

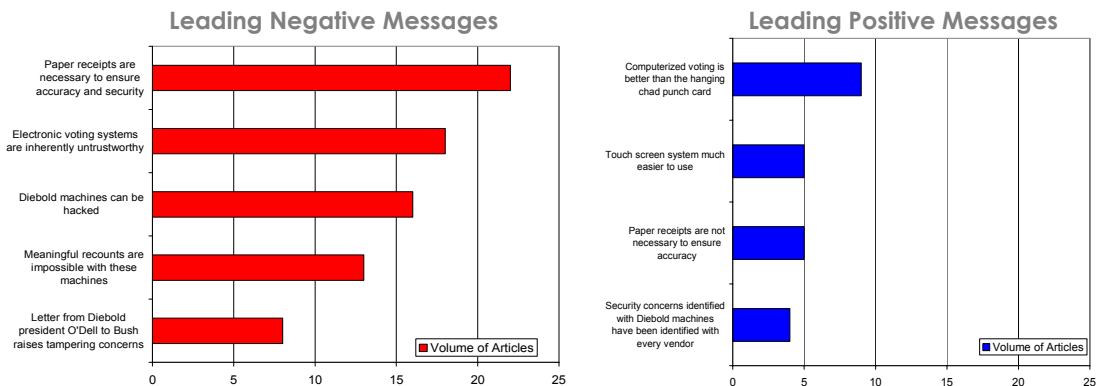


This analysis examines media coverage discussing Diebold Election Systems and electronic voting machines. All of the articles researched were obtained through online searches using Factiva for the period between January 1 and April 10, 2004.

"...even a cursory look at the behavior of the major voting machine companies reveals systematic flouting of the rules intended to ensure voting security. Software was modified without government oversight; machine components were replaced without being rechecked... even if there are strong reasons to suspect that electronic machines miscounted votes, nothing can be done about it. There is no paper trail; there is nothing to recount." (New York Times, January 23)

Coverage of Diebold Election Systems and electronic voting systems in general indicates a tough road ahead. Of the 136 articles researched by CARMA, 66 percent were unfavorable, 15 percent were favorable, and 18 percent were neutral. More significantly, the volume of negative coverage increased as the primary season advanced and evaluations of electronic voting systems began in earnest. Overall, stories indicated serious concerns regarding the security and accuracy of electronic voting systems.

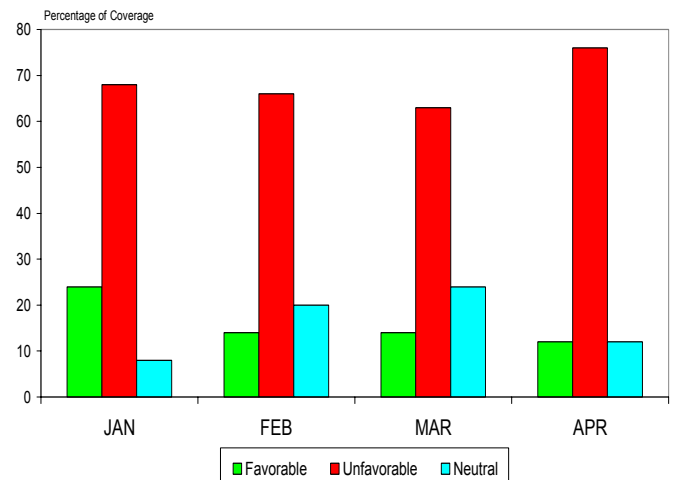
Negative messaging raising security, accuracy concerns dwarfed positive arguments



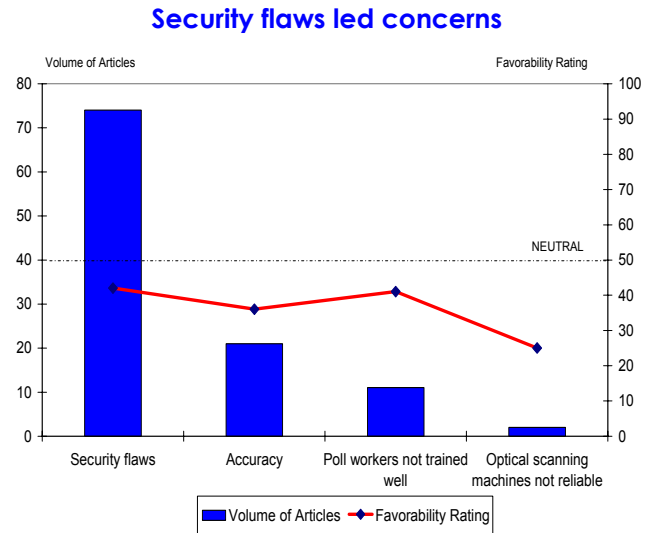
Negative messages outweighed the positive by a 3 to 1 margin, thus signifying that voting machine companies, including Diebold, need to do more to adequately convey their messages. The majority of negative messaging reflected concerns relating to the security and accuracy of electronic voting systems. In particular, coverage indicated that without paper receipts, most experts do not believe that electronic voting machines can be trusted "because there's no way to ensure that the choices punched on the screen will actually be reflected in the final tally," (Newsweek, March 29).

Coverage has grown increasingly unfavorable as the year progresses. Over the past four months, the percentage of favorable coverage has given way to an increasing number of unfavorable stories. The largest volume of stories came in March, yet more importantly, the first two weeks of April revealed an increasing number of unfavorable stories as a percentage of overall coverage (76 percent), signaling heightened concern in the media relating to electronic voting machines. As the general election approaches, the volume of negative stories will likely increase, thus requiring action from voting machine manufacturers to counter the negative views of electronic voting being presented in the press.

Unfavorable coverage increasing

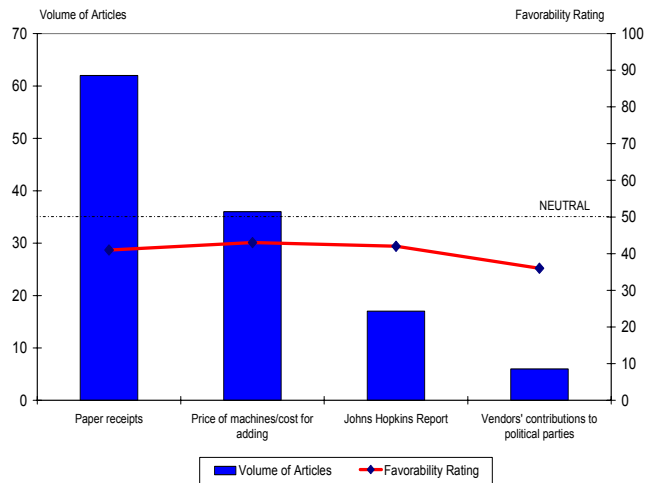


Potential security flaws with electronic voting machines led all issues appearing in coverage. Seventy-four articles discussed this issue, often pointing to specific tests or studies revealing actual security problems with electronic voting machines. In particular, seventeen stories discussed the analysis done by Johns Hopkins University computer scientist, **Aviel Rubin**, which concluded that Diebold software could be easily hacked. Studies such as Rubin's moved the controversy over the security of electronic voting machines from "the theoretical to the practical" and precipitated a slew of stories painting a negative view of electronic voting machines. (*The Financial Times*, March 2). **"In several tests, critics have shown they can jam microchip-embedded smart cards into machines, or alter and delete some votes -- in some cases simply by ripping out wires. They've cracked passwords to gain access to computer servers and found systems without the up-to-date security patches readily available on the internet,"** (*Associated Press*, March 2).



The debate over whether paper receipts are necessary to verify voter intent, and ensure the accuracy of electronic voting also drove coverage, appearing in 62 articles. The majority of these stories indicated that electronic voting machines were defective without paper receipt capabilities. The two main reasons given in support of paper receipts were: 1) paper receipts are needed for a recount; and 2) voters want to see a visible record of their vote. Coverage mentioning the need for paper receipts was decidedly negative, averaging a 41 favorability rating.

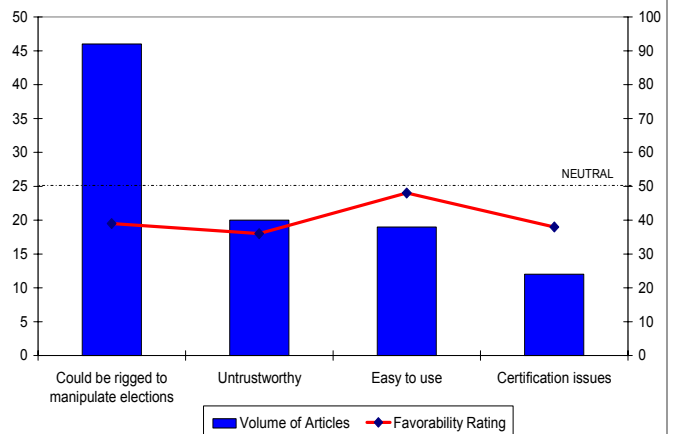
Paper receipt debate loomed large



However, not all reporting on paper receipts was negative as **some argued that paper receipts are not necessary and may in fact create more problems.** Nevertheless, this was clearly the minority view in coverage. Messaging conveying that paper receipts are necessary outweighed the counter argument by a margin of 22 to 5.

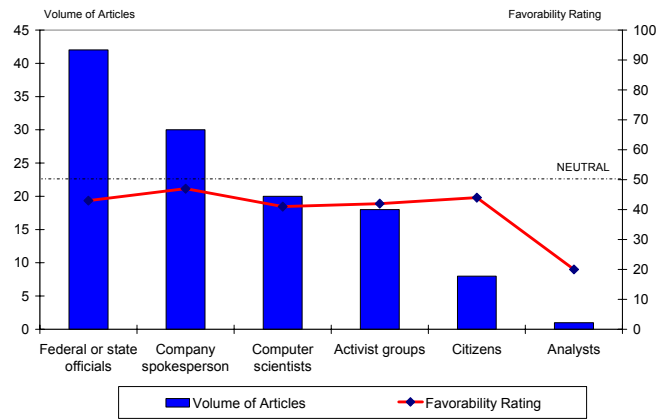
A significant number of stories asserted that voting machines could be rigged to manipulate elections (34 percent). This issue will likely gain momentum as we approach the November presidential elections. In addition, **concern over the trustworthiness of electronic voting machines appeared widely in coverage:** "Many experts are concluding that touch screens, the alleged voting technology of the future, are... untrustworthy," (*Newsweek*, March 29). This sentiment appeared throughout coverage, indicating a need for a more concerted effort to reassure the voting public. "Easy to use" was the main positive characterization of electronic voting machines, appearing in 15 percent of the articles researched.

e-Machine most often characterized as easy to manipulate



Federal and state officials were the leading influencers in this coverage appearing in 31 percent of the stories. Comments varied depending on the state. In Maryland for example, Diebold voting machines received a fair amount of positive coverage, due in large part to positive commentary of Linda Lamone, the state's administrator of elections. By contrast, California legislators were extremely critical of Diebold's machines, which performed poorly during the primaries. In particular, Senator Don Perata (D-Oakland) quipped, "I think it's fair to say from the evidence so far that the test flight crashed and burned." Perata added that no one wants California to "be the sequel in 2004" to the 2000 voting debacle in Florida (*Los Angeles Times*, March 12). Company spokespeople were included in 22 percent of the coverage, helping to mitigate the negative commentary. Computer scientists were particularly critical, most often commenting on test results and raising security concerns. Activist groups on both sides of the debate were prominent, appearing in 13 percent of the stories.

Leading influencers

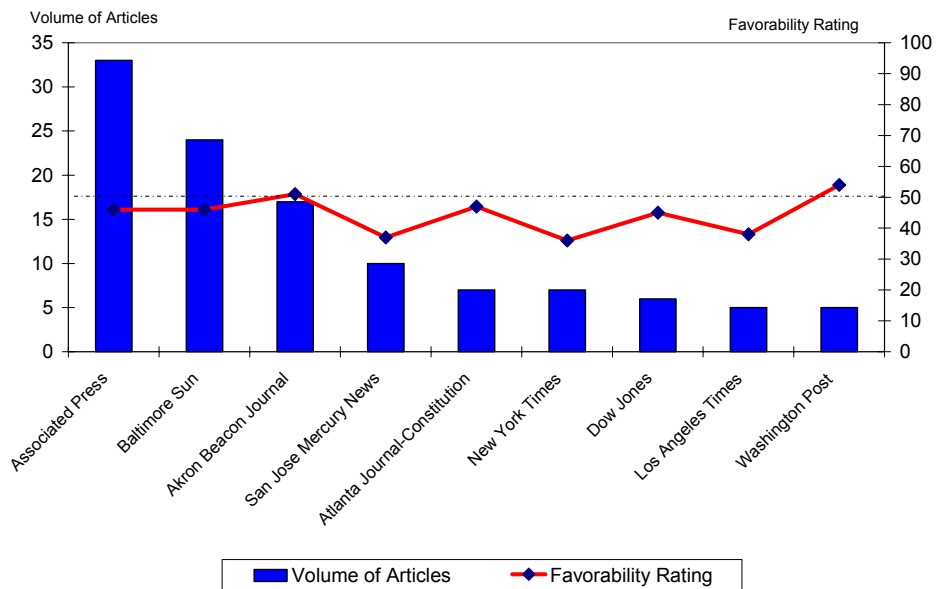


The **Associated Press** covered the electronic voting machine issue more than any other media outlet, generating 33 articles in the first three and a half months of 2004. Coverage was moderately unfavorable discussing all aspects of the controversy.

The **Baltimore Sun** was the second leading publisher of news coverage with 24 stories. Coverage in the Sun was mixed, but overall, generally positive. In particular, the use of Diebold machines in Maryland's recent primary elections received mostly positive reporting, indicating that most agreed that the machines performed as expected.

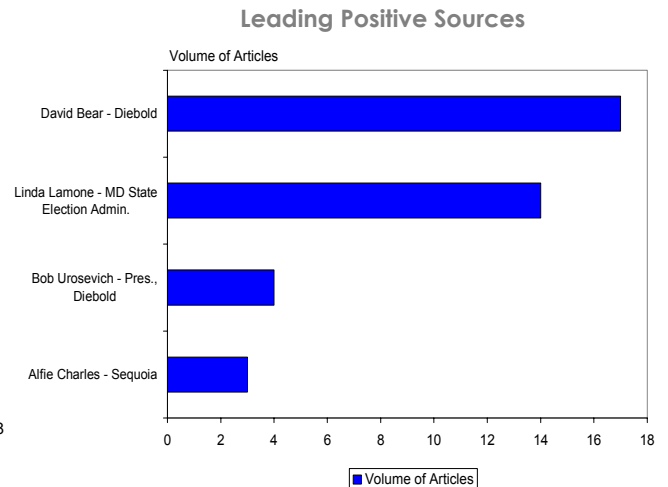
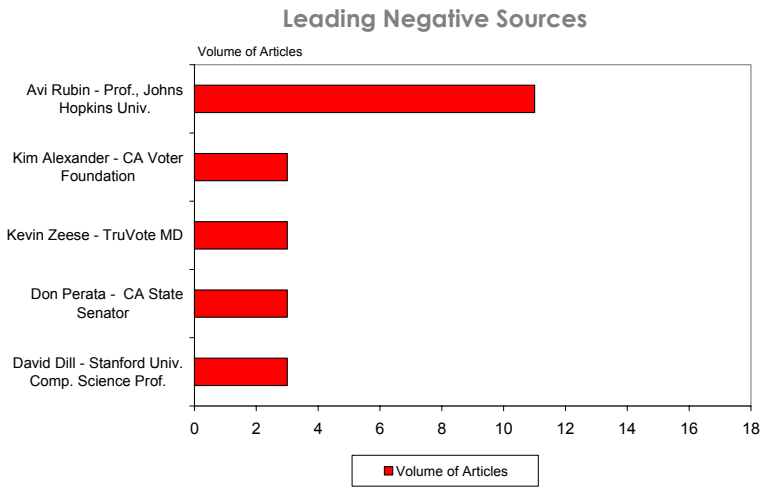
Some of Diebold's most positive reporting came from the **Akron Beacon Journal**, which may be explained by the fact that Diebold is based in Ohio. Most of the *Journal's* reporting focused on Diebold's contract wins in the state, with security issues receiving little mention.

AP and Baltimore Sun generated most coverage while the San Jose Mercury News was the most unfavorable



Some of the most scathing coverage appeared in the **San Jose Mercury News**, mainly due to problems with Diebold machines occurring during California's March primary. The News also openly criticized of electronic voting machine manufacturers, including Diebold: "The government unwisely ceded development of electronic voting machinery to private companies like Diebold Voting Systems, whose proprietary software is under electronic lock and key. The secrecy of the source code, a slew of malfunctions, and a lack of a paper copy that voters can look at have eroded confidence in touch-screen voting," (April 8).

Leading positive and negative sources reacting to electronic voting systems



Coverage contained 79 favorable and 68 unfavorable sources. Diebold spokespeople – appearing in 28 articles or 35 percent of the coverage – were most often cited. Their positive affect on what was often very negative coverage, cannot be overemphasized, as their mitigating statements provided a significant boost to the favorability of coverage in which they appeared. In particular, the company benefited greatly from the visibility of spokesman David Bear (15 articles, 49 rating).

Diebold also received strong support from Maryland State Elections Administrator, Linda Lamore, who made many positive comments about the company and its machines. For example, in commenting on the performance of Diebold machines in Maryland's recent primary, Lamore enthused: "We had virtually no technical issues at all," (*Baltimore Sun*, March 4). Even more positively she commented in *Newsday* on March 2 that "the voters love it. They really do."

Avi Rubin, an associate professor of computer science at Johns Hopkins University, was the leading negative spokesperson in coverage. Rubin wrote a critical report on the Diebold machines attracting national attention to the potential security issues of electronic voting. Throughout coverage, Rubin appeared as a major critic of electronic voting, and in particular, Diebold's machines.

"[Rubin] scoffed at the claim that the machines are secure because there were no problems in earlier elections 'From a security perspective, that's like saying that because you walked through a bad neighborhood and didn't get mugged, that the neighborhood is inherently safe,' Rubin said," (Associated Press, March 2).

"Rubin wrote that software developers, poll workers, voters and 'even janitors' could access Diebold's voting system for nefarious purposes," (*Atlanta Journal Constitution*, February 15).

CONCLUSIONS

Until recently, it had been taken for granted by many people that electronic voting systems were inherently better than the punch-card systems they were replacing. Many point to the 2000 presidential election, and specifically the events in Florida, as a wake up call signaling the need to reform America's antiquated voting system. Most believed new electronic voting systems were the answer. However, due to problems exposed by government sponsored tests and confirmed during actual trial runs during the primary season, faith in electronic voting appears to be slipping. As the following headlines attest, electronic voting systems will likely face increasing scrutiny and criticism in the months preceding the general election in November: "New

Electronic Scanners Miscalculated Some Votes in San Diego County," (*Knight Ridder*, April 8); "Test of Electronic Balloting System Finds Major Flaws," (*New York Times*, January 30).

While touch-screen voting has been acknowledged by most as superior to the old system, for now there exist many concerns, including, security issues, the lack of a paper trail, and the preference by some voters to vote on paper. These will have to be resolved before there will be true acceptance of electronic voting systems.

Notable and Quotable

"The consultant assured lawmakers the machines would be 'worthy of voter trust' . . . but outlined physical weaknesses and electronic vulnerabilities that would allow a determined hacker to corrupt or destroy election results," (*The Washington Post*, January 30).

"You are more secure buying a book from Amazon than you are uploading results to a Diebold Server," Michael Wertheimer, RABA Technologies (firm hired by MD legislature to conduct security analysis of Diebold System) *Id.*

"Diebold 'basically had no interest in putting security in this system. It's not like they did it wrong. It's like they didn't bother,'" Paul Franceus, consultant who worked on the Maryland study, (*Baltimore Sun*, January 30).

"Consumers go to the store and are given a receipt listing what they purchased. So why can't voting machines produce a similar piece of paper the state can use to ensure the integrity of elections?" *Id.*

"The multimillion-dollar answer depends on whom you ask. Each expert and company has a Web site advocating a position: Touch-screen technology is accurate and easy to use, or it's flawed and untrustworthy. Paper ballots are the best current solution to a poor election system, or paper ballots are flawed and untrustworthy," (*Newsday*, March 2).

"The biggest problem is that, without a paper ballot, there is nothing tangible to recount," (*Associated Press*, March 20).

"[Voters] are afraid there's no way for them to tell if their votes were properly counted," (*Associated Press*, March 2).

CARMA Rating System

Each article included in the study was given a favorability rating based on the CARMA rating scale of zero to 100. Using this system, a zero represents highly unfavorable coverage; a 100 rating indicates extremely favorable coverage, and a 50 means that the story was neutral. In short, ratings below 50 indicate unfavorable coverage, while ratings above 50 signal positive coverage. Articles are coded in increments of five (e.g., 50, 55, 60). The combined average of the ratings coded for all the articles determines the overall favorability rating.

In order to eliminate subjectivity, a predetermined set of criteria is used to rate the stories. Each story is evaluated based on the headline, length and placement of the story, accompanying photos, number and quality of sources, messages that may appear in the coverage, and the general tone of the article.

ADDENDUM

Regional Volume Leaders

MARYLAND (24 articles, 46 rating):

- In late January, a report delivered to the Maryland legislature by RABA Technologies revealed massive security flaws in the state's touch Screen voting system supplied by Diebold. The report detailed numerous flaws but also presented several fixes that could instill a high degree of confidence in the machine's use in the general election. As such, the favorability of articles discussing the report varied widely depending on the articles focus. For example the *Associated Press* printed a story on January 30 titled: "Consultant says computer voting system 'worthy of voter trust.'" The article was balanced and emphasized the solutions that are available to correct the flaws. Conversely, Dow Jones published an article on the same date entitled "Security flaws found in Diebold electronic voting system." Not surprisingly, this article was much more negative.
- The *Baltimore Sun* ran the most scathing story covering the RABA Technologies report entitled: "Md. Computer testers cast a vote: Election boxes easy to mess with. In Annapolis, tales of trickery, vote rigging." The article provided a detailed description of the types of flaws that existed and concluded that major changes would have to be made to make the system worthy of voter trust.
- The need for receipts was not significantly discussed in coverage of the recent primary election in Maryland. Although reports on the Maryland primary indicated that some glitches with the system, mostly due to human error, slowed vote counts and left some questioning the system's reliability, coverage generally indicated a consensus view that the voting machines performed as expected.

CALIFORNIA (19 articles, 38 rating)

- The lack of a paper receipt function on Diebold's electronic voting machines drove negative coverage in California. As the *San Jose Mercury News* observed, "[c]ritics are alarmed that the touch screen voting systems do not create a paper that allows for physical recount of ballots." (February 1). Following California's primary election, which revealed many problems with the state's electronic voting system (particularly in San Diego and Alameda Counties), numerous state senators called for paper receipts to restore voter confidence in the electronic system. Moreover, in a show of bipartisan unity, Senators Don Perata (D – Oakland) and Russ Johnson (R – Irvine) called for delaying the implementation of the machines until all malfunctions had been worked out. Fallout from the problems with the electronic voting system during the primary were widespread and severe as evidenced by the following quotes:
 - "The fundamental key to democracy is that everyone's vote counts and everyone's vote is counted. No one can assert that last week's election met that fundamental test" – California State Senator Russ Johnson (*San Francisco Chronicle*, March 12).
 - "We're quite angry. We have a very important election coming up in November, and we can't afford any more problems." - Alameda County Counsel, Richard Winnie (*San Jose Mercury News*, March 25)

OHIO (18 articles, 50 rating)

- Diebold received a neutral rating for coverage running in Ohio media outlets. Reporting at the outset of the year was favorable as Ohio outlets discussed Diebold winning contracts to supply voting machines to 40 of Ohio's 71 counties. Reporting became more negative in March and April as a state legislative committee recommended that Ohio require that electronic voting machines provide a

paper receipt. Such a requirement could jeopardize Diebold's contracts and result in the company having to re-bid for contracts it has already won.

- Reporting on the issue indicated that the Ohio legislators are concerned about security issues found in tests of electronic voting systems and reported by other states that have used electronic voting, including Maryland and California. Not surprisingly, these reports were negative, but not as negative as they might have been, given that they attributed the security flaws to all voting machine manufacturers and not solely to Diebold. Moreover, reporting on the possible paper receipt requirement often included comments from Diebold Spokesman David Bear, which helped mitigate negative messages. Additionally, a number of reports contained comments from supporters of electronic voting who believe that paper receipts are unnecessary and support moving forward with the Diebold machines in the general election.
- Reports also indicated that start-ups AccuPoll and TruVote could have an edge over if the Ohio legislature requires paper receipts given that both companies' machines have a built in paper receipt capability. Yet some, such as KeyBank Capital analyst Matt Summerville, doubt those companies will provide much competition for Diebold: "I've never heard of AccuPoll. I've never heard of TruVote. I don't know how they could come into their [Diebold's] home state and take business," (*Akron Beacon Journal*, April 14).
- The issue is still playing out in Ohio, and the ACLU has named Summit County Ohio in a lawsuit claiming that requiring paper receipts will prevent implementation of electronic voting systems in time for the general election, thus disenfranchising voters. As such, Diebold will continue to receive a high volume of coverage in Ohio relating to its electronic voting systems.