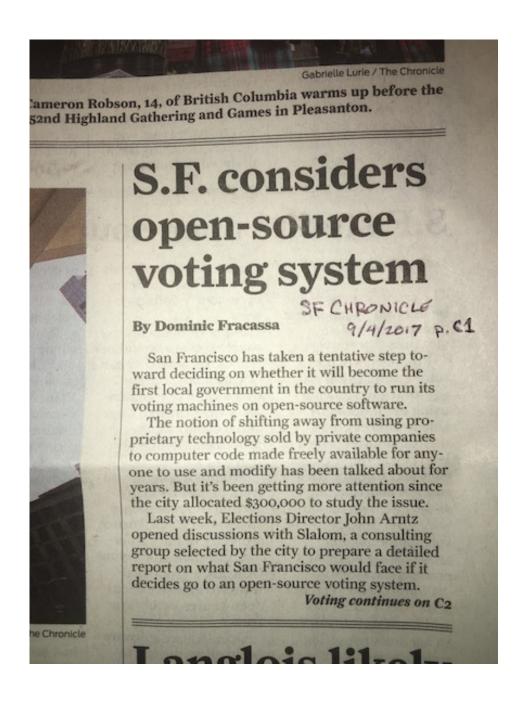
"S.F. considers open-source voting system," San Francisco Chronicle, By Dominic Fracassa, September 4, 2017, p. C1 (2 pages).



up an 18-pound rock and spun around twice.

"Eee-oww-eee!" he grunted, as he let fly. The rock traveled a distance of 48 feet, 8¾ inches. Her birds were supposed to perform six shows during the games but only managed two, with Pocieche squirting them all the while from giant

The heat wave — particularly fierce in the Tri-Valley area around Pleasanton — took its toll on the two-day event. Attendance at the games was off by 75 percent.

said no Scot would dream of calling off the 152nd annual Scottish games for heat or for anything else.

"None of our chiefs would want to go down in history for being the Hamnquist, who
wears braces on his teeth,
said he must also compensate by repositioning
the blow pipe in his
mouth and pulling his
lips tighter. Between the
heat and the braces, the

ning," he said. "I was trying to be practical."

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## S.F. studies open-source voting

Voting from page C1

The report is expected to be finished by January at a cost of around \$175,000.

Proponents of opensource voting systems say local governments using them would be able to hold elections with an unprecedented level of control, transparency and security. It's a concept that's gaining wider attention nationwide given the specter of vote tampering that arose during last year's presidential election.

California Secretary of State Alex Padilla has said he would support an open-source voting system, assuming it could pass the state's certification protocols. In April, Padilla endorsed the Voting Modernization Bond Act of 2018, which seeks \$450 million to upgrade the state's antiquated voting machines. Some of that money could be spent by

county elections officials to research and develop open-source voting systems.

Supporters say opensource systems would be reliable because they can be constantly assessed by a swarm of programmers who can spot bugs and recommend improvements before election day.

"To put it simply, you want to have as many eyes on the code as possible," said Brent Turner, secretary of the California Association of Voting Officials, a group dedicated to implementing open-source voting systems.

Open-source software could allow the city to more fully understand and adjust how votes are tallied. Currently, vendors of electronic voting equipment provide few details about how their machines operate, claiming those details are proprietary. Governments are also beholden

to private vendors if they want to make a change to the software running the machines.

"You're stuck with whatever they provide," said Chris Jerdonek, president of the San Francisco Elections Commission and the chairman of the commission's Open Source Voting System Technical Advisory Committee. "Open-source would give the city an opportunity to say, 'We want to make a tweak,' and then they'd be free to do that."

Open-source proponents also say governments could save money by reducing their reliance on outside vendors. Just how much San Francisco might save isn't totally clear, but for the past 11 years, the city has spent an average of \$2 million annually on its voting equipment, which it buys from Dominion Voting Systems. This year, the city renewed its contract with Dominion



Santiago Melia / The Chronicle

S.F. Elections Director John Arntz is weighing the merits of moving to an open-source voting system.

through 2018 for \$2.3 million.

There are doubters, however.

Many technology and security experts stress that open-source software is not inherently more secure just because a lot of people are looking for bugs and plugging security holes.

"Software designed for inspection tends to be 'better' — although transparency does not magically improve security," said Deirdre Mulligan, an associate professor at UC Berkeley's School of Information.

And Jack Miller, the chief information security officer at SlashNext, a cybersecurity firm, questioned whether an opensource voting project could attract enough skilled volunteers to police the software code effectively.

But Turner said the term "open source" can be a bit of a misnomer, suggesting that the code is open to inspection and alteration at any time. In reality, Turner said. access to the code could be controlled by the city, even if it remains visible to the public.

"It's a publicly held code that can be locked down before it's utilized in a real election," Turner said. And if hackers do manage to manipulate the code, "with an open-source system, someone will see it and you'll have all these smarty-pants try to outshine each other to fix the problem. They're the proofreaders," Turner said.

Any hope of receiving additional funding to exploring open-source voting will be "fully contingent" on the consulting firm's findings in January, said Jerdonek, the elections commissioner. The biggest potential roadblock, he said, is getting city officials to take the risk of being the first in the nation to try it.

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RIDE CALTRAIN VTA LIGHT RAIL OR BUS SERVICE



Langlois bids for seat

But not everyone supports Langlois. the rent control measure on the November ballot