Re: Ensuring that every Texas voter can cast a secure, auditable, & verifiable vote

Dear Ms. Decker,

Our groups share a goal of ensuring that every eligible Texas voter is able to cast an effective vote. To that end, we are reaching out to urge you to take steps to initiate a process to implement a secure and reliable voting system in Kendall County. If you have already taken those steps, we commend you and would like to hear about them.

As you may know, the ES&S iVotronic paperless voting machines that the County currently uses for Election Day voting are insecure, unreliable, and not auditable. Decades of independent research and widespread bipartisan consensus confirm this. We would like to work with you to ensure that Kendall County adopts secure, verifiable, and auditable voting systems at the earliest possible date—preferably by the 2020 elections—and that this initiative becomes a priority for your office. To that end, we have set out below some information and resources to explain the urgency of ensuring that all Kendall County voters have access to a secure and reliable voting system as soon as possible.

1. Kendall County’s Voting System Suffers from Serious Deficiencies

The Voting System is Aging, Insecure, and Cannot be Audited

Experts agree that outdated voting technology poses serious risks of leaving votes uncounted due to hacking or mechanical breakdown. ¹ Direct Recording Electronic (DRE) systems, which cast

and count ballots digitally, are doubly dangerous: they are more likely to fail (because they offer pathways that malicious hackers can exploit and rely on obsolete technology that is increasingly likely to malfunction), and they produce no record outside their software that can be used to catch mistakes through audits or recounts.

Outdated voting technology such as paperless DRE machines is not good enough for Texas voters and should be phased out. Last year, the Senate Intelligence Committee found that DRE machines, like the iVotronic, “are at highest risk for security flaws” and urged their replacement.2 Similarly, the National Academy of Science convened a group of leading national experts to assess the needs of U.S. election systems to operate reliably in the current threat environment. Their report concluded that “[v]oting machines that do not provide the capacity for independent auditing . . . should be removed from service as soon as possible.” Their consensus was that “[e]lections should be conducted with human-readable paper ballots.”3 And leading computer scientists and cybersecurity experts at Texas’s most preeminent institutions have delivered the same message loudly and clearly: “paper records (collected in a secure, private way) are indispensable to a secure elections system.”4

None of this is breaking news. Texas’s insecure voting machines have been covered in Texas Monthly,5 Vice Magazine,6 and Politico.7 But the iVotronic machines used in Kendall County are particularly outdated, insecure, and susceptible to error. For over a decade, computer science experts have sounded repeated alarms over the iVotronic’s security. Beginning in 2007, independent researchers identified serious flaws in the iVotronic’s hardware (the machines themselves) and software (the programs running on the machines) that create the kind of

---


3 NAS Report at 80.


vulnerability that sophisticated hackers can but exploit in a manner that would cause widespread disruption. They concluded that “[i]nserting malicious code at any step in this process could result in a virus spreading to all other components, completely compromising the election.” In other words, the iVotronic machines have “fundament, pervasive deficiencies”—and should not be used. This research has been replicated and reinforced many times, including as recently as 2017.

Using machines that are at or near their manufacturer-recommended lifespan only makes matters worse. Aging equipment increases the cybersecurity risk because older systems fall well behind the current state of the art in cybersecurity measures, and software or the operating system used to run the systems may no longer be receiving security updates.

The Shortcomings of Kendall County’s Voting System Are Exacerbated by the Threats Facing U.S. Elections in 2020

Election security is a national security issue—and there is widespread, bipartisan agreement that U.S. elections are at risk. The U.S. Director of National Intelligence recently appointed an election threats executive, explaining that election security is “a top priority for the intelligence community—which must bring the strongest level of support to this critical issue.” The FBI agrees, and has said that “the threat from nation-state actors remains a persistent concern.” And on September 24, 2019, a leading cyber threat intelligence organization issued a report warning: “It is unequivocally clear . . . that the Russians invested a significant amount of money and effort

---


9 Id. at 98.


11 See NAS Report at 92.


in the first half of this year to build large-scale espionage capabilities. Given the timing, the unique operational security design, and sheer volume of resource investment seen, . . . we may see such an attack carried out near the 2020 U.S. Elections.”

This threat environment adds stress to outdated voting systems where none is needed: systems must accurately count every valid ballot while sophisticated adversaries seek to undermine them. And, voting systems with longstanding and well-studied vulnerabilities, like the iVotronic, face greater risks than other systems.

To meet this threat, jurisdictions should administer elections on modern systems using paper ballots. At least 122 Texas counties will use paper systems this November; and 40 out of 50 states will use only paper systems by November 2020.

2. The U.S. Constitution Requires Voting Systems that Ensure that Every Voter Can Cast an Effective Vote

The only way to make sure all Texans’ votes are counted is to have a record of every vote that cannot be altered by machine failure or hacking. Every voter deserves a voting system that meets independently developed best practices. Most importantly, whatever machines Kendall County adopts should provide voters with the means and opportunity to verify human-readable marks on paper that correctly represent their intended selections, before casting their ballot.

Not doing so impermissibly burdens the voting rights of Kendall County voters. The constitutional right to vote is not satisfied by simply allowing a voter to place a ballot in a ballot box or enter selections on a touchscreen. “[I]ncluded within the right to choose . . . is the right of qualified voters within a state to cast their ballots and have them counted.” In that manner, the federal Constitution guarantees each voter the right to cast an effective vote—a ballot that is counted correctly towards the outcome of the election. Moreover, it also prohibits states from subjecting voters to arbitrary disparities in the effectiveness of their votes.

---

19 See Bush v. Gore, 531 U.S. 98, 104–05 (2000) (“Having once granted the right to vote on equal terms, the State may not, by later arbitrary and disparate treatment, value one person’s vote over another.”).
A federal district court in Georgia recently applied these principles to rule that plaintiffs challenging the use of iVotronics in their state will likely succeed in their case. The plaintiffs in Curling v. Raffensberger challenged Georgia’s use of iVotronic voting machines on the grounds that it violated the constitutional rights of Georgia voters. Because the iVotronic suffers from significant security flaws due to vulnerabilities in its hardware and software, the plaintiffs in Curling claim that Georgia’s continued use of the iVotronic system violates their right to vote under the First and Fourteenth Amendments. In August, a federal judge concluded that Georgia’s use of the iVotronic system does likely “burden[] and deprive[] [Plaintiffs] of their rights to cast secure votes that are reliably counted, as guaranteed under the First and Fourteenth Amendments of the United States Constitution.” In doing so, the court highlighted its prior conclusion that Georgia’s “continued reliance on the use of DRE machines in public elections likely results in ‘a debasement or dilution of the weight of [Plaintiffs’] vote[s],’ even if such conduct does not completely deny Plaintiffs the right to vote.”

The right to vote, the cornerstone of our democratic system of government, depends on a system of election administration that provides all eligible voters an effective opportunity to participate—not just those who happen to live in a jurisdiction that uses an adequate voting system. At minimum, this means ensuring that the machinery of democracy has the capacity to record and count each vote consistently, fairly, effectively, and accurately. And that means ensuring that there is a paper record of every vote.

3. Implementing a New Voting System by the 2020 Election is Still a Practical Option

In light of the urgency of ensuring that all Kendall County voters have access to a secure and reliable voting system, we urge you to consider taking immediate steps to implement a reliable voting system, if you have not already done so. That system should make use of paper ballots—just as the systems in 122 Texas counties will by this November. Though we recognize that budget constraints, funding, and the need for preliminary approvals from County Commissioners or other officials are all serious factors, we respectfully ask that you assess the possibility of updating your voting systems by Election Day 2020. From our standpoint, this is a difficult but not an impossible task: many Texas counties have recently and smoothly transitioned to paper-based systems. In fact, the state of Virginia moved many of its precincts from paperless DRE

---

21 Id. at *2-3.
22 Id. at *1.
23 Id. at *54.
24 Id. at *54 (quoting Bush v. Gore, 531 U.S. 98 at 105 (alterations in original)).
25 At least 15 Texas counties have purchased and/or deployed paper-based systems since the beginning of 2018, including Washington, Cooke, Caldwell, Atacosta, Rusk, Starr, Bastrop, Orange, Rockwall, Bowie, Johnson, Ellis,
voting machines to a paper-based systems in just 3 months.\textsuperscript{26} In Pennsylvania, following a February 2018 directive\textsuperscript{27} ordering that all new systems employ a paper vote record, approximately 75% of counties have deployed new systems (with the remaining counties set to transition by the April 2020 primary). And in South Carolina, which completed an RFP for a new, statewide system in July of this year, new machines have already been delivered to various counties.\textsuperscript{28}

All signs suggest that help is coming—Congress is on track to appropriate substantial funding to upgrade states’ voting systems.\textsuperscript{29} A bipartisan coalition recognizes the importance of ensuring that all voters have access to reliable voting systems. But ultimately, county officials bear responsibility for making sure every voter can cast a ballot that will be counted.

We thank you for your attention to this important matter, and welcome the opportunity to discuss this further. We—and the computer and cybersecurity experts who have spoken out on the need to secure Texas’s infrastructure—are available to serve as resources to Kendall County or to answer any questions about steps it can take to ensure that its voters have secure, reliable, and auditable systems at the earliest possible date. We can be reached at the contact information below.

---


\textsuperscript{27} Wolf Administration Directs that New Voting Systems in the Commonwealth Provide Paper Record (Feb. 9, 2018), available at \url{https://www.media.pa.gov/Pages/State-Details.aspx?newsid=261}.


\textsuperscript{29} Carl Hulse, \textit{After Resisting, McConnell and Senate G.O.P Back Election Security Funding}, NYT (Sept. 19, 2019), available at \url{https://www.nytimes.com/2019/09/19/us/politics/mcconnell-election-security.html?module=inline}. Although a federal appropriation for voting systems is not yet final, the House of Representatives recently appropriated $600 million for states to upgrade voting systems, and the Senate is on track to appropriate $250 million. In all likelihood, this year Congress will approve an amount between those figures for states to use in replacing and upgrading voting systems.
Most sincerely,

Jamila Benkato  
Protect Democracy

Edgar Saldivar  
Andre Segura  
ACLU Foundation of Texas, Inc.

Adrian Shelley, Director  
Public Citizen – Texas

Sophia Lin Lakin  
Adriel I. Cepeda Derieux  
American Civil Liberties Union

Attachments: