A paper jam roils California vote

There's a rush in the state to replace decertified electronic devices with printed ballots and scanners.

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First of two parts

Riverside County was in the vanguard of a new electronics era in 2000, when it became the first county in the nation to convert to computerized voting machines.

With the new technology, voters were able to cast their ballots up to 10 days early and miles outside their own precincts at shopping malls. An RV outfitted as an electronic polling station was sent to senior centers, Indian reservations and places deep in the desert.

But after what Riverside Registrar Barbara Dunmore calls 40 successful elections on the $25-million system, those programs are dead. The county has more than 3,000 of the machines in a warehouse, stacked up to the rafters, perhaps never to be used again.

In a series of controversial decisions last year, California Secretary of State Debra Bowen decertified the vast majority of electronic voting machines in the state, arguing that they were vulnerable to tampering and have defects that could corrupt vote counts.

As a result of her order, about a third of California counties are scrambling to prepare for the Feb. 5 presidential primary, printing millions of paper ballots, acquiring new optical scanners and pressing into service optical scanners normally used to count absentee ballots.

San Diego, San Bernardino, Santa Clara and Riverside are among 21 counties hit by the decertification, putting thousands of machines worth millions of dollars into storage.

The counties believed the machines provided a bulwark against a disputed election, like the one that hit Florida's punch-card system in 2000. In their view, that election demonstrated an accuracy problem, not a security problem. Nonetheless, the electronic machines are under a cloud.

Bowen enlisted a team of eminent computer scientists from top laboratories and universities. They were able to hack into every type of voting machine. "People just don't trust them," Bowen said about the electronic machines. "You only have one chance to get an election right."

The systems in Los Angeles County, which already uses paper ballots, and in Orange County were recertified and do not expect major problems.

But some county registrars are warning of potential problems if elections are close, because paper ballots are sometimes mismarked and must be interpreted for the actual voter intent -- just as with the Florida punch cards of hanging-chad notoriety.
Election results also will be reported far later than normal, because tons of paper ballots must be hauled to county headquarters and manually fed into the scanners. They sound like blenders chopping ice, and sometimes send ballots flying across the room.

In San Bernardino, a test run of paper ballots in November found that optical scanners could count only 10,000 votes per hour. That means it could take more than 17 hours, starting at 10 p.m., to handle the 175,000 votes expected, said Registrar Kari Verjil.

"We will be working all night," she said.

Already, the pace is frenetic. In Riverside, workers are jammed in the warehouse bundling the paper ballots and preparing new voting booths that must be distributed across the county, which sprawls from the Colorado River westward to the San Jacinto Mountains.

In one early sign of trouble, Riverside has issued a warning to voters that some paper ballots were too deeply scored along a fold line and could fall apart when unfolded. Those ballots have been mailed to voters and must be replaced.

Riverside is getting by in this election with more than $700,000 in last-minute spending for new scanners, voting booths and other equipment. It may have to spend millions more in the future. In the coming elections, one electronic machine can still be used in each precinct to provide access for disabled voters, a federal requirement. So Riverside will use 720 of its 3,700 machines.

The decertification by Bowen, a Democrat, has stirred deep resentment in the Republican stronghold.

"This was a shoot-from-the hip political maneuver to help her gain name recognition," said Riverside County Supervisor Jeff Stone. "This is purely a waste of taxpayer money. When the times are lean, this doesn't help."

The sentiment is similar elsewhere. "Of course it's difficult," Verjil said.

"It seems like every time we get a new secretary of state there is a new voting system," she said. "Who's to say what will happen in four years if we get another secretary of state?"

San Diego County Registrar Deborah Seiler said Bowen had created unprecedented chaos in preparing for the elections.

Seiler sued Bowen over one new requirement that counties increase audits in close races, even though victory margins often change as more absentee ballots are counted. "We have no idea how we are going to be running our elections week to week," she said. "What is at risk is voter confidence."

Despite the turmoil in other parts of the state, Los Angeles County, the biggest voting district in the nation, does not face any major changes in its balloting system because it was already using the paper scanning method Bowen favors.

"The best news for us is, our voting system has been recertified by the secretary of state," said Acting Los Angeles County Registrar Dean Logan. "For Los Angeles County voters, they are not going to see anything different than what they have seen before."

Logan said the count would be slow in part because of the large number of mail ballots that would be sent in at the last minute or dropped off at polling stations on election day. He estimated that more than 20% of the vote will not be processed until after election day.

Orange County, meanwhile, uses a Hart InterCivic system – the only electronic voting machine substantially unaffected by Bowen's order, said
Registrar Neal Kelly. Nonetheless, electronic machines have tremendous security protocols, including putting 91,000 bar-coded seals on the machines to guard against tampering.

"Welcome to my nightmare," Kelly joked. "There are a lot of grassy-knoll theories going on. Some of these people are on the fringe and will never be satisfied."

David Wagner, an assistant professor of computer science at UC Berkeley, helped organize and lead the team of 50 experts who examined California's electronic machines.

They concluded that all of the computerized systems were flawed. In the worst case, they found, an individual could introduce a virus into one machine that could spread to the entire system, causing the vote to be miscounted.

"This was not an easy attack," Wagner said. "It would have to be technically sophisticated. But it was doable."

The team concluded that the safest approach was to use paper ballots that could be counted using optical scanning machines. Voters mark ballots themselves, leaving a paper record that can be rechecked.

"These scanning machines give you a much better basis for making elections trustworthy," Wagner said. But paper ballots -- whether sent by mail or cast on election day -- have their own set of problems.

Since the first secret ballot election, some paper ballot boxes have been stuffed. Conny McCormack, the well-known former registrar of Los Angeles County who retired last year after disagreements with Bowen, said the state review never examined the security weaknesses of paper ballots.

What's more, some paper ballots will require a confusing mark that connects dots next to candidates' names. Any improper marks or stray ink or the wrong color of ink can shoot a ballot into a reject pile.

From there, a so-called "duplication board" of election administrators would have to determine the voter's intent and then transfer those selections to a new paper ballot.

"We don't have evidence of people trying to hack into our systems, but we do have evidence of people making a mistake on paper ballots that cause accuracy problems," said Seiler, the San Diego registrar.

Contra Costa County Registrar Steve Weir, who heads a statewide association of election officials, said many counties had had to scramble to find alternatives to computerized voting machines, and his own county was having trouble finding enough poll workers.

He said he was confident that things were going to work, but added: "There are seasoned registrars like myself who are sweating this election."

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