, Prohibit voting by public networks or by faxing ballots to any office other than the local election office; No immaterial, onerous paper weight requirements for voter registration forms; Serious penalties for ballot tampering or vote fraud, and for fraudulently losing registration forms or changing them prior to submission; State issued ID not required, but any reasonable proof of residency for voter identification to vote; Voter sign-in system must be a paper system, not an electronic one subject to crashes, power outages, or network failures; No one other than the voter or a non-partisan election official (or a postal clerk) may make any marks on a ballot envelope, except for an authorized person who returns a ballot to a polling place may sign it as required by the jurisdiction; Penalties for systematically challenging voters; Consider how voter rolls may be scrubbed of people who have allegedly moved, died, or are convicted of crimes; Consider how voter registrations are verified against other databases. (Not everyone has a driver's license or state issued ID card. Sometimes it is unclear what is a middle name or a compound last name; or people use different forms of their names. In some foreign names, the family name is first not last. DMV databases are not always accurate. For guidance on implementing voter registration databases see <http://acm.org/usacm/VRD>); Paper ballots should be available at all polling locations for voters who prefer not to vote using electronic ballots and in case of long lines, power outages, or equipment failures; Automatic reinstatement of federal voting rights for anyone convicted of any felony or other crime who has served their time.
4. **Public Oversight over Elections: Access to Election Records and Data:** Government is the servant of the people, and not the master of them. The people, in delegating authority, do not give their public servants the right to decide what is good for the people to know and what is not good for them to know. The public must be informed so that we may retain control over the instruments of government we have created. Rapid access to public records related to elections is vital for citizen oversight of election integrity, voter registration accuracy, and manual audits. Adequate records must be produced and retained, and records needed to canvass the election must be made available to the public before the election is certified. Information must not be removed from public oversight by placing it outside governmental custody or allowing proprietary rights to be ceded to private parties.  
 A printout of each voting machine's vote totals must be posted immediately and made available to the public and to certified tabulation observers at the polling place at poll closing to be compared to centrally tabulated totals for the corresponding polling place to be displayed on the Internet. We need a federal statute requiring public access to election records that is similar either to the Freedom of Information Act, or to the National Voter Registration Act of 1993 (NVRA) **Sec. 1973gg-6 (j) "Public disclosure of voter registration activities"**. I.e. we need federal legislation that states something like the following:

"Each State shall maintain for at least 2 years and shall make available for public inspection and, where available in electronic format, provided on a public web site or by photocopying at a reasonable cost, all records concerning the implementation of *elections*. Beginning with 2008 federal elections, all electronic logs, data files and reports which can be produced in electronic form by election systems currently in use should be made available before election results are made official<sup>52</sup>, and the public should be allowed reasonable examination of

P. 4 prepared by **Kathy Dopp**, National Election Data Archive, [kathy@uscounyvotest.org](mailto:kathy@uscounyvotest.org) 3/29/2007  
 Anyone may freely use, copy, or disseminate under the sole condition that it be properly attributed.

relevant paper documents before the election is certified. Beginning with 2010 federal elections, scanned copies of relevant paper records should be made available at least one week before the time period to contest the election has expired, with originals available for authentication if requested;”

**Funds for Scanners:** Approximately \$3.3 Million to \$29.9 Million would be needed to supply approximately 3300 jurisdictions with special scanners, costing approximately \$1,000 to \$9,000 each, to make the job of scanning paper election records efficient.<sup>xiii</sup> Allow ample time to sufficiently reduce or eliminate, where necessary, the particular constraints and parameters of current election administration systems (as defined below).

Records which need to be created, retained, and made publicly available in addition to voter-authenticated ballots, include incident, troubleshooting, and problem logs from elections workers, vendors and help desks; ballot accounting and reconciliation forms; assignment logs for voting equipment (including peripherals) serial numbers and locations where equipment has been deployed throughout the election cycle; security area access logs, keycard logs, and videotapes; all computer and voting system audit logs, event logs, error logs, network event and status logs, and process reports, ballot definition files and databases; results tapes and reports including the interim tallies; voter registration lists, records of voters who requested, mailed, and returned mail-in or provisional ballots, voters who signed in at the polls on Election Day and during early voting; certification reports, contracts of sale for voting systems, technical support, maintenance, and repair logs, and all billings, invoices, adjustments and written communications with vendors, and electronic vote count data on central tabulation, voting system printouts, certification and testing reports. All records which are available in electronic format shall be made publicly available on the Internet.

**Election Administration Constraints** include election timeline requirements and personnel deficiencies. Many jurisdictions rely on nonprofessional and largely volunteer election officials, who are not skilled and do not have the time to carry out demanding bureaucratic tasks such as data collection, entry, compilation and reporting. The implications of adding audit, reconciliation, compilation, and reporting requirements to election administration are broad. To fulfill these requirements, it may be necessary to adjust primary and Election Day timelines. In order for all of the auditing, reconciliation, data collection and entry, copying of records, and reporting activities to be appropriately and correctly implemented prior to any swearing in for Federal offices, more staff, equipment, and computer systems may be needed. Although election officials should never audit their own work and audits would be conducted by independent auditors, election officials must be available during the entire canvass period to assist the auditors with reconciliation, provide ballots and election records, and provide a room with facilities for public observation for both the random selections and the manual audits. The reporting requirements, although vital for citizen verification of election results, would initially, until systems are developed, be particularly onerous for election officials. Getting the data from counties and townships is complicated and time-consuming and would take possibly three weeks of work to accomplish. One election official suggests moving Election Day to mid-October so that the auditing, reconciliation, data collection, input, and reporting activities can be implemented prior to any swearing in for Federal offices. Ample input would be required from election officials, the 50-state Standards Committee, and when formed, the State Election Audit and Recount Committees for the US EARC to develop reasonable timelines for public release of election records and standards and timelines for election data reporting for audit, auditable, and voter service reports.

**Public Right to Observe:** The right to observe the election process is necessary to empower citizens to ensure election fairness and transparency. Citizens should be allowed to observe close-up or by verifiable, transparent, immediately available, close-up video. Citizens should be able to observe the preparation and administration of elections, real pre-election voting machine testing (not just demos),

the polls, and the transfer of ballots to the central office, the tallying and reporting of the votes, manual audits, recounts, and any post-election testing. All of these should be sufficiently publicly noticed. This requirement should include language that requires jurisdictions to allow genuine observation and recording of the events, not just presence in the room.

**Election Monitoring Website:** The GAO could create an easy-to-use web site that the public could use for research and independent analysis of election integrity and voter disenfranchisement. The goal is for states' auditable, audit and voter service reports for an election to be submitted and publicly displayed at least two weeks prior to any candidates' swearing in date for the same election and prior to the state deadlines for contesting an election, with the recognition that fulfillment of this goal may require adjustment of election timelines, or reasonable graduated reporting deadlines over several federal election cycles<sup>xiv</sup>.

5. **Voter Service Reports:** must be publicly verifiable. Reports must include the number of registered voters assigned to that polling location, whether polling locations represent one or more precincts (if more, how many), machine allocation, equipment failure and breakdown, under-vote, over-vote, and uncounted ballot rates, absentee and provisional ballot & voter registration handling, and other crucial measures of voter services. Also, after reasonable time frames, include reports on whether supplies ran out, and maximum reported wait time for voting. The goal is to have voter service reports submitted prior to the deadline to contest an election and prior to swearing in. The EARC shall work with election officials to determine what reporting time frames are reasonable for particular data, given the acknowledged election administration constraints (see above).
6. **Reallocate EAC functions**, as appropriate, to the General Services Administration (GSA), Federal Election Commission (FEC), US Government Accountability Office (GAO), National Institute of Standards and Technology (NIST), the Technical Guidelines Development Committee<sup>xv</sup> (TGDC), and a 50-state representational Standards Board, rename it the National Election Standards Board, hire a new administrative staff, and add a 50-state citizens' representational body to jointly assume most of the functions currently filled by the EAC.<sup>xvi</sup> See these three papers on the EAC:  
[http://electionarchive.net/docs\\_other/EAC-DoNotReauthorize.pdf](http://electionarchive.net/docs_other/EAC-DoNotReauthorize.pdf)  
<http://www.votersunite.org/info/TestimonyTheisen03-13-07.pdf>
7. **Allow Ample Time for Sequential Standards-Setting, Development and Purchase Cycles for New Equipment and Public Disclosure of Voting System Software.** The normal development cycle for new technological equipment is many years. Standards must be set and enforcement systems must be developed, years in advance of requiring adoption of new equipment. Requirements for independent ballot-verification systems for voters with disabilities and requirements for all voting system software to be publicly disclosed both take long development cycles. Most voting systems currently run primarily on commercial software which cannot be publicly disclosed and which can easily hide undetected malicious code. Open source voting systems would be less costly and more secure, but will require a long development cycle to achieve. Exempting commercial off-the-shelf (COTS) software from being publicly disclosed would exempt over 90% of software, which could hide malicious programs. There is no need to use COTS software on voting systems. The costs are considerable for the complex systems necessary to log voting system components and verify publicly disclosed software. Consider incentives for open source (public) voting system code. All information necessary to validate elections must be produced and made publicly available for the voting system and no restrictions on public access to election records necessary to verify election integrity may be imposed by proprietary claims, nor shall access to election records or results necessary to verify the integrity of the electoral process be placed outside of governmental custody. Detailed explanations of the intricacies of voting system software disclosure are here: [http://electionarchive.net/docs\\_other/dopp/VotingSystemSoftwareDisclosure.pdf](http://electionarchive.net/docs_other/dopp/VotingSystemSoftwareDisclosure.pdf)

<http://www.cs.berkeley.edu/%7Edaw/papers/testimony-house07.pdf>

A **HAVA State Plan Process** which brings together stakeholders, including representatives of citizen oversight groups, and appropriate experts<sup>xiii</sup>, would provide an important vehicle for states to develop policies, procedures, and processes appropriate to specific state needs and requirements.

**Prioritization of Conflicting Requirements:** HAVA and the Voting Rights Act of 1965 with amendments provide a series of open-ended and possibly conflicting requirements for voting systems including security, accuracy, reliability, accessibility, voter privacy, and voter independence. While HAVA focused primarily on accessibility, each of these requirements is valid, but the fulfillment of one may very well negate the attainability of the other. For example, for voters without limbs, independent verification of ballots and ballot privacy conflicts because if ballots are never touched by voters and simply fall into a bin, then ballot secrecy for all voters and *independent* verification for voters with disabilities may be unattainable. Requirements for accessibility and multiple languages, especially due to the open-ended nature of the laws regarding these requirements have thus far created a situation where equally valid priorities, such as security, accuracy, and reliability, have become unattainable under current voting equipment solutions. Ample time must be allowed for studying and determining appropriate priorities for these conflicting requirements so that standards-setting procedures incorporate priorities and avoid creating or perpetuating situations of conflicting and mutually unattainable requirements. Prioritization and federal standards setting should be conducted in conjunction with appropriate State Plan processes, including public input, development of enforcement, testing, and monitoring systems; and for development, purchase, and training cycles. States should be allowed to develop their own standards which meet or exceed federal standards.

**Enforcement:** Consider both civil and criminal penalties, including a reduction in certain federal funds to be appropriated in the coming year; or only provisionally swearing in Congressional Members or not certifying Presidential electors from states that have disenfranchised their voters by any means, including by failing to audit transparently or by failing to submit auditable, audit, and voter service reports in the required time frames. **Fund Voter Service Reports:** Fund only verifiable, complete voter service reports.

**Submission of Reports:** The auditable report required to verify election audits must be submitted prior to the date of the random selection of machine counts for the manual audit; and the audit report used for monitoring vote count accuracy should be submitted prior to election results being made official and must be submitted sufficiently prior to the deadline to contest an election and prior to the swearing in date. Voter service reports, used for monitoring voter disenfranchisement must also eventually be submitted sufficiently prior to the deadline for contesting elections and prior to swearing in dates.

### Acknowledgements

Dozens of persons contributed to writing this document over many months of discussion, after dedicating themselves for years to bringing verifiable integrity to U.S. elections. Some of these persons are listed here: <http://electionarchive.org/ucvInfo/US/ExpertsList.pdf>. Recent revisions were based on input from state and county election officials including Bruce Funk, former (23 year) chief election official of Emery County, Utah; and revisions were made by Nancy Tobi, Cofounder of **Democracy for New Hampshire** and Chair, NH Fair Elections Committee; by Bev Harris, Director of **Black Box Voting**; and by Phil Fry, **Citizens Alliance for Secure Elections (CASE)**, Ohio.

*This document is available online:*

<http://electionarchive.org/ucvInfo/US/EI-FedLegProposal-v2.pdf>

P. 7 prepared by Kathy Dopp, National Election Data Archive, [kathy@uscounyvotest.org](mailto:kathy@uscounyvotest.org) 3/29/2007  
Anyone may freely use, copy, or disseminate under the sole condition that it be properly attributed.

<sup>i</sup> Teams of stakeholders, experts and election officials could collaboratively draft these bills beginning with the language of existing proposals. Teams could consist of persons with expertise in specific topics such as auditing, voter disenfranchisement, election records, election law, voting technology, disability issues, security, election administration, and so on.

<sup>ii</sup> Adopted February, 2007, NASS stated: "Members of Congress should respect our country's legal and historical distinctions in federal and state sovereignty and avoid preemptions of state authority when drafting federal legislation. Federal legislation should include a reasonable timeframe for implementing state requirements or programs. Federal legislation that affects the office and duties of the Secretaries of State should be drafted with input from NASS or a representative sample of the Secretaries of State who would be impacted by the bill. Federal legislation that mandates changes to state laws or regulations should include full funding to support those changes. Federal legislation should not curtail state innovation and authority solely for the sake of creating uniform methods among the states; all legislation should grant states maximum flexibility in determining methodologies properly and effectively carrying out the duties of Secretaries of State, including the protection of voting rights."

<sup>iii</sup> States should have flexibility to implement standards and procedures that meet and exceed federal requirements.

<sup>iv</sup> The Holt, Nelson, and Clinton bills would create a "HAVA-like" mess due to insufficient implementation timelines.

<sup>v</sup> Recommended language for vote count audit amounts is something like:

- a) at least 1% (one per centum) of each county's precinct or batch vote counts are audited; and
- b) a sufficient number of vote counts shall be audited to give at least a 99% probability for detecting at least one corrupt vote count if the amount of corrupt vote counts were sufficient to alter the election outcome of any election contest, taking into account the margin between the candidates; and
- c) at least one vote count is audited in each election contest submitted to the voters within each county's jurisdiction; and
- d) in addition to randomly selected precincts in a), b), and c) above, a small number of discretionary precinct vote counts selected by candidates, or alternatively, precinct vote counts which calculations show are "suspicious"  should be manually audited.

<sup>vi</sup> All vote counts (precincts or batch or machine counts) should be roughly the same size in order for the audit to be most effective. If the vote counts are not roughly of equal size, then the exact number of vote counts that could wrongly alter an election outcome may be exactly calculated using the number of ballots cast in each vote count, and used to exactly calculate the minimum audit sample size that would ensure that the election outcomes are correct; or the probability of random selection of precincts could be weighted by size as proposed in a recent paper by Ron Rivest.

<sup>vii</sup> Some jurisdictions do not employ ballot privacy envelopes so that the person(s) who open up the mail-in ballots and verify the legal right of the person to cast a ballot in the election, may also view the choices made by the voters.

<sup>viii</sup> For accessibility, these jurisdictions could also possibly purchase a telephone voting system, ballot assist devices, ballot marking devices, or possibly add ballot printers to a DRE. According to Noel Runyan, electrical engineer and computer scientist who designs accessible voting systems, "The only voting systems that permit truly accessible verification of the paper ballot are ballot marking devices." It is possible to provide a single BMC to be used by any voter in the polling place "to give overvote warnings, so a precinct count optical scanner would not be necessary." See Runyan's testimony: [http://electionarchive.net/docs\\_other/HearingTestimony/NoelRunyanTestimonyHouseAdmin-March2007.doc](http://electionarchive.net/docs_other/HearingTestimony/NoelRunyanTestimonyHouseAdmin-March2007.doc)

<sup>ix</sup> Note that if all DRE voting systems with paper roll VVPATs were also replaced by precinct-based paper ballot optical scan systems, the total fiscal note would be approximately \$990 Million = 74,000 X \$10,000 + 50,000 X \$5,000. The number of precincts was taken from Warren Stewart's testimony on election reform before the House Admin Committee: [http://electionarchive.net/docs\\_other/HearingTestimony/StewartTestimony.doc](http://electionarchive.net/docs_other/HearingTestimony/StewartTestimony.doc)

<sup>x</sup> Election officials must be non-voting members of any audit or recount committee because auditing in any fields is done independently of those who conduct the audited activities.

<sup>xi</sup> "Security by obscurity" is a discredited method of security that leaves any system open to security breaches by insiders whereas systems that permit public scrutiny of security procedures have better security.

<sup>xii</sup> Note: Because current computerized voting systems already produce audit logs, event logs, as described above, all that is required is to click the menu items to save a copy of each log and report to disk, a task that can be accomplished simply by following properly designed Users Guides for the equipment. This is not a time consuming task, nor does it require special expertise. The single most powerful and efficient improvement to public access can come simply from running copies of electronic reports and saving them to disk, or publishing them online.

<sup>xiii</sup> The top of the line highest end high speed scanners that can network directly to the county system and convert documents -- including narrow documents like checks or poll tapes -- into digital images, runs for about \$9000. The lowest end model -- tradeoffs being speed and efficiency and networking ability -- is about \$300. To scan all the poll tapes in a LARGE jurisdiction might take staff time of 1-2 days. The other documents will be doable in an hour. The whole time equation could vary wildly depending on the scanner model and whether it will process poll tapes.

<sup>xiv</sup> In other words, a reasonable deadline for submission of reports might be January 15th in the first federal election cycle in 2008, but by 2010 the reasonable deadline for the same report might be December 15th, as determined by the US Election Audit and Recount Committee in consultation with state and local election officials; moving the deadlines over time until

the goal is achieved to permit public oversight and verification of election results as much as possible prior to certifying election results, and prior to state deadlines for contesting elections, and prior to swearing in ceremonies.

<sup>xv</sup> The qualifications for TGDC members need to be increased to require a Masters degree in technical fields.

<sup>xvi</sup> The EAC duties, as described on their website and listed below in lower case, could possibly be delegated as follows:

- Technical guidance on the administration of federal elections. – NIST & STANDARDS BOARD
- Produce voluntary voting systems guidelines. – NIST & STANDARDS BOARD
- Research and report on matters that affect the administration of federal elections. – STANDARDS BOARD, & NIST
- Otherwise provide information and guidance with respect to laws, procedures, and technologies affecting the administration of Federal elections. – STANDARDS BOARD, NIST & CITIZENS GROUP
- Administer payments to States to meet HAVA requirements. – GSA
- Provide grants for election technology development and testing. – NIST.
- Manage funds targeted to certain programs designed to encourage youth participation in elections. – FEC
- Develop a national program for the testing, certification, and decertification of voting systems. – NIST & STANDARDS BOARD
- Maintain the national mail voter registration form that was developed in accordance with the National Voter Registration Act of 1993 (NVRA), report to Congress every two years on the impact of the NVRA on the administration of federal elections, and provide information to States on their responsibilities under that law. – FEC
- Audit persons who received federal funds authorized by HAVA or this bill by Congress. – GAO
- Submit annual reports to Congress describing election activities for previous fiscal year. – APPROPRIATE ENTITIES

<sup>xvii</sup> The composition and appointment of State Plan Committee Members are details to be worked out.



**RE: ELECTION INTEGRITY GROUPS RELEASE A "ONE-PAGE CONCEPT PROPOSAL FOR FEDERAL ELECTION REFORM LEGISLATION"**

*Friday, March 30, 2007.* Leaders in four election integrity organizations are delivering a proposal to the Congress calling on the members to sponsor better election reform legislation.

According to leaders of The National Election Data Archive, Black Box Voting, Democracy for New Hampshire, and Citizens' Alliance for Secure Elections, OH, there are serious flaws in current election reform proposals proposed by U.S. Congressman Rush Holt and Senator Bill Nelson (HR 811 & S559) and by Congresswoman Stephanie Tubbs Jones and Senator Hillary Clinton (HR1381 & S804).

Some election officials agree. Douglas A. Kellner, Co-Chair of the New York State Board of Elections in a March 20, 2007 email correspondence said: "Congress got it wrong when it passed the Help America Vote Act in 2002 and there is a high probability that HR 811 in its current form could create another form of expensive mischief that could interfere with efficient administration of elections."

The National Conference of State Legislatures (NCSL) and the National Association of Counties (NACo) have also written a joint letter on March 19, 2007 urging members of Congress to oppose HR811/S559.

Yet, federal election reform legislation is critically needed in early 2007 if it is to be in effect in time to assure the accuracy and truth of 2008 federal elections.

Kathy Dopp, President of the National Election Data Archive with help from state and county election officials and other election integrity activists such as Bev Harris, Director of Black Box Voting; Nancy Tobl, Cofounder of Democracy for New Hampshire and Chair, NH Fair Elections Committee; and Phil Fry of Citizens' Alliance for Accurate Secure Elections OH have authored a "One-Page Concept Proposal for Federal Election Reform Legislation". The key ideas of their proposals are 1) citizen oversight of elections, 2) sufficient manual counts of paper ballots to verify the accuracy of election outcomes, 3) prohibit and monitor voter disenfranchisement, and 4) well-planned, long-term improvement of voting systems. They are also recommending that the US Election Assistance Commission be dissolved.

According to Dopp, their "One-Page Concept Proposal for Federal Election Reform Legislation" has more reasonable time frames, enforceable requirements, provisions for citizen oversight, respect of states' rights and flexibility, provides sufficient funding to cover its requirements, and is more cost-efficient and effective than current election reform proposals.

Attached is the "One-Page Concept Proposal for Election Reform Legislation" along with detailed comments. <http://electionarchive.org/ucv/Info/US/EI-FedLegProposal-v2.pdf>

Any feedback on the proposal and any help that you can be in getting this legislation sponsored would be greatly appreciated.

Best Regards,

*Kathy Dopp*

Kathy Dopp, President of National Election Data Archive  
<http://electionarchive.org>  
[kathy@usvotecounts.org](mailto:kathy@usvotecounts.org) 435-658-4657

The flaws in current election reform bills proposed by Holt, Nelson, Clinton, and Tubbs-Jones are discussed in these papers and articles:

"Federal Election Audit Costs" shows that the HR811/S559 and HR1381/S804 election audits would give as low as a 10% probability of detecting outcome-altering vote fraud and yet cost 50% to 94% MORE than an election audit with a 99% success rate, when applied to 2002 and 2004 US House and Senate races.  
<http://electionarchive.org/ucvAnalysis/US/paper-audits/FederalAuditCosts.pdf>

Much of the testimony that has been given before the House Administration Committee on Election Reform is available publicly here: [http://electionarchive.net/docs\\_other/HearingTestimony/](http://electionarchive.net/docs_other/HearingTestimony/) or will be posted here: <http://www.cha.house.gov>

Doug Kellner, NYS Board of Elections Co-Chair' comments:  
<http://www.wheresthepaper.org/CommentDouglasAKellner.htm>

Joint letter of National Association of Counties and National Conference of State Legislatures  
[http://electionarchive.net/docs\\_other/HearingTestimony/NCSL-NACoopposeHoltBill.pdf](http://electionarchive.net/docs_other/HearingTestimony/NCSL-NACoopposeHoltBill.pdf)

"Fool Me Once: Checking Vote Count Integrity"  
<http://electionarchive.org/ucvAnalysis/US/paper-audits/TierElectionAuditEval.pdf>

DeForest Soaries says that "EAC and Federal efforts for election reform 'A Charade,' 'Travesty!'  
<http://www.ejfi.org/Voting/Voting-6.htm#soaries>

"Why we must not Re-Authorize the EAC"  
[http://electionarchive.net/docs\\_other/EAC-DoNotReauthorize.pdf](http://electionarchive.net/docs_other/EAC-DoNotReauthorize.pdf)

"The US Election Assistance Commission Has Not Done its Job"  
<http://www.votersunite.org/info/TestimonyTheisen03-13-07.pdf>

"Avoid Another HAVA Train Wreck: Software Disclosure Requirements are a Good Long Term Goal but Need to Be Redrafted in Current Federal Election Integrity Legislation."  
[http://electionarchive.net/docs\\_other/dopp/VotingSystemSoftwareDisclosure.pdf](http://electionarchive.net/docs_other/dopp/VotingSystemSoftwareDisclosure.pdf)

David Wagner, computer scientist's testimony on election reform before the House Admin committee:  
[http://electionarchive.net/docs\\_other/HearingTestimony/wagner.pdf](http://electionarchive.net/docs_other/HearingTestimony/wagner.pdf)

"Critical changes are needed to Holt's HR811"  
<http://electionarchive.org/ucvInfo/US/ChangesNeeded2HR811.pdf>

"Holt's HR 811, A Deceptive Boondoggle -- 10 Blunders to Fix" by Bruce O'Dell  
[http://www.opednews.com/articles/opedne\\_bruce\\_o\\_070221\\_holt\\_s\\_hr\\_811\\_a\\_dece.htm](http://www.opednews.com/articles/opedne_bruce_o_070221_holt_s_hr_811_a_dece.htm)

"What's Wrong with Holt II (HR 811)" by Bev Harris of Black Box Voting  
[http://www.opednews.com/articles/opedne\\_bev\\_harr\\_070208\\_what\\_s\\_wrong\\_with\\_ho.htm](http://www.opednews.com/articles/opedne_bev_harr_070208_what_s_wrong_with_ho.htm)

"Summary of E-Voting as a Ponzi Scheme" by Nancy Tobi of Democracy for New Hampshire  
<http://www.democracyfornewhampshire.com/node/view/3571> or  
<http://www.democracyfornewhampshire.com/files/PonziSummary.pdf>

"New Version of Holt Bill: A Giant Step Backwards" by Nancy Tobi of Democracy for New Hampshire  
[http://www.opednews.com/articles/opedne\\_nancy\\_to\\_070207\\_new\\_version\\_of\\_holt.htm](http://www.opednews.com/articles/opedne_nancy_to_070207_new_version_of_holt.htm)

HR811 Review by Marian Beddill  
<http://noleakybuckets.org/holt811/holt811detail.shtml/>

"Who is Supporting and Who is Opposing Current Election Reform Legislation?"  
[http://www.opednews.com/articles/genera\\_kathy\\_do\\_070325\\_who\\_is\\_opposing\\_or\\_s.htm](http://www.opednews.com/articles/genera_kathy_do_070325_who_is_opposing_or_s.htm)

Analysis of the proposed "Count Every Vote" bill (federal legislation)  
<http://www.democracyfornewhampshire.com/node/view/3609>

What's wrong with the NEW Holt Bill (HR 811)?  
<http://www.democracyfornewhampshire.com/node/view/3572>

Stopping H.R. 550 as written because we can't compromise on democracy  
<http://www.democracyfornewhampshire.com/node/view/3084>

Joint Letter to Congress on HR811/S559 of the National Association of Counties and The National  
Conference of State Legislatures  
[http://electionarchive.net/docs\\_other/HearingTestimony/NCSL-NACooppoaseHoltBill.pdf](http://electionarchive.net/docs_other/HearingTestimony/NCSL-NACooppoaseHoltBill.pdf)

## **Why The Election Assistance Commission Must Not Be Reauthorized Centralization Of Executive Power In The U.S. EAC**

Nancy Tobi, [ntobi@democracyfornewhampshire.com](mailto:ntobi@democracyfornewhampshire.com)

*The democratic processes of the American Republic are based on decentralized power and a government of the people, by the people, and for the people.*

**1. White House Control over Counting the Votes:** Current legislative proposals, such as Congressman Holt's Bill<sup>1</sup> or Senator Clinton's election reform bill<sup>2</sup>, extend the power and authority of the Election Assistance Commission (EAC) beyond its existing expiry date, establishing a Presidential Commission authorized to control the counting of votes in U.S. elections.

**2. Crony Appointments:** The potential for stacking of the EAC with political appointees is evident in the scenario already played out under the current Administration<sup>3</sup>, putting political appointees into positions of power and authority without the checks and balances of Congressional oversight. Of the eight recess appointments made on January 4, 2006, three were Commissioners to the Federal Election Commission. Two of those interim-appointed Commissioners are known for their opposition to voting rights and clean elections. The third is a political crony of Senate Minority Leader Reid of Nevada. Of Bush's two latest EAC appointees, who were both confirmed by Congress without public hearings, neither has any election experience to speak of, and both follow the same pattern of crony appointments.<sup>4</sup>

**3. Regulatory Authority:** Federal regulatory authority means the federal entity preempts state and local authorities. In the matter of elections, the US Constitution endows the States with authority over election administration. This enforces decentralization of power, which is a foundational building block for the American democratic processes. HAVA<sup>5</sup> created the EAC as an advisory commission with one exception: it was granted regulatory authority over the National Voter Registration Act (NVRA). The EAC has been steadily positioning and even suing<sup>6</sup> to assert regulatory authority in other areas under its domain. **Even if it does not succeed through litigation, the EAC could, with the insertion of a single line of text in ANY congressional act, become regulatory.**<sup>7</sup> A regulatory EAC means that a Presidential Commission would have legal decision making and enforcement power over the following areas, for every state in the nation:

- Which voting systems are approved for use
- Who counts the votes
- How votes are counted
- How recounts are administered and how election outcomes are determined

An editorial in the New York Times, entitled "*Strong Arming the Vote*" (August 3, 2006)<sup>8</sup> describes how the Department of Justice under the Bush Administration has been heavily involved in partisan ploys to negate checks and balances in election practices.

*Any legislation that makes permanent the EAC would establish a new arm of executive power with dangerous authority to subvert the democratic process of elections that supports our system of government, and could result, in effect, in a bloodless coup. The EAC's functions would be better accomplished if they were reallocated.*<sup>9</sup>

<sup>1</sup> HR811 <http://thomas.loc.gov/cgi-bin/bdquery/z?d110:h.r.00811>:

<sup>2</sup> S804 <http://thomas.loc.gov/cgi-bin/bdquery/z?d110:h.r.01381>; and  
<http://thomas.loc.gov/cgi-bin/bdquery/z?d110:s.00804>:

<sup>3</sup> In early 2006, the Bush White House made numerous recess appointments  
[http://www.sourcewatch.org/index.php?title=Recess\\_appointments\\_made\\_by\\_President\\_George\\_W.\\_Bush](http://www.sourcewatch.org/index.php?title=Recess_appointments_made_by_President_George_W._Bush)

<sup>4</sup> March 8, 2007 Hunter & Rodriguez Appointed as New EAC Commissioners

[http://www.eac.gov/news\\_030807.asp](http://www.eac.gov/news_030807.asp)

<sup>5</sup> [http://www.fec.gov/hava/law\\_ext.txt](http://www.fec.gov/hava/law_ext.txt)

<sup>6</sup> *Statement of EAC Chairman Paul DeGregorio regarding the EAC's Tally Vote of July 6, 2006, involving the request from the Arizona Secretary of State to change the instructions on the Arizona Federal Voter Registration Form.*

<http://www.eac.gov/docs/DeGregorio%20comments%20of%20July%206%2006%20Tally%20Vote%20regarding%20AZ%20%20final%20pd.pdf>

<sup>7</sup> *This is how the FEC gained regulatory powers.*

<sup>8</sup> [http://www.nytimes.com/2006/08/03/opinion/edit-1-thu.html?\\_r=1&oref=slogin](http://www.nytimes.com/2006/08/03/opinion/edit-1-thu.html?_r=1&oref=slogin)

<sup>9</sup> See Ellen Theisen "Evidence Indicates EAC's On-Going Failure Will Continue"

<http://www.votersunite.org/info/TestimonyTheisen03-13-07.pdf>

and Kathy Dopp "Critical Changes Needed to Holt HR811" item #11

<http://electionarchive.org/ucvInfo/US/ChangesNeeded2HR811.pdf>