Miami Dade County Officials Recommend Scrapping DRE system for Optical Scanners

When considering the proposed advantages and disadvantages of touchscreen/pushbutton voting machines (DREs) with precinct based optical scan systems, it is useful to look at actual experiences in other states. Increasingly, reports are coming to light which show that two problems consistently plague DRE voting systems:

- Flawed vote counts due to hardware and software failures, and

- Operational cost overruns exceeding predicted costs.

A recent example is Florida's Miami Dade county (population 2,253,362), the 8th largest county in the United States.

After a March 8 referendum, it was revealed that a coding error caused the county's DREs to lose hundreds of votes in six recent elections.

The controversy over the lost votes led the Supervisor of Elections to resign on March 31. The newly appointed supervisor issued a report recommending that Miami Dade scrap it's $24.5 million touchscreen voting system in favor of paper ballots with optical scanners.

New York must decide on a new voting system. We must take the Miami Dade lesson to heart when considering our options.

In Florida, Mayor Kristin Jacobs said that she regrets that her county chose DREs over optical scan machines:

"I understand that we've invested a lot of money in the electronic machines, but I would be more comfortable with optical scan because it gives you the ease of computerization and a paper trail," she said. "Hindsight is 20-20. In retrospect I probably would have gone with optical scan but we're beyond that now…"

Let's not make that mistake in New York.

Following are three articles and an opinion piece about the Miami Dade experience with DREs.

- **Florida: Voting Glitches Found in 6 Recent Elections** The Miami Herald, March 31, 2005
- **Miami-Dade's elections chief urges new system** Sun-Sentinel, May 28, 2005
- **Paperless, touch-screen voting costs soar** Herald Today Manatee-Brandenton-Sarasota, May 29, 2005
- **New balloting system for voter confidence** The Miami Herald, June 01, 2005

Highlights (emphasis added) from the following articles which appeared in the Sun-Sentinel, The Miami Herald, and other Florida newspapers reporting on the Miami Dade situation.

On Coding Errors and Machine Failures:

"More recently the machines received another blow when the Miami-Dade elections department revealed that a staffer's *coding error had led to hundreds of ballots being thrown out* in last month's special referendum…"

"…the same error was found in *five other municipal elections*."

"*Of the electronic undervotes, 477 could be blamed on an faulty computer program* that should have protected people's votes even if they didn't press the flashing red button that finalizes the process."

"In those cases, poll workers are supposed to insert a cartridge that tells the machine to count a Yes or No vote. But *the bad coding told the machines to ignore the voter's selection.*"

On Required Technical Support for DRE Systems:

"The original purchasing contract included more than 400 days' worth of project-manager support from ES&S -- *but those days were gone by the end of the first year...*"

"Now, the county negotiates the rate and number of days for ES&S support in advance of elections. *That price has been as high as $1,100 a day, per person.*"

"…the county spent slightly *more than $100,000 for the November election in support* from the Omaha-based company, with *rates up to $1,800 a day,* said deputy elections supervisor Gisela Salas."

On the Cost of DRE Systems:

"County officials say *the machines have more than tripled Election Day costs.*"

"Miami-Dade's controversial paperless voting machines *cost taxpayers about $6.6 million to operate during last November's presidential election --about twice what officials had budgeted.*"

"Miami-Dade's expenses included *$1.4 million in overtime costs alone.*"

"Back-up batteries for each of the 7,200 iVotronic machines -- at $147 a pop -- totaled more than $1 million. Election Systems & Software, the company that makes the iVotronics, recommends *replacing the batteries every three to five years.*"

On the Cost of Optical Scan Systems:

"Meanwhile, Orange County, which has a voting population roughly half the size of Miami-Dade's, spent less than $2 million to run its comparatively low-tech optical scan machines -- *less than a third of Miami-Dade's cost.*"

Florida: Voting Glitches Found in 6 Recent Elections

The Miami Herald
by Tere Figueras Negrete and Noaki Schwartz,
March 31st, 2005

Electronic voting machines tossed out hundreds of ballots during this month's special election on slot machines -- and elections workers have traced the same computer error to five other municipal elections in the past 12 months.

Raising the red flag: An alarmingly high number of so-called ''undervotes'' in the March 8 election -- which only had one item on the ballot.

Embattled Miami-Dade Elections Supervisor Constance Kaplan has said that the incorrectly tabulated undervotes would not have affected the outcome of the elections. But County Manager George Burgess wants to review the outcome of five other elections.

''It's disturbing, and that's an understatement,'' Burgess told The Herald. ``We have to take our responsibility seriously. Every vote needs to be counted.''

Adding to Kaplan's woes: She also faces an independent audit of her department, demands from the gambling industry to call a new election and talk that her job may be on the line.

The reports of uncounted votes also bring renewed criticism from those who have been wary of the paper-free electronic voting machines -- an unsettling development for a county that had poured substantial resources into escaping the chad-filled ghost of the 2000 presidential election.

''Her leadership is in question and has been in question for a long time,'' said Lida Rodriguez-Taseff, head of the Miami-Dade Election Reform Coalition and a longtime critic of the elections department.

ON THE HOT SEAT

Burgess called Kaplan into his office Wednesday for an hour long closed-door talk. Through her spokesman, she told The Herald: ``I'm very concerned about this matter. We are continuing to review and improve our operations.''

Burgess, in a blunt memo to Mayor Carlos Alvarez and county commissioners, wrote that he found Kaplan's explanations ''to be inadequate'' and ''unacceptable.'' He said he expects better answers from Kaplan by Friday.

The problem came to light after a review showed a ''significantly higher proportion'' of undervotes cast on the iVotronic machines than on undervotes submitted on absentee ballots, Kaplan wrote in a memo.
A total of 1,246 undervotes were recorded on the iVotronics for the March 8 slots referendum, versus 61 on the absentee ballot. ''Undervoting'' means a ballot was cast but no choice was made.

According to Kaplan:

Of the electronic undervotes, 477 could be blamed on an faulty computer program that should have protected people's votes even if they didn't press the flashing red button that finalizes the process.

In those cases, poll workers are supposed to insert a cartridge that tells the machine to count a ''Yes'' or ''No'' vote. But the bad coding told the machines to ignore the voter's selection.

ASSIGNING BLAME

Kaplan called it human error. Two election supervisors have been reassigned. She also blamed Elections System & Software, which makes the iVotronic. Kaplan said a project manager with ES&S failed to detect the coding problem.

Paperless, Touch-Screen Voting Costs Soar

Herald Today Manatee-Brandenton-Sarasota
May 29, 2005

TERE FIGUERAS NEGRETE
Knight Ridder Newspapers

MIAMI - Miami-Dade's controversial paperless voting machines cost taxpayers about $6.6 million to operate during November's presidential election - about twice what officials budgeted.

Meanwhile, Orange County, which has a voting population roughly half the size of Miami-Dade's, spent less than $2 million to run its comparatively low-tech optical scan machines - less than a third of Miami-Dade's cost.

With a newly appointed elections supervisor set to weigh in by the end of this week on whether Miami-Dade should jettison its highly touted, $24.5 million iVotronic touch-screen system, the expenses it generates for each election - which include programming, setting up and securing the machines and printing backup ballots - will be a major factor in the decision.

"The cost is something that we're looking at very closely," said Lester Sola. "That, and voter confidence."

But comparing Miami-Dade's costs with Orange County's "is not apples to apples," said Bill Cowles, Orange County's elections supervisor. For example, Cowles' department listed the major expenses for the November elections at $1.12 million - a number that did not include costs such as overtime for staffers. The single biggest expenditure listed: $526,700 for ballots.

"There are a lot of costs associated with optical scan, too," Cowles said, citing printing costs and ballot storage. Orange County, which includes Orlando, is the most populated county to use optical scan devices as its sole voting apparatus. Manatee County also uses optical scan devices.

Miami-Dade's expenses included $1.4 million in overtime costs alone. Other costs stemmed from a massive voter outreach effort before the election and from officials' deploying technical experts to the polls to make sure touch-screen machines operated properly.

Better, cheaper way?

Now, as part of its evaluation of whether to keep the iVotronics, the county will have to balance its costs against the optical scanners - and judge how each would play out in the challenge of running an election in a major urban area, Sola said.

A key selling point for the iVotronic machines in 2002 was the promise that they could cater to the needs of increasingly diverse, logistically complicated elections.

"There was the idea that this would help deal with these issues, when in reality, that may not have been the case," said Sola, who was not part of the elections department at the time.

Sola was tapped to oversee Miami-Dade elections after the unexpected resignation of Constance Kaplan, who left in March after revelations that a computer coding error dumped hundreds of votes in an election that month. The same coding error was detected in several other municipal elections during the past year.

Officials have said the mistake did not affect the elections' outcomes, but County Manager George Burgess directed Sola to look into replacing the iVotronics with the optical scan devices.

Since then, staffers have been crunching numbers.

Big ticket costs

Here are some of the big-ticket costs associated with the iVotronics:

• Back-up batteries for each of the 7,200 iVotronic machines - at $147 a pop - totaled more than $1 million. Election Systems & Software, the company that makes the iVotronics, recommends replacing the batteries every three to five years.

• Batteries for the 7,600 handheld devices that activate the machines cost $8 each - or $60,800 total.

• Sola estimates that the county would need another 1,000 iVotronics - at about $4,000 apiece - by the next presidential election in 2008. Outfitting the county with an optical scan system could run an estimated $8 million, according to a memo drafted by Kaplan last year.

There also is the issue of the technical support required for the iVotronics.

The original purchasing contract included more than 400 days' worth of project-manager support from ES&S - but those days were gone by the end of the first year, a period that included the disastrous September 2002 primary.

Now, the county negotiates the rate and number of days for ES&S support in advance of elections. That price has been as high as $1,100 a day, per person.

For the 2004 election cycle, the county commission approved a contract that anticipated $294,000 in technical support. ES&S spokeswoman Megan McCormick declined to speak on the specifics of the Miami-Dade contract, citing company policy, but said the county's use of support staff "was consistent with what we have in other counties."

'A lot more work'

In Broward, which also uses ES&S iVotronics, the county spent slightly more than $100,000 for the November election in support from the Omaha-based company, with rates up to $1,800 a day, said deputy elections supervisor Gisela Salas.

"It's not like running a punch-card election. It's a lot more work and resources," she said. "But we're pretty comfortable with what we're doing."

The need for technical support in counties that use the touch-screen method varies greatly. In Palm Beach County, which uses a system created by Sequoia, elections workers rely solely on telephone support from the California-based company.

The November elections in Palm Beach County, which has a voting population of more than 759,000 - and like Miami-Dade, uses ballots in three languages - cost about $1.5 million, said elections chief Arthur Anderson.

Anderson, along with elections supervisors around the state, met this month during a conference in Orlando, where talk naturally turned to Miami-Dade's controversy.

"It got very emotional," Anderson said.

One defender of the touch-screen system is Cowles, who plans on phasing out Orange County's optical scanners and converting to an all-electronic system by 2012. He cites burgeoning voter rolls as a reason for switching.

If Miami-Dade decides to move in the opposite direction and purchase the optical scan machines, the switch would not be immediate. Unlike the state-mandated dumping of the punch-card method, the county would have time to adapt to the new machines. And the change would have to be approved by the county commission.

"There is a lot of work and a lot of cost associated in getting that end product to the voters," said Sola of the touch-screen system. "We have to decide what's going to be best in the long run."

Miami-Dade's Elections Chief Urges New System

By Chrystian Tejedor and Ihosvani Rodriguez
Sun-Sentinel
May 28, 2005

After repeated embarrassing glitches at the polls, elections officials in Miami-Dade County have recommended scrapping the county's $24.5 million electronic voting system in favor of paper ballots with optical scanners.

Supervisor of Elections Lester Sola made the recommendation Friday in an initial analysis of the county's voting system and the feasibility of adopting a new one. In his report, Sola said that adopting the simpler system could save county taxpayers millions and restore voter confidence by providing a paper record of ballots cast.

In April, an outraged Mayor Carlos Alvarez requested a study on the merits of the optical scan system after revelations that the Elections Department lost hundreds of votes during the March 8 slot machine referendum because of a coding error.

The revelations led former Supervisor of Elections Constance Kaplan to resign on March 31 and were the latest embarrassing chapter in the county's elections. Sola took over the same day.

Alvarez also fumed that the current system has increased the cost of running an election to about $7 million per election.

Sola's report comes days after a voter advocacy group released a disparaging report that cited a litany of problems during last fall's general elections, among them malfunctioning voting machines.

After County Manager George Burgess reviews Sola's report, the issue could head to county commissioners, who could decide to switch systems Sola estimated that replacing the voting machines with paper ballots and optical scanners would take at least 15 months.

Alvarez was attending a funeral late Friday and could not be reached for comment, staff said. In a one-paragraph written statement, Burgess said he would meet with Sola in the coming weeks before making any specific recommendation.

In his report, Sola recommended that county leaders move carefully in exploring purchasing a new system.

But Sola said an initial analysis showed that the county would save more than $13 million over five years with an optical scan system through lower operating costs and the elimination of costly maintenance expenses.

Staff Writer Madeline Baro-Diaz contributed to this report.
Ihosvani Rodriguez can be reached at ijrodriguez@sun-sentinel.com or 305-810-5005.
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New Balloting System for Voter Confidence

OUR OPINION: SUPERVISOR MAKES A STRONG CASE FOR OPTICAL SCANNING

The Miami Herald
June 01, 2005

The snafus of the 2000 presidential election did worse damage to voting in Florida than merely tarnishing the state's image. The debacle undermined voter confidence in the accuracy of election results. Voter concern about whether every ballot cast actually will be counted continues today, even though punch-card voting machines -- villains of the 2000 election -- have been replaced statewide.

Less expensive

In Miami-Dade County, expensive new touch-screen equipment has failed to restore voter confidence, primarily because of its inability to produce a paper record of each vote. This is the primary reason why the Miami-Dade County Commission should view favorably a recommendation by Supervisor of Elections Lester Sola to switch to optical-scan equipment.

Mr. Sola's analysis concludes that scanning equipment would be easier to use and would create an auditable paper record, two big pluses compared to electronic voting. County Manager George Burgess has received Mr. Sola's report and, after reviewing it, will make a recommendation to the commission.

There is another reason for switching to an optical-scan system, and it is of no small consequence. The costs would be significantly less. Mr. Burgess says that he is carefully weighing all factors involved in a switch. The county already has invested $24.5 million in electronic equipment and another $6.6 million in costs associated with the 2002 elections. If Miami-Dade sticks with touch-screen technology, it will have to spend another $1 million for more machines and batteries. Bottom line: The production costs of elections would increase significantly from the historical average of $1.5 million per election.

Optical-scan equipment, on the other hand, could be purchased for much less -- an estimated $8 million -- and operational costs would be more in line with historical costs. Thus, an optical-scan system would be less expensive, easier to use and more likely to restore voter confidence. Barring some unforeseen obstacle, the county should happily convert to optical-scan equipment.

Deliberate certainty

Mr. Burgess said that he wants to carefully review Supervisor Sola's report and weigh the pros and cons of both systems before making a recommendation. If his decision is for optical scanning and the commission approves, he said that he would advise a methodical, careful conversion. That would be wise. In the switch to touch screens from punch cards, the county was pressured to move quickly because of the looming decertification of the old equipment and upcoming election.

This time, county commissioners face no such obstacles. With a certified system in hand, they can and should move with deliberate certainty to make sure that votes are counted accurately and that voters have confidence in the system.