

**Response to Utah's Lt. Governor's Office
Meeting with Summit County Commissioners - 8/15/05**

Lt. Governor Gary Herbert's Office is misinforming counties by claiming that:

"HAVA is an under-funded mandate":

The Help America Vote Act (HAVA) is only an under-funded mandate if we purchase digital recording electronic (DRE) voting machines that record votes electronically! There would be excess Federal funds if we purchase paper ballot optical scan machines (AutoMARK/ES&S). Utah received \$26.6 million in federal funds and used \$505,400 on its voter registration database. The precinct-based opti scan system costs \$21,585,071¹, including maintenance, support and extended warranty through 2009. Utah would have \$4,509,529 left over and could amend its HAVA plan to use those excess funds to implement statewide independent audits, better election data reporting and monitoring systems, or possibly create funds to pay future expenses of Federal elections.

The Lt. Governor's office wants Utah to spend \$27,967,915 million² on a system that he admits "will be difficult (to conduct a hand recount)" and which "there is not yet a certified method available for an automated recount of the paper record". And touch-screen DREs cost 50-60% more to operate.³

"a recount of the paper record .. (is an) unlikely scenario .. to arise".

This informs us that the Lt. Governor does not plan to check the accuracy of our vote counts with routine independent audits. People make mistakes and people program computers and election ballot definitions. Insiders have been rigging elections since the 1800's. Won't we want to check?

"computer experts were on Utah's voting equipment selection committee":

None have PhDs in computer science. Being a *manager* of an IS department is not the same as being a computer scientist specializing in voting systems, a computer security expert, or a test engineer.

"the Massachusetts based nationwide 'Association of People with Disabilities'⁴ is threatening to sue Utah if Utah purchases the AutoMARK rather than Diebolds."

Some disabilities groups were given large donations by Diebold. Such lawsuits from disabilities groups⁵ failed in Ohio and Florida. The Department of Justice published a specific opinion that it is *not* necessary to use DRE touch-screens to comply with disability regulations. The AutoMARK optical scan system has better disability ratings than Diebold. On the other hand, citizen lawsuits could be lodged in Federal court if they buy and use machines that do not meet standards for security, error⁶, language, and paper trail.

"in CA's test only one machine had 19 screen freezes."

The truth is that 19 machines out of 96 had at least 20 crashes of various kinds which were "corrected" by rebooting. There were 14 printer jams of at least two kinds, some of which resulted in VVPT records being lost.

¹ See <http://utahcountvotes.org/ESS/> for the final ES&S bids. Diebold bid details have not yet been released.

² Our phone calls to obtain the supposedly public Diebold bid details have not resulted in our seeing the bid yet - elections@utah.gov 801-538-1041 Records office: Debbie Gunderson (801) 538-3150 dgundersen@utah.gov

³ See this cost study of 4 NC counties or Miami-Dade, FL's cost study <http://www.ncvoter.net/affordable.html>

⁴ Association of People with Disabilities: <http://www.aapd-dc.org/docs/feedback.php>

⁵ Some disabilities groups were given large grants from Diebold.

⁶ See <http://utahcountvotes.org/docs/error-rates-HAVA.pdf>

"in CA's test the printers were not properly loaded with paper."

If the experts who loaded the paper for the CA test could not do it correctly how are busy poll workers supposed to do it?

"in CA's test there were no vote count errors."

True perhaps, but in Utah's Mock Election, a Diebold machine had to be pulled because it was switching the votes of two candidates and there have been numerous other cases of votes being lost by Diebold e-voting machines during elections in other states. The accuracy of our vote counts depend on being able to detect and easily recover from similar mistakes.

The point is that CA Secretary of State McPherson is doing his fiduciary duty of protecting his citizens, and the Utah Lt. Governor's office is not. In particular, Utah's Lt. Governor should insert the provisions mentioned by CA into our own contracts of purchase.

"no one offers a system with the opportunity to cast paper ballots into a ballot box"

Yet Accupoll DREs, tactile ballots, and any opti-scan system, including the InkaVote and ES&S/AutoMARK systems all have paper ballots that voters deposit into ballot boxes.

"a computer scientist at NASED conference said that voting machines could not be hacked if they were 'supervised and guarded by election judges and clerks'".

This statement was made at the National Association of State Election Directors' conference by retired Professor Brit Williams who is one of a handful of American computer scientists supporting paperless electronic voting. His "solution" for preventing hacking ignores the fact that the vast majority of computer hacking is done by insiders. Measures that suggest insiders protect voting systems from outsiders are laughable. In many states felons are not allowed to vote, but *are* allowed to write instructions for our voting systems. American history and current data indicate cases of poll workers and election officials tampering with vote counts.

"our office is not aware of any 'flaws' that would result in a lack of voter security or confidence. This system does .. raise the bar in .. making sure that every vote is counted accurately."

Does the Lt. Governor's office not follow elections news stories or independently research the systems they plan to implement? I am certain that the Lt. Governor's office has at least seen this: <http://utahcountvotes.org/AdviceReDiebolds.pdf> Why do they claim ignorance?

"the implementation deadline for HAVA compliance is January 1st."

I personally spoke with Tom Wilkey, Director of the U.S. Election Assistance Commission (EAC), the organization that controls HAVA implementation, at the NASED.org summer conference. Wilkey was very clear that HAVA funds must be spent by January 1st, but that the equipment need not be in place until the "first Federal election in 2006" (June 22 in UT). It is also simple to read the HAVA text. Utah's Election Office could also phone the U.S. E.A.C.! Why haven't they?

"early voting is being planned for Utah":

This may be a bad idea. Although voters like early voting, lines can be longer for early voting than election day voting, and election administration and security of our vote counts becomes a nightmare and it provides many additional opportunities for election tampering. No need to follow a bad choice that other states have made!

"Diebold's solution is Help America Vote Act (HAVA) compliant"

The Lt. Governor says that NASED has certified it, yet NASED certification has nothing to do with HAVA compliance. According to the official 7/20/2005 U.S. Election Assistance Commission advisory as evaluated by the computer scientists and voting system experts at the Stanford, CA Verified Voting Foundation the AccuPoll is the only touch-screen DRE that so far that meets HAVA requirements.⁷ There is no proof that Diebold is handicapped accessible⁸. Where are the studies that Diebolds meet the 2002 federal standards, especially for error rates? Sure they can put a sticker on it saying it is, but until there are human factors studies proving this it's all smoke. Why spend all of that money on machines that don't meet HAVA law standards?

What is certain is that touch-screens are *less* elderly accessible. The number of elderly grossly exceeds the number of handicapped. Why would we want to disenfranchise that group to enfranchise a smaller one?

"Diebold is a quadruple redundant system - three copies of each vote and a VVPAT"

There may indeed be three electronic copies of the votes (internal memory, pcmcia, and GEMS) plus the paper trail. But if there is a software bug or some malicious code in the DRE, all three electronic copies would contain the same incorrect votes. Only the paper trail can detect such a problem.

In general, triple hardware redundancy is a good thing. But it is intended to deal with potential *hardware reliability* problems--i.e. random hardware glitches or failures. If one of the chips goes bad, you still have the other two. The only thing three copies give you is some way to isolate a bad memory card. It does not isolate any of the many plausible error paths. Banks don't ensure accuracy that way. Banks have audit trails of the transactions and perform routine independent audits. Why does Herbert not plan to use the VVPAT to perform any routine audits of vote count accuracy?

Redundancy of this kind does nothing at all to deal with *software correctness problems* (bugs) or *security problems* (e.g. malicious software), which is what the VVPAT is all about.

Unfortunately most people are not aware of the profound differences between *reliability* and *security*. Utah's computer scientists have recommended that the Utah Election office hire experts in computerized voting systems and security since July, 2004, yet none have yet been hired.

"op scan voting systems have a higher error rate than punch-card voting systems"

The Lt. Governor's office quotes the spoiled ballot rate of *central* count op-scans from a FL study⁹ rather than the under 1% error rate of the *precinct-count* op-scans that HAVA requires *on the same page* in the same FL study. Another MIT/CalTech Vote project¹⁰ found that op scans had a median residual error rate of 1.3% versus 2.5% for punch-cards. A Duke University study in NC¹¹ found that optical scans had the lowest under-vote rates of any technology in the 2004 election.

Note: It is annoying and exhausting to keep up with the constant stream of disinformation and misleading information emanating from Utah's Election Offices since July 2004. In Cache County, Lt. Gov. Herbert even told the commissioners that Diebold voting machines which run on Windows, are not computers! Why do they shun advice from Utah's own computer scientists and security experts? They are not doing their job.

Utah's Election Office Needs to Show Diligence, Integrity and Respect for Democracy!

⁷ See <http://www.verifiedvotingfoundation.org/article.php?id=6113> and [http://www.eac.gov/docs/EAC%20Advisory%2005-004%20\(%204%20page%20fit%20\).pdf](http://www.eac.gov/docs/EAC%20Advisory%2005-004%20(%204%20page%20fit%20).pdf)

⁸ Here is a report from Florida that Diebold is not HAVA compliant <http://www.bbvdcs.org/general/FFECreport.pdf>

⁹ <http://www.usccr.gov/pubs/vote2000/report/ch8.htm> HAVA requires voter education with the central count opscans.

¹⁰ http://www.hss.caltech.edu/~voting/CalTech_MIT_Report_Version2.pdf

¹¹ <http://www.cs.duke.edu/~justin/voting/totals.html>