Electronic voting has potential security flaws

Disabled voters in Oregon will use the e-ballots, although mail-in ballots have proven more reliable

BY ANTHONY LUCERO
NEWS REPORTER

With the presidential election only a month away, fears from 2000's election may remain in the minds of some voters, who may still remember terms like "pregnant" and "dimpled" chads and the havoc caused by ballot mistakes and recounts. This year, voting systems are under increased scrutiny, especially as some states install new electronic voting systems.

In Oregon, electronic voting is not the method for casting votes, though counties use electronic systems to tally the votes. Mail-in ballots were used in the 2000 presidential election, when Oregon achieved the second-highest level of voter turnout with 78.9 percent of registered voters casting a vote, beat only by Wyoming, which had an impressive 97.1 percent turnout, according to the Federal Election Committee.

However, disabled voters in Oregon will still cast electronic votes as part of the Help America Vote Act and the Americans with Disabilities Act.

If the race remains as close as it is currently, votes in battleground states like Ohio and Florida that use electronic voting will decide the next president, said Michal Young, associate professor and head of the Computer Information and Science department. He added that those two states do not look like they have proper safeguards and may face some of the same scrutiny as the Bush-Gore election.

Last year, Young said he participated in an electronic voting seminar at the University's CIS department that addressed electronic ballot systems and how to improve them.

"We were interested in how the electronic voting system works and the distinction between reliability and security — reliability not a guarantee of security," said Young. "It stops being just an interesting technological problem but a terrible political issue facing us."

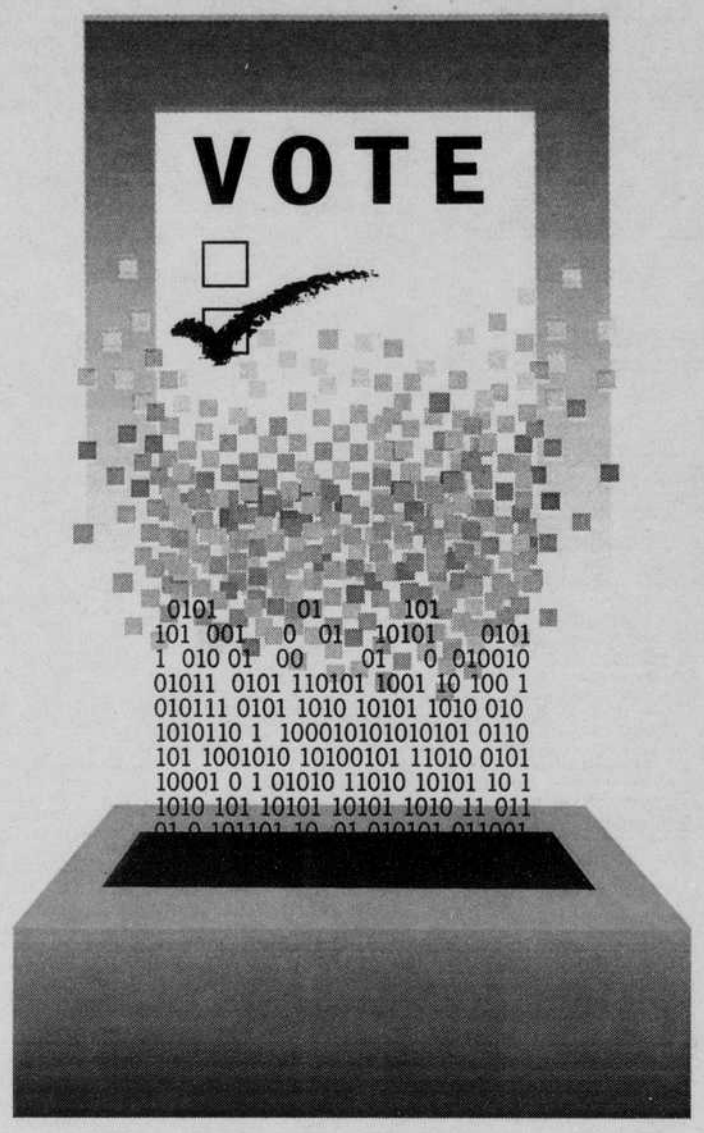
Young said the problems are myriad in regard to electronic votes. He said Direct Recording Electronic voting systems such as Diebold or Sierra (the two largest market holders) have security flaws, are closed-system, which means they are not available for the public to assess their accuracy, and, in some counties, contain no paper trail to match with electronic ballots.

Young believes Oregon's mail-in voting system is one of the best options available. Unlike an electronic system where large-scale fraud can occur in a closed DRE system that would be virtually untraceable, the mail-in system would at worst spur household fraud where one member of the family casts votes on other family members' ballots.

Citing a California Technical Institute/Massachusetts Institute of Technology study titled "Residual Votes Attributable to Technology," Young said the mail-in system is the best vote-recording method, second only to old-fashioned marked ballots where voters "X" a box beside their choice for candidate, in terms of residual ballots. Residual ballots are those cast but not counted due to ballot mistakes or ones that show no preference.

However, Americans should not only be worried about electronic voting, according to Priscilla Southwell, associate dean of social sciences in the Political Science department.

"We still need to think about the other issues, like disenfranchised votes, ballots thrown out after mistakenly believed to be cast by felons and voter registration cards not being filed correctly," Southwell said.



RESIDUAL VOTES

A Caltech/MIT study found that technology, in part, contributes to residual votes that are not properly cast. Residual votes are votes where no candidate is picked by choice or the voter misunderstood how to fill in the ballot.

Residual votes as a percent of all ballots for different types of voting systems:

Machine Type	1988	1992	1996	2000
Paper ballot	2.2	1.4	2.1	1.3
Lever machine	2.0	1.5	1.7	1.7
Punch card				
• "Votomatic"	2.9	2.2	2.6	3.0
• "Datavote"	3.7	2.4	2.1	1.0
Optically scanned	2.5	2.4	1.5	1.2
Electronic (DRE)	3.5	2.5	2.9	1.6
Mixed	2.1	1.4	1.5	2.7
Overall	**2.5**	**2.0**	**2.1**	**2.0**

Source: Caltech/MIT "Residual Votes Attributable to Technology"

Young had similar sentiments, saying that the problem is not only with the system used to tally ballots and its legitimacy, but also if voters believe the outcome is fair.

Sophomore Sharie Grant's concerns as a voter echo what many Americans are anxious about in this presidential election.

"I think people should worry about (another problem similar to Florida in 2000) in every election," she said after she finished registering to vote outside the Knight Library. "We need to think about anything that could go wrong."

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