

The background of the slide is a close-up, slightly blurred image of the stars and stripes of the United States flag. The stars are white and five-pointed, set against a dark blue field. The stripes are red and white, running diagonally across the bottom right corner.

Voter Confidence and Increased Accessibility Act of 2007

April 25, 2007

Introduction

- “A common goal exists: to make sure that when the American public goes to sleep on election night, they believe that the results of the election fairly represent the will of the people. From this mutual goal I believe all interested parties can find a common reasonable ground on how exactly to make this a continuing reality.”
~Hugh J. Gallagher¹
- “Elections in 98.6% of the jurisdictions in America worked exactly as intended, and served voters and served candidates and served democracy exceedingly well. But we are continuously told in some quarters that there is a ‘crisis of confidence’ for voters. Polls conducted in 2006 immediately after the election say that allegation simply does not stand up. If there was a crisis in voter confidence, then why did 88% of the voters tell CNN in exit polls that they ‘had full confidence that their vote was counted accurately and fairly in Congressional elections?’” Doug Lewis²
- “As reported recently in a CNN poll discussed at the NASS conference, more than 90% of the public likes the new voting equipment purchased in response to HAVA...To put it bluntly, in Mississippi, as in most of the country, the people have overwhelmingly accepted the new voting equipment and have confidence in it. Why destroy this confidence through new federal mandates?” ~ Eric Clark³
- “Continued federal involvement by legislation means also seriously erodes the sovereignty of the states over elections issues, a bedrock principle of our democracy since our nation’s founding.” ~Eric Clark³

Status of the Holt Bill (H.R. 811)

- As of April 23, 2007 the bill has 209 Co-Sponsors
- Members of the Colorado Delegation that are Co-Sponsors:
 - Rep. Diana DeGette
 - Rep. Mark Udall
 - Rep. John Salazar
- No major action since March 29, 2007
- Related Bills are S. 559 on 2/13/2007 Referred to Senate committee.
 - Status: Read twice and referred to the Committee on Rules and Administration.
 - According to *Election Administration Reports* for April 2, 2007, there is a delay because Senator Dianne Feinstein has yet to introduce her own bill on the topic.

Summary of the Bill

- **The Holt Bill-Amends HAVA 2002 regarding:**
 - Ballot Verification and mandatory paper record audit capacity
 - Accessibility and ballot verification of the results for individuals with disabilities.
 - Including voters:
 - whose primary language is not English and,
 - who have difficulty with literacy
 - Manual Audits and the establishment of Election Audit Boards

Verification

- Would require a percentage for random audits and increased accessibility to include voters whose primary language is not English, and voters with difficulties in literacy.
- Amends Section 301 (a) (2) Audit Capacity to cover:
 - Ballot Verification
 - Manual Audit Capacity

What is meant by Ballot Verification

- Voters must be given an opportunity to correct “errors made by the system” on the paper ballot.
 - If the DRE prints an erroneous ballot, the voter must be given an opportunity to correct it.
- DREs shall not preserve the voter-verifiable paper ballots in any manner that makes it possible, at any time after the ballot is cast to associate the voter with his or her vote.
 - Reel to reel mechanisms would have to be modified to separate each ballot and store it randomly.
- Requires all DREs to print paper records

What is meant by Manual Audit Capacity

- Voter-verified ballots shall be used at the official ballots for the purpose of any recount or audit.
- The paper records are deemed the vote of record because they are the only one verified by the voter, rather than the voting machine.
- Paper ballots shall be suitable for manual audit equivalent to that of a paper ballot voting system and shall be counted by hand in any recount or audit.
 - Strictly electronic recounts would not be acceptable

Accessibility and Ballot Verification for individuals with disabilities

- Two parts
 - Access for individuals with disabilities and others
 - System requirements
- Access
 - Allow the voter to privately verify the permanent paper record.
 - States must design their system to ensure that no voter will be unable to cast a ballot due to a shortage or failure of voting equipment, ballots, or necessary supplies.
 - In the event of equipment failure or other circumstances the voters shall be advised immediately of their rights to use an emergency ballot and upon request be given one.

Accessibility and Ballot Verification for individuals with disabilities (continued)

- Voting System Requirements:
 - Election officials to be instructed in the rights of disabled to vote with the assistance of an aide of their own choosing.
 - Notice posted in each polling place instructing voters that the paper ballots “shall serve as the vote of record in all recounts and audits.”
 - No voting system shall ‘contain or use’ any ‘undisclosed software’ or any software not certified by the state.
 - No voting system shall contain or be accessible by wireless or any other connection to the Internet at anytime.
 - Supplies, voting machines shall remain in secured storage until use.
 - All voter-verified paper ballots shall be marked printed or recorded on durable paper (thermal paper would not be acceptable)

Mandatory Manual Audits by Hand Count

- Establish Election Audit Boards
 - 60 Days before each federal election the chief auditor of each state shall appoint an Election Audit Board
- At the option of the state the local office may also be included
- The board shall be an odd number no less than 7 but, no more than 13
- To the greatest extent possible reflect the voting population of the state
- Audit shall include early votes and Mail-in Ballots
- If audit results do not match the results the board will conduct additional hand counts of additional precinct
- Audits must be conducted in such a manner that they may be observed by the public
- Results shall be made public after the audit has been completed. It shall provide a comparison of the results and provide an explanation for any discrepancies. The report will include under votes, and spoiled ballots, and be broken down by categories of early, day-of, mail-in, and provisional.

Timeline

- Implementation deadline for H.R. 811 is the first federal election of 2008
- Audits would be required by November 2008
- State procedures for resolving discrepancies must be published by January 1, 2008

“The timing issue is exactly why Congress needs to act quickly, so states could be ready for the 2008”⁵

~Matt Dennis, Communication Director for Rep. Rush Holt D-N.J.

Challenges of H.R. 811 (Access)

- Increased accessibility of voters whose primary language is not English
 - **Challenge of this Provision:**

“Inflexible federal laws such as H.R. 811 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 out of the norm. A poignant example of an unintended consequence of the Help America Vote Act occurred in South Dakota. The law required 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.” ~Chris Nelson, South Dakota Secretary of State, Testimony before the House Administration Committee on March 23, 2007.

Challenges of H.R. 811 (Access)

- Voter-verified ballots shall be used as the official ballots for purposes of any recount or audit.
 - **Challenge of this Provision:** "So far every jurisdiction that has tried to audit or recount paper records produced by DREs, and had to do so with humans instead of technology, the counts are taking exponentially longer times to complete than any other form of voting. Please know that as election officials we have been, and continue to be, seriously concerned about audits and/or recounts of paper ballots produced by DREs. **This is far more difficult than is being acknowledge and is a slow, grinding process. The solutions for this are not yet sufficient and the design of the system is not yet conducive to making this a quick process. We tend to forget why we moved to voting equipment. It is more accurate. It is more difficult to manipulate – despite the allegations to the contrary. It counts faster. Machines make few errors, humans make many.**" ~Doug Lewis, Executive Director National Association of Election Officials – The Election Center, Testimony before the House Administration Committee on March 20, 2007.
 - **Challenge of this Provision:** "Perhaps one of the key hurdles to passing legislations that takes effect for the 2008 election is a statement issued by the Elections Technology Council (ETC) the voting system manufacturers' industry trade association. These vendors, who support the concept of requiring voter-verifiable paper audit trails (VVPAT) for all electronic voting systems, and who would profit from a law requiring those without such as system to purchase it state: **'Even assuming the swift passage of HAVA legislation in 2007, it is too late to implement change in time for 2008 federal elections. The ETC said changes to voting systems take between 18 months to four and one-half years to finally deploy in the field, depending upon the complexity of the changes.** Factors contributing to the time required include development of products, federal testing and certification, state testing and certification, manufacturing, delivery and installation, and training and election preparation.'"
~Election Administration Reports Volume 37, Number 7 April 2, 2007 *House Plans to Mark Up Holt Bill After Returning from Spring Recess* Richard G. Smolka Editor.

Challenges of H.R. 811 (Verification and Audits)

- The paper records are deemed the vote of record because they are the only ones verified by the voter, rather than the voting machine.
 - **Challenge of this Provision** : “The VVPAT should not be the ballot of record; it should be used only as an audit device to prove the electronic record.” ~Matthew M. Damschroder, Director of the Franklin County Board of Elections in Columbus Ohio Testimony before Committee on House Administration on March 20, 2007

Possible Solutions for Verification and Audits

- **Possible Solution:** “I am strong advocated 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 excluded these options.** Its is my hope that the Congress will not only keep the door open to much needed progress in voting system but would actively promote such development.”
~George Gilbert, Director of Elections Guilford County, NC
testimony before Committee on House Administration on March 23, 2007.

Possible Solutions for Verification and Audits (Continued)

- By Definition E2E is: **End-to-end auditable** (E2E) systems are a form of Independent Verification. E2E systems usually use [cryptography](#) to store copies of voted ballots. These systems may provide the voter with receipts to allow them to verify that their vote is included in the tally, all votes were cast by valid voters, and the results are tabulated correctly. These systems, sometimes referred to as receipt-based systems, do not permit a voter to prove to others how she voted.
<http://en.wikipedia.org/wiki/E2E>
- 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 trails (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 base upon. E2E systems are an active research topic and one E2E approach has been marketed.
- Further:
 - “The STS believes that current paper-based approaches can be improved to be signification 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 used verifiable voting records for independent audits, an
 - Creating a process to include new and innovative voting systems with greater usability, accessibility, and security. <http://www.votehere.com>

Challenges of H.R. 811 (Verification and Audits Continued)

- No voting system shall 'contain or use' any 'undisclosed software' or any software not certified by the state.
 - **Challenge of Provision:** "...By opening vendor software to public inspection invites precisely the kind of threat that many individuals believe is caused by the vendor software remaining proprietary: **Unscrupulous individuals attempting to influence the election process. These individuals would be presented with a road map which could be used to circumvent systems security, and as a direct result system reliability and accuracy**" ~Hugh J. Gallagher, Managing Director Election Systems Acquisition & Management Services (ESAMS) Testimony before Committee on House Administration on March 15, 2007
 - **Challenge of Provision:** "I support the findings presented in the California Legislature 2006 report: **'A policy decision to require open source software for voting systems would disrupt existing voting systems without providing an immediate alternative.'** We must find an alternative that achieves the perceived goal advocates of open source code promote, without inducing highly unacceptable risk into the election process" ~Hugh J. Gallagher, Managing Director Election Systems Acquisition & Management Services (ESAMS) Testimony before Committee on House Administration on March 15, 2007.
 - **Challenge of Provision:** "Voting system source code is mission critical to successful elections. **Placing this source code in the hands of hackers and terrorist clearly creates the potential for harm to the integrity of elections.** In addition, substantial harm can be done to a voting system by well meaning members of the public." ~Britain J. Williams, Ph.D., Professor Emeritus Kennesaw State University Testimony before the Committee on House Administration on March 15, 2007.

Compromise for Open Software

- Dr. Williams states in his testimony: “It is recommended that the EAC be granted the authority to make voting system source code available to responsible individuals. Persons wishing to review voting systems source code should be required to make application to the EAC; providing their credentials for reviewing the software, their ‘need to know’, and the specific voting system software they wish to review.”
- Mr. Gallagher states in his testimony: “Consideration may be given to a compromise solution whereby an independent government agency, the Election Assistance Commission (EAC) supported by the National Institute of Standards and Technology (NIST), be designated as an escrow facility for all vendor software.”
- Mr. Lewis states in his testimony: “As to other parts of HR 811, our message to you is this: if you want to achieve voting systems security, this is probably not the right answer. You can better accomplish that task by instructing the US Election Assistance Commission (EAC) to work with the Nation Institute of Standards and Technology (NIST) and tell them to develop methods for assuring security of voting systems and election software.

Challenges of H.R. 811 (Verification and Audits Continued)

- All voter-verified paper ballot shall be marked, printed or recorder on durable paper (thermal paper would not be expectable)
 - **Challenges of this Provision:** “These printers use thermal paper which has proven to provide high quality print, it is inexpensive, easy to use, and last a minimum of five years. The language quoted above would require our counties to discontinue the use of this paper. Let me say that if the provision I just mentioned were amended to delete “durable” and “of archival quality,” I believe all of Mississippi’s 82 counties except two would qualify at the present time.” ~Eric Clark, Mississippi Secretary of State before the House of Representatives Committee on Administration March 15, 2007.
 - **Challenges of this Provision:** “When discussing the requirements for DREs to have paper, it is my understanding from my colleagues around the nation there is no state yet which could comply with the paper trail system as specified in HR811. **So the 27 states that have previously taken action would have to scrap what they have already done and spend hundreds of millions of dollars to revamp once again. Surely, this Congress does not intend for that to happen. And what could they buy if they wanted to continue with DREs? From what we are told, nothing currently manufactured as a DRE can comply.**” Doug Lewis, Executive Director, National Association of Election Officials – The Election Center, Testimony before the House Administration Committee March 20, 2007

Challenges of H.R. 811 (Verification and Audits Continued)

- States must design their system to ensure that no voter will be unable to cast a ballot due to a shortage or failure of voting equipment, ballots, or necessary supplies.
 - In the event of equipment failure or other circumstance the voters shall be advised immediately of their rights to use and emergency ballot and upon request shall be given one.
 - **Challenges of this Provision:** “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.” ~~Chris Nelson, South Dakota Secretary of State, Testimony before the House Administration Committee on March 23, 2007.
 - **Challenges of this Provision:** In El Paso County in the 2006 General Election 212,478 ballots were ordered for polling places of that number 124,000 were not used which is 58.4% of the ballots. At a cost of \$.60 per ballot the cost of ballots that were unused was \$75,000.

Challenges of Manual Audits and Audit Boards

- **Argument Against:** "Election Audit Board" which is required to go into selected counties to conduct thorough hand recounts of ballots in conformity with a detailed, mandated process. **Furthermore, proposed legislation would prohibit any state or local election official – someone who might actually understand the election equipment and the election process – from serving on the Audit Board or conducting these hand recounts.**" ~Eric Clark, Mississippi Secretary of State before the House of Representatives Committee on Administration March 15, 2007.
- **Argument Against:** "Bringing a separate elected official into the process who has no role and no experience in conducting elections would make concluding our election enormously more difficult and time consuming – and possibly politicized – and would be unwise almost beyond belief." ." ~Eric Clark, Mississippi Secretary of State before the House of Representatives Committee on Administration March 15, 2007.
- **Argument Against:** "HR 811 calls for audits by State Auditors or by appointments through the AG of the state and not by election officials. **We want to be kind here, but this may be the worst of the ideas that have been offered in election legislation. Under these provisions, you turn the process of live ballots over to people who have no idea of what goes into protection those ballots, who have no experience in assuring the protection of the voters' votes, and who will be handling the ballots without the training of what to look for or what to do if there are problems with the ballots.** Additionally, they are doing audits that then impact the "official" record of the votes. Name an election official in America who wants to be responsible for ballots that have not remained in their procession." Doug Lewis, Executive Director National Association of Election Officials – The Election Center, Testimony before the House Administration Committee March 20, 2007

Better Solution for Manual Audits and Election Boards

- **Better solution:** “If an audit process is necessary and desirable – and almost 70 percent of the states have not felt compelled to do an audit as it is being considered in legislation – **and if Congress want to establish an audit process, then it needs to let the states and local governments figure out how best to do that. Simply tell the states that an audit process is required. Then back away and let them figure out how to do it to best serve their voters.**” Doug Lewis, Executive Director National Association of Election Officials – The Election Center, Testimony before the House Administration Committee March 20, 2007
- **Better solution:** “Manual Tabulation of paper is a technology that has become obsolete in the larger jurisdictions in the 19th 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 base on computer scientists' assurances that these systems are prefect....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.
 - Some of the advantages of electronic audit systems include:
 - Equally accessible to all voters regardless of disability.
 - Can provide accurate and efficient recounts, in additional to audits, in the event a voting system tabulation error is discovered.
 - Can be integrated into the voting process so that voters do not have to perform double ballot verification.
 - Can offer open source code without impinging on the security or proprietary nature of the voting system software.
 - Enables audits and recounts to be completed in a timely manner. ~George Gilbert, Director of Elections Guilford County, NC testimony before Committee on House Administration on March 23, 2007.

Challenges to the 2008 Implementation

- **Argument Against:** What work well in a state like New Hampshire, with its unique New England character and conventions, is often inapplicable to Mississippi, with its distinctive history and makeup. That states must have the flexibility to tailor our elections equipment and procedures to our citizens' desires and needs. Indeed one of the best aspects of HAVA was the fact that it recognized and embraced this core canon – HAVA mandated certain key goals but, left it to the states to determine the best means – legislation that we have seen would deviate from this proven formula for success by mandating specifically the equipment and the products which the state must use. ~Eric Clark, Mississippi Secretary of State before the House of Representatives Committee on Administration March 15, 2007.
- **Argument Against:** "The bill has noble intentions but, it is not practical. It comes down to time and money; quite frankly, I don't see us having enough of either. States and counties would be hard-pressed to meet the bill's deadline for implementing its requirement in time for the primary and general elections of 2008, a presidential election year. The \$300 million earmark in the bill to help states get the equipment they need 'is about a third' of what would be needed. States are being set up to fail for meeting the bill's timeline, an outcome that would further erode voter confidence." ~Scott Doyle "Voter Act raises question ire" Duggan, Kevin April 14, 2007
www.coloradoan.com/apps/pbcs.d111/article?AID=/20070414/NEWS01/70414337/1002
- **Argument Against:** "Even if you amend some of the provision other have pointed out as most objectionable, and retain a 2008 effective date, there will be failures which could well be widespread." ~George Gilbert, Director of Elections Guilford County, NC testimony before Committee on House Administration on March 23, 2007.
- **Argument Against:** "We're talking about 10 months from now – that's nuts. The rush to make changes, would absolutely assure a meltdown in the elections next year." ~Mississippi Secretary of State Eric Clark USA TODAY "Paper-Trail voting gets organized opposition." Wolf, Richard. 04.24.2007

Conclusion

- Elections in 98.6% of the jurisdictions in America worked exactly as intended, and served voters and served candidates and served democracy exceedingly well. ~Doug Lewis, Executive Director National Association of Election Officials – The Election Center, Testimony before the House Administration Committee March 20, 2007
- The question is not whether we should change elections policy and practices. We can do that from time-to-time and absorb individual changes. **But the question has to be is should Congress be the one specifying not only the changes, but the practices, the implementation, and the deadlines? A more prudent way to do this is for Congress to establish basic values that it wants the election process to have such as fairness, transparency, auditability, and security and what it wants the process to do for voters.** Doug Lewis, Executive Director National Association of Election Officials – The Election Center, Testimony before the House Administration Committee March 20, 2007
- 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 the 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.** ~Chris Nelson, South Dakota Secretary of State, Testimony before the House Administration Committee on March 23, 2007

1. Gallagher, Hugh J. (Election Systems Acquisition and Management Services (ESAMS)) Testimony before the Committee on House Administration Election Subcommittee Hearing on Election Reform, Washington, D.C., March 15, 2007
2. Lewis, Doug, (National Association of Election Officials – The Election Center), House Administration Election Subcommittee Hearing on Election Reform
3. Clark, Eric (Mississippi Secretary of State) Testimony before the Committee on House Administration Election Subcommittee Hearing on Election Reform, Washington, D.C., March 15, 2007
4. "AEI-Brookings Panelist Suggest Congress May Find it Difficult to Pass Election Legislation", *Election Administration Reports*, Volume 37, Number 7, April 2, 2007, page 3.
5. Duggan, Kevin "Voter Act raises questions, ire" , The Coloradoan.
<http://www.coloradoan.com/apps/pbcs.dll/article?AID=/20070414/NEWS01/7041433711002>.
6. Wolf, Richard, "Paper-trial voting gets organized opposition" USA TODAY. April 24, 2007.