IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF GEORGIA ATLANTA DIVISION

DONNA CURLING, ET AL., Plaintiffs,

V.

BRAD RAFFENSPERGER, ET AL., Defendants.

Civil Action No. 1:17-CV-2989-AT

CURLING PLAINTIFFS' REPLY IN SUPPORT OF MOTION FOR PRELIMINARY INJUNCTION

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I. INTRODUCTION

State Defendants rely on four fundamental claims: (i) Georgia's "electronic voting system" is "used throughout the country;" (ii) Curling Plaintiffs contend that "BMDs are always unconstitutional" because "the U.S. Constitution prohibits electronic voting;" (iii) Georgia's voting system is secure and reliable; and (iv) HMPBs are not feasible for 2020 elections. All four claims are false and either lack supporting evidence or contradict State Defendants' own evidence.

First, Defendants identify no other state using the election system Curling Plaintiffs challenge in Georgia. Instead, BMDs typically are used for those voters who need them because they cannot mark paper ballots by hand. This is the same voting system Curling Plaintiffs seek, thus acknowledging that non-barcode-based BMDs can be constitutional *when necessary*. Ironically, State Defendants argue—wrongly and without legal authority—that this voting system is unconstitutional; thus, they are the ones asking the Court to declare unconstitutional an "electronic voting system" that *actually* is used "throughout the country."

Second, State Defendants' claims about the security of Georgia's election network are breathtaking in their inaccuracy and incompetence. They finally admit that they ignored this Court's August 2019 Order directing the State to "work with its consulting cybersecurity firm" to secure the election network, instead doing

nothing since before Georgia rolled out the current system. They also now admit

Further, the

measures they emphasize to secure the system, such as "hash values" and "encrypted" bar codes, reveal a deeply disturbing ignorance about their own system and basic cybersecurity challenges. And they have the audacity to attack Plaintiffs' experts for not examining the Dominion equipment while blocking that examination and offering nothing themselves from any security expert who has. In fact, they offer no testimony from a single election security expert at all.

Finally, their claim that it is infeasible to use HMPBs has no supporting evidence, apart from a vague, conclusory declaration from Chris Harvey. And they ignore that—unlike in 2018 and 2019—Georgia already has the infrastructure in place needed for HMPBs across the state, using the same EMS and scanners as well as the same poll workers who already are trained on HMPBs since each polling place is required to have sufficient paper ballots for voters to vote by hand given the "chaos" that inevitably will ensue again this fall as in June and last year. All Curling Plaintiffs seek is to provide paper ballots to voters to mark by hand and to scan with the same scanners. That's it. This is no heavy lift for 2020, and the

Constitution demands this relief where the alternative is a hopelessly unsecured, unreliable, unverifiable, opaque, clunky, glitchy, unreasonably-complicated election system used by no other state in the country that erodes voter confidence and ultimately disenfranchises many voters (during a pandemic, no less, that applies additional stress to the system and election workers). These are ideal chaotic circumstances for a hacker to affect election outcomes undetected through such penetration points as WiFi connections, removable media, and off-the-shelf hardware or software loaded to the equipment, none of which State Defendants dispute.

Curling Plaintiffs appreciate the November election is approaching, but contrary to State Defendants' stunning argument, the Constitution does *not* exempt states from its protections merely because enforcing them is inconvenient. An election on an unconstitutional system, regardless of the circumstances or timing, is always indefensible and offends the most fundamental principles on which our democracy depends. The Constitution requires more. And so should this Court.

II. ARGUMENT

A. State Defendants Misstate Curling Plaintiffs' Position

Curling Plaintiffs do not now and have never asked the Court to "decide that the U.S. Constitution prohibits electronic voting." (Dkt. No. 821 at 14.) Nor do they

seek an order that "BMDs are always unconstitutional." (*Id.* at 15.) State Defendants know this. Curling Plaintiffs challenge *Georgia's* election system, which relies on barcodes to tabulate votes as the primary means of voting and suffers from such vulnerabilities that the State's own security experts advised against using it. In fact, no election security expert has endorsed Georgia's election system. *Not one*.

Unable to identify another state using the same election system as Georgia, State Defendants resort to noting a handful of counties in the country that supposedly do. (*Id.* at 19.) But this only highlights the impropriety of Georgia's statewide use of barcode-based BMDs. BMDs typically are for voters with disabilities, just as Curling Plaintiffs' seek here. In contrast, the majority of voters heading to the polls this November will be marking ballots primarily by hand. (Halderman Decl. ¶¶ 2-5.) Thus, State Defendants' claim that Curling Plaintiffs are challenging "an electronic voting system used throughout the country" is remarkably false. (*Id.* at 1.)

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¹ Recent data shows that voters in only 12 percent of precincts in the United States (comprising 13.5 percent of registered voters nationwide) will mark ballots primarily by BMD. (Dkt. No. 681-2, Ex. 1 at 2G, 2O.) Meanwhile, voters in 72.5 percent of precincts will mark ballots primarily by hand. (*Id.* at 2E.) Sixty-three percent of precincts will use BMDs primarily for voters with disabilities. (Dkt. No. 681-2, Ex. 2 at 2I.) *See also* Halderman Decl. ¶¶ 2-5.)

B. Georgia's Election System Is Woefully Unsecure and Unreliable

State Defendants offer this Court no basis to conclude that Georgia's election system is secure. To the contrary, they damn their own election system and their own opposition to Curling Plaintiffs' requested relief with their repeated complaint that Plaintiffs' experts' "have never examined the Dominion system." (*Id.* at 2, 6-7, 9.) They argue that Plaintiffs' experts cannot knowledgeably assess the security of that system without examining its components. *But the same holds for their own experts*. And they are forced to admit, yet again, that no election security expert has ever examined the Dominion system—except for Fortalice Solutions in a single year-old report they are withholding behind a contrived privilege claim. (*See* Dkt. No. 842 at 23-24.)

Defendants tellingly have abandoned their prior election security experts,

Prof. Wenke Lee and Dr. Michael Shamos, both of whom advised against the

Dominion system.² Theresa Payton also has disappeared. Now they rely on Juan

Gilbert, whose testimony is irrelevant by their own argument given he has never

² Dkt. No. 554, Shamos Dep. at 56:13-57:2, 57:13-21; Dkt. No. 615-2 ("Lee I") at 4 (In his recommendation to the SAFE Commission set up by Governor Kemp, Dr. Lee concludes, "A secure voting system should use hand-marked paper ballots instead of ballot marking devices. . . . This consensus approach among the cybersecurity research community ensures that votes by the voters are counted accurately."); *see also* Dkt. No. 615-3 ("Lee II") at 2-3.

examined the Georgia election equipment. (Dkt. No. 821-2 ¶ 38.) And he is not an election security expert in any event, instead focusing his election efforts on accessibility issues. They also rely on Jack Cobb, who admits his firm did nothing more than "ensure the voting system can exercise the types of elections run in the State of Georgia." (Dkt. No. 821-6 ¶ 6.) His firm did not test the system for security vulnerabilities.

Further, Mr. Cobb's declaration reveals a disturbing level of ignorance about basic cybersecurity issues and even the Dominion system Georgia uses. (Halderman Decl. ¶¶ 36-49; Appel Decl. ¶¶ 13-17; Liu Decl. ¶¶ 14-16.) For example, it is well understood in the cybersecurity community that the "hash values" Mr. Cobb emphasizes are easily manipulated by malware and thus are not reliable for assessing computer security as he wrongly claims. (*Id.*) It's akin to asking a computer hacker if he hacked a computer and expecting an honest answer. Additionally, Mr. Cobb claims that "the QR code [] includes a digital signature and is encrypted" in the Dominion system Georgia uses. (Dkt. No. 821-6 ¶ 6.) He provides no evidence for this, nor could he—because it's inaccurate. (Halderman Decl. ¶¶ 37-40, 46, 48.)

Thus, despite this Court's August 2019 Order directing the State to "work with its consulting cybersecurity firm," *Curling v. Raffensberger*, 397 F. Supp. 3d 1334, 1411 (N.D. Ga. 2019) ("*Curling II*"), State Defendants admit they have

implemented a new election system without any independent security assessment they are willing to rely on in this case and without any assessment since it was rolled out statewide this year.

1. State Defendants Continue to Disregard Election Security

Defendants rely on the Declaration of David Hamilton to argue that the State has somehow secured its election system. (Dkt. No. 819-1.) But his testimony is damning. He admits that, despite the fact that two years have passed since the November 2018 Fortalice report and despite the Court's concern at the Defendants' insufficient attention to security in 2019,

 \P 3(10).) As the Court found, even Fortalice's preliminary assessment of the PCC elements "rang serious alarm bells." *Curling II*, 397 F. Supp. 3d at 1375. The Court also observed that the Fortalice assessments only provided a "distinctly incomplete picture" into many of the central issues affecting the security of the election system.

(Halderman Decl. ¶¶ 63-71.)

2. June 2020 Elections Are Prologue for November 2020

State Defendants dismiss voluminous reports of widespread failures of the BMD system in the June 2020 primaries as irrelevant. (Dkt. No. 821 at 4, 6.) This is wrong. The "disastrous primary election" confirms the need for Curling Plaintiffs' relief.⁴ Evidence recently produced by Defendants shows that the BMD system

³ "In an email to The Associated Press, Tess Hammock, spokeswoman for Secretary of State Brad Raffensperger, said, 'These conclusions are silly and unfounded. At the end of the day no judge should be susceptible to political Rhetoric." Kate Brumback, *Judge blasts Georgia officials' handling of election system*, Associate Press (Aug. 17, 2019), https://apnews.com/3bb82cd078444a42b9aad64faadc802b.

⁴ Nick Corasaniti & Stephanie Saul, *Georgia Havoc Raises New Doubts on Pricey Voting Machines*, N.Y. Times (June 11, 2020),

https://www.nytimes.com/2020/06/11/us/politics/georgia-voting-machines.html; Richard Fausset & Reid J. Epstein, *Georgia's Election Mess: Many Problems, Plenty of Blame, Few Solutions for November,* N.Y. Times (June 10, 2020), https://www.nytimes.com/2020/06/10/us/politics/georgia-primary-election-voting.html; Mark Niesse and Alan Judd, *Election fiasco reveals flaws with Georgia's new voting system,* Atlanta Journal-Constitution (June 24, 2020), https://www.ajc.com/news/state--regional-govt--politics/election-fiasco-reveals-flaws-with-georgia-new-voting-system/FoZjtLGPYccOrHzXHiPbDL/; Richard Fausset, Reid J. Epstein & Rick Rojas, "*I Refuse Not to Be Heard*": *Georgia in Uproar Over Voting Meltdown*, N.Y. Times (June 9, 2020),

https://www.nytimes.com/2020/06/09/us/politics/atlanta-voting-georgiaprimary.html ("Georgia's voting fiasco stemmed primarily from the 30,000 new voting machines the state bought last year...").

played a central role in the chaos of the June primaries. Many complaints to the Secretary of State from voters report many different problems caused by BMDs, including: missing races and missing or incorrect candidate names displayed on BMDs;⁵ BMDs failing to record voter intent;⁶ the inability to vote due to BMD

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⁵ Cross Decl. Ex. 1 (voter reported "presidential candidates were not on my ballot" and "Joe Biden name was absent on [her daughter's] ballot! She said she had to vote for Bernie Sanders, but was confused because she thought he had dropped out [of] the race"); Cross Decl. Ex. 6 ("I was only allowed to vote for the judges in my county and that's it. I find that to be very disturbing that my vote truly did not count and I am angry that I was not given the opportunity to vote on the other election candidates for president, senate, sheriff, or register my preference on the numerous questions that were on the other ballot."); Cross Decl. Ex. 10 ("When I went to vote at the machine, it also did not have the presidential candidates but other ballots did have the candidates. . . ."); Cross Decl. Ex. 16 (local sheriff and legislative seats not reflected on touchscreen ballot and poll worker "shrugged and said it does that sometimes"); *see also* Cross Decl. Exs. 5, 9, 11, 13, 17, 21, 22, 32, 33, 34, 35, 39.

⁶ Cross Decl. Ex. 2 ("Once I got in to vote my voting machine did not work properly. . . . My machine would not put a checkmark next to my selection and this was after I hit the selection button twice as I was instructed. . . . When I printed my ballot nothing was selected. . . . This was by far my worst voting experience.").

malfunction;⁷ other instances of BMD malfunctions;⁸ hours-long waits;⁹ improper instructions on use of the BMDs;¹⁰ and other equipment malfunctions.¹¹ These and other problems will only worsen in November 2020 with an expected record turnout

⁷ Cross Decl. Ex. 3 ("I voted using a provisional ballot . . . due to the voting machine malfunctions. . . . I do not have the link available to check my provisional ballot status."); Cross Decl. Ex. 14 (voter did not vote because she had to leave for work after voting machine would not accept her voter card and then indicated she had already cast a vote); Cross Decl. Ex. 25 (voters started leaving after voting machines were not working and provisional ballots were not available); *see also* Cross Decl. Exs. 27, 30.

⁸ Cross Decl. Ex. 12 ("I was the 12th person in line to vote and the precinct didn't open until an hour later because NONE of the new voting machines were working. . . . At 8:30am, we demanded paper ballots. At 9:00am the machines are still down and no technician yet on site."); *see also* Cross Decl. Exs. 15, 17, 18, 19, 24, 27, 30, 31, 33.

⁹ Cross Decl. Ex. 4 ("It took almost 5 hours to cast our ballots during the 2020 June primary election."); Cross Decl. Ex. 18 ("Machines broken in morning followed by inability to print ballots. I've been in line for over 2 hours and can't even see the building yet."); Cross Decl. Ex. 19 (3 hours wait due to broken machines); Cross Decl. Ex. 23 (voter not permitted to vote because he had requested absentee ballot that was never received and was turned away at the poll after three hours wait); Cross Decl. Ex. 24 (3 hours wait due to voting machines not working. "Voters wrapped around the block waiting in the heat, humidity, and rain."); Cross Decl. Ex. 25 (3 hours); Cross Decl. Ex. 40 (3.5 hours); Cross Decl. Ex. 26 (4 hours); Cross Decl. Ex. 29 (5.5 hours); Cross Decl. Ex. 36 (referring to 7-8 hour waits). ¹⁰ Cross Decl. Ex. 8 (poll workers unaware of how to use BMDs, one voter was observed "headed toward the exit with his ballot in hand (presumably thinking it was a copy for him to keep) and was about to leave until another voter told him he needed to cast his ballot. . . . The two poll workers (yes, only two) were busy assisting other voters and therefore did not notice that the man was going to leave with his ballot in hand"); Cross Decl. Ex. 37.

¹¹ Cross Decl. Exs. 7, 20, 25, 40, 37.

at the polls.¹² Defendants vaguely suggest that "lessons were learned" from the problems in June (Dkt. No. 821 at 27) and cite a conclusory, generic statement in a single declaration. (*Id.* (citing Dkt. No. 821-9, Harvey Decl. ¶ 9).) They identify no solutions adopted to avoid the same chaotic problems this November. This is critically important because that chaos provides an ideal environment for an undetected attack on the election. Defendants offer nothing to prevent that.

3. New Security Vulnerabilities Have Come to Light

Defendants claim that there are "almost no new allegations about June 2020" or "security risks." (Dkt. No. 821 at 6.) This is false. In addition to the voter experiences that demonstrate the unreliability of BMDs, the new system evidently is connected to the Internet via WiFi networks¹³ that permit remote access by

¹² Defendants seek to blame the pandemic for the lack of training and knowledge of poll workers. (Dkt. No. 821 at 6.) But the pandemic will still be a problem in November and the pandemic, as in June, will only exacerbate, not excuse, the faults of the BMD system. As set forth in their opening brief, Curling Plaintiffs' requested relief also enhances voter safety and is better suited to the challenges presented by the pandemic.

¹³ Letter to Jasmine Shannon, Elections Division, Ga. Sec'y of State, Brennan Center for Justice (Jan. 13, 2020),

https://www.brennancenter.org/sites/default/files/2020-

^{01/}Brennan%20Center_Public%20Comment_Georgia%20Proposed%20Election% 20Rules.pdf. See also Ga. Sec'y of State, Executive Summary, Initial Findings: Pilot Counties Municipal Elections 2019, New Georgia Statewide Voting System (Nov. 14, 2019),

https://sos.ga.gov/admin/uploads/Executive_Summary_Initial_Findings_Pilots_11-14-19.pdf.

Dominion and potentially others. Defendants do not dispute this or even reference it. Nor do Defendants address the significant data errors uncovered by the State.¹⁴ Further, election security expert Harri Hursti observed numerous problems during the June 9, 2020, and August 11, 2020 elections, including:

- BMDs mysteriously printed "test ballots," which may indicate configuration issues or troubling changes in behavior of the system. (Dkt. No. 809-3, Hursti Decl. ¶¶ 16-17.)
- The EMS server is operated almost exclusively by the vendor, Dominion. (*Id.* ¶¶ 24-25.) This is a serious concern from a conflict of interest standpoint, as the vendor has strong interests in reporting problems with the system, which is made worse by a lack of trained county employees to supervise the process. (*Id.*)
- The Dell computers on which the EMS ran appeared to not be "hardened," which requires that unnecessary software, logins, and accounts have been removed to reduce the number of avenues of attack. (*Id.* ¶¶ 27-29.)
- Some computers used for vote processing had game and entertainment software still installed. (*Id.* ¶¶ 32, 34-35.) This game software included in one case a game developed in Russia *after* the release of the operating system Fulton County used, making it unclear whether the County is using multiple operating systems or the game was installed later. (*Id.* at ¶¶ 34-35.)
- The version of Windows used by what appears to be the main election management computer was released on August 2, 2016. (*Id.* ¶ 30.) The Windows version of the apparent "main" computer in the Dominion EMS rack

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¹⁴ See, e.g., Ga. Sec'y of State, *Executive Summary*, supra note 15 at 4 ("The issue could be remedied be reloading the final dataset with the field removed. By 7:40am the SOS office directed that KnowInk and Dominion do a universal fix quickly by loading that dataset through a WiFi connection. That was executed and the PollPads then began to function properly by approximately 8:20am.").

has not been updated for 4 years, and has 3,177 documented vulnerabilities. (*Id.* \P 36.)

- When removable USB drives were connected to the server, they were automatically loaded. (Id. ¶ 37.) This poses an extreme security risk, as it permits content on the removable media to execute immediately. (Id.)
- Dominion technicians work directly on the election server's operating system. (*Id.* ¶¶ 38-40.) Such work is not captured in election system event logging and auditing cannot be reliable absent capturing such data. (*Id.* ¶ 39.) Further, direct observation revealed that Dominion employees had full access to the computer, evidencing that no meaningful access separation or privilege or role controls protected the election servers. (*Id.* ¶ 41.)
- Voters did not inspect their BMD-printed ballots prior to casting them at the scanner. (*Id.* ¶¶ 13, 19.) This became obvious when voters attempted to cast "test ballots" that the BMD sometimes printed. (*Id.* ¶¶ 13, 16, 19.) Voters attempted to cast these "test" ballots because they did not read them prior and note the "test ballot" text on the printout prior to placing them into the scanner, which rejected them. (*Id.* ¶ 16.)

Finally, Dr. Halderman also notes several vulnerabilities in his declaration, and evidence indicating an external hack. (Halderman Decl. ¶¶ 18-20, 23.) State Defendants' application and implementation of the BMDs have laid bare the system's shortcomings.

4. Dr. Gilbert Tellingly Does not Endorse Georgia's System

Dr. Juan Gilbert's testimony is damning by omission. Nowhere in his lengthy declarations does he endorse Georgia's barcode-based BMD system as necessary and reliable. In fact, despite Defendants' repeated attacks on Dr. Halderman for not examining Georgia's election equipment, Dr. Gilbert admits that he has "never

personally used a Dominion BMD as configured for Georgia." (Dkt. No. 821-2 \P 38(B).) He also acknowledges that "that use of barcodes generally increases the 'attack surface'" of a voting system. (*Id.* \P 45.)¹⁵

Dr. Gilbert argues, just generally, that BMDs can be safely used because: (i) voters can verify their ballots; and (ii) audits can detect irregularities. (Dkt. No. 821-7 ¶¶ 12-13). First, Dr. Gilbert ignores that the very study he cites demonstrates voters rarely check their ballot, and a mere instruction typically will not change this. (Halderman Decl. ¶¶ 52-53.) More importantly, even if a handful of voters in a precinct are able to detect an error, there is no way to prove it, and the only remedy is to allow those voters to re-vote. (Appel Decl. ¶¶ 9-10.) Such detection does not provide a basis to invalidate an election (though the election potentially should be invalidated because of vote-altering malware), and even if it did, the only remedy would be to re-run the entire election. Second, Dr. Gilbert ignores that risk-limiting audits depend on a trustworthy record of the vote, which BMDs (particularly barcode-based BMDs) cannot provide. (Appel Decl. ¶ 11; Halderman Decl. ¶¶ 10, 54, 58.)

¹⁵ Dr. Gilbert's general support for barcode-based BMDs is no surprise given he sells his own such election devices. (Dkt. No. 821-2 ¶ 16; Prime III Voting System, http://www.primevotingsystem.com/ (last visited Sept. 1, 2020).)

5. Audits Cannot Save Georgia's Unreliable BMD System

State Defendants argue that "[b]ecause Georgia's new voting system produces paper ballots that clearly indicates voters' selections, they can also be audited." (Dkt. No. 821 at 19.) This is a circular fallacy. The very problem with BMD-generated ballots is that an attack that misprints both the barcode and human-readable text will never be revealed in an audit or caught by any but perhaps a few voters. And the audit implemented by Georgia is insufficiently rigorous to correct even the situations of a barcode-only misprinting attack. (Halderman Decl. ¶¶ 10, 54-58.) Defendants divert attention from this failing by wrongly accusing Dr. Halderman of changing his position regarding audits for BMDs. (Dkt. No. 821 at 19.) His position remains unchanged. (Halderman Decl. ¶¶ 10, 54-58.)

In addition, the audit here is not sufficiently rigorous even to correct a barcode-only misprinting attack. Georgia has announced no plans to inspect the barcodes during its planned audits. And even if it did, the audit is intended to achieve a high-risk-limit only in a single race to be selected by the state. This means that it would likely select too few ballots to uncover barcode-based cheating, and none that affect the outcome of other races. As detailed by Mr. Stark, the pilot audits did not confirm the validity of the results, nor that votes were counted accurately or that the system produced accurate results. (Dkt. No. 809-2, Stark Decl. ¶¶ 4-5.)

Defendants claim they are using cutting edge statewide risk-limiting audits. They are not. By definition, a risk-limiting audit has a known minimum chance of correcting the reported election outcome if the reported outcome is wrong. (Id. ¶ 6.) Defendants' audit rules fall short, because they do not call for true risk-limiting audits, call for audits of only one contest, among dozens, every two years, explicitly allow for political influence, and fail to follow basic principles for election integrity. (Id. ¶¶ 4-16.) A post-election audit of a meaningfully flawed paper trail cannot cure the flaws of that paper trail.

6. Elements of the DRE/GEMS System Still Plague BMDs

Defendants continue to claim that the DRE/GEMS system is separate and apart from BMDs, and the issues that compromised the DRE system have no effect on BMDs. Defendants are wrong. (Halderman Decl. ¶¶ 11-12, 15-35, 47.) For example, Defendants ignore that the voter registration database remains the same one from the DRE era. (Halderman Decl. ¶ 12.) As Dr. Coomer explains, the new Poll pads used with BMDs will "receive flat text files for each election containing the then-current voter information from the state's voter-registration database." (Dkt. No. 821-1 ¶ 8.) This is the same database that Fortalice reported could be accessed by hundreds of individuals in 2017 and had rampant security issues. *Curling II*, 397 F. Supp. 3d at 1377-78. This alone reveals a dangerous link

between the old system and the new, in addition to the fact that many of the same personnel, network, and hardware support the new system.

7. State Defendants' Arguments Regarding "Actual Compromise" Are Meritless

State Defendants make much of the fact that Plaintiffs' analysis of the DRE/GEMS system has not yet revealed any actual compromise, but this argument runs counter to the Court's detailed findings of acute vulnerabilities at every level of the Georgia system. *Curling II*, 397 F. Supp. 3d at 1410-12. The Court has never required evidence of any actual attack as a threshold for relief. Were this the threshold, then the results would be disastrous.

As a practical matter, Defendants ignore that they have obstructed and delayed Dr. Halderman's analysis, only recently producing thousands of memory cards for just three counties and even more recently some DRE data. (*See* Halderman Decl. ¶¶ 15-35.) Defendants may not know how long it takes to forensically examine such materials since they have never had it done, but it unfortunately is difficult and time-consuming—and it may find nothing merely because attacks can be undetectable. Thus, the outcome of any such examination cannot rule out the possibility of malware in the system, nor does the examination dictate whether the Curling Plaintiffs are entitled to the relief they seek. As to the KSU server, Defendants conveniently ignore their spoliation of data on the server. *Curling II*, 397 F. Supp.

3d at 1339-40 ("[The KSU Breach "unfortunately was an early talismanic event in this saga . . . Defendants' inconsistent candor with the Court about the CES/KSU hack and the security of the servers . . . impacts the evidence.").

C. Relief Is Both Feasible and Necessary to Secure Georgia's Elections

As they did in 2018 and 2019, Defendants claim that replacing the BMD system is improper because of the proximity of the November elections. But they offer absolutely no evidence to support this claim. It is mere *ipse dixit* from their lawyers. Moreover, this recycled argument ignores the infrastructure that now exists for the Georgia election system. Defendants do not—and cannot—dispute that the elements needed to implement HMPBs are already in place throughout Georgia and that HMPBs have already been successfully used to run an election The Curling Plaintiffs' relief is feasible in the time remaining before the November elections, and the balance of equities weigh heavily in favor of relief.

Defendants' attacks on feasibility are premised on the mistaken and troubling belief that Georgia voters' constitutional rights may be violated, and relief denied, simply because an election is near. (Dkt. No. 821 at 13, 28; see e.g. Dkt. No. 766.) None of the cases Defendants cite supports such a broad claim. In *Purcell v. Gonzalez*, 549 U.S. 1 (2006), the Supreme Court merely cautioned against orders that could "result in voter confusion and consequent incentive to

remain away from the polls." 549 U.S. at 2. Defendants have not offered any evidence that moving to HMPBs would lead to voter confusion, particularly when compared to the complex and difficult BMD system. The other cases on which Defendants rely are readily distinguishable on the facts:

- Republican Natl' Comm. v. Democratic Nat'l Comm., 140 S. Ct. 1205 (2020): the Court stayed the application of a broad injunction issued less than five days before an election and that went beyond the scope of the relief requested by the plaintiffs;
- *Merrill v. People First of Ala.*, --- S. Ct. ---, No. 19A1063, 2020 WL 3604049 (July 2, 2020): the Court stayed the application of an injunction modifying procedures established for responding to COVID-19 less than one month before an election; and
- Little v. Reclaim Idaho, --- S. Ct. ---, No. 20A18, 2020 WL 4360897 (July 30, 2020): "[t]his is not a case about the right to vote" at all but merely a case about ballot initiatives. Id. at *2.

Ultimately, "a tight timeframe before an election does not diminish" the sanctity of the right to vote, particularly when that right is threatened as it is in Georgia.

League of Women Voters of N.C. v. North Carolina, 769 F.3d 224 (4th Cir. 2014).

1. Georgia Already Possesses the Framework for Conducting Elections with HMPBs.

Defendants attempt to apply the Court's conclusions regarding the public interest from 2018 to today, acting as if nothing has changed in the intervening two years. (Dkt. Not. 821 at 3). Defendants are wrong. In September 2018, the Court balanced the available evidence regarding security concerns against the feasibility

of moving to an entirely new system in denying injunctive relief. *Curling v. Kemp*, 334 F. Supp. 3d 1303, 1326-27 (N.D. Ga. 2018) ("*Curling I*"). In July 2019, after it was clear that State Defendants had misled the Court and the public regarding the scope and severity of the state's security vulnerabilities, the Court concluded that the DRE System was not safe for use. *Curling II*, 397 F. Supp. 3d at 1401-02. While the Court stopped short of banning DREs in 2019, the Court was concerned about whether the implementation of the BMD system would be completed in time for 2020 elections. *Id.* at 1408. The Court specifically ordered Defendants to devise a contingency plan using HMPBs, recognizing that the scanning technology provided by Dominion could be used for HMPBs, and to carry out a pilot program with HMPBs. *Id.* at 1408-09.

Thus, Defendants' assertion that the Curling Plaintiffs seek "to change the entire election system in a matter of days," (Dkt. No. 821 at 29), is belied by the fact that the primary elements for using HMPBs are already in place. Unlike 2018, there are no concerns about moving to an entirely new and unknown system or obtaining an unknown quantity of additional equipment. *Curling II*, 397 F. Supp. 3d at 1406-07. Unlike 2019, there are no concerns about speeding up the rollout of a new and untested Dominion system that can process HMPBs. *Id.* at 1405. As Defendants admit, the scanners used in the BMD system statewide can read

barcode or hand-marked ballots interchangeably. (Dkt. No. 821 at 19.) Use of HMPBs would actually require *far less* equipment than the use of BMDs, because counties would no longer require clunky, complicated, costly machines or printer stations.¹⁶

Given the interchangeability of the scanners, State Defendants are left arguing over the extent to which the use of HMPBs will require more paper. (Dkt. No. 821 at 28.) However, Mr. Harvey, Dr. Coomer, nor Mr. Cobb offer no evidence to support their speculation that there are no printers available to print paper ballots. (Dkt. Nos. 821-1, 821-6, 821-9.)¹⁷ Defendants have also refused to provide any discovery on the costs of obtaining sufficient paper and other equipment for using HMPBs, despite the fact that there should be at least some evidence of costs from the 2019 Cobb County pilot. The Court previously rejected Defendants' cost assertions, citing the lack of evidence, (*Curling II*, 397 F. Supp. 3d at 1405), and Defendants stand on even flimsier ground today.¹⁸

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¹⁶ The absence of additional equipment will enable election officials to apply social distancing guidelines more rigorously and avoid the need for additional contamination service, thereby furthering voter safety and reducing cost.

 $^{^{17}}$ Mr. Cobb's cursory statement regarding the availability of paper ballots is particularly suspect given that he does not describe any experience in election material procurement. (Dkt. No. 821-6 ¶ 12.)

¹⁸ To support their cost claims, Defendants cite to the hearing testimony of several county officials who merely testified in *2019* that switching from DREs to another system would be costly. (Dkt. No. 821 at 27.) That testimony is irrelevant.

2. Georgia Has a Roadmap for HMPB Elections

State Defendants also make much of the fact that poll workers would require additional training, yet this claim ignores two fundamental facts: (1) Defendants are required to provide HMPBs under certain circumstances, per State Election Board Rule 183-1-12-.11(2)(c)-(d); and (2) Defendants have a blueprint for conducting an election with HMPBs from the Cobb County pilot election.

Defendants never once acknowledge that, unlike 2018 or 2019, one of the largest counties in the state has successfully conducted an election on HMPBs, using the same equipment that is now implemented across the state. Thus, counties demonstrably can successfully handle HMPB elections across the state.

Defendants' recent production provides some insight into the reason behind this omission. Defendants' documents from the June BMD election tell a different story from the 2019 HMPB pilot.¹⁹ One Cobb County resident reported that it took over three hours for her to vote because the "machines [were] not working" due to purported issues with the "programming," requiring her to use a provisional ballot. (Cross Decl. Ex. 25.) This resident aptly remarked that there is "no excuse" for

¹⁹ Thomas Hartwell, Eveler: Paper-ballot pilot, new machines a success in Cobb, Marietta Daily Journal (Nov. 7, 2019),

 $https://www.mdjonline.com/elections/eveler-paper-ballot-pilot-new-machines-a-success-in-cobb/article_16eeadb6-0181-11ea-a05e-e7ef327d817c.html.\\$

"continuing to make a mockery of the right to vote. Georgia is way overdue to step up & perform competently." (*Id.*) While much has changed in Georgia in the last year, Defendants' refusal to take the necessary steps to secure the vote has not.

This fact is made more evident by Defendants' stunning admission that they have no contingency plan if, and when, the system fails again in November. (Dkt. No. 821 at 6.) Defendants were specifically ordered to devise a contingency plan for using HMPBs if the BMD system was not "completely rolled out and ready for operation in time for the March 2020 Presidential Primary elections or in subsequent elections in 2020." Curling II, 397 F. Supp. 3d at 1410. The Court recently noted reports that election equipment components were still "being delivered up until the June 2020 general and primary elections and beyond." (Dkt. No. 768 at 8-9 n.6.) And, as detailed above, numerous complaints make clear that the BMD system was not "ready for operation" during the June primary. Thus, Defendants should already have HMPB backup plan in place. Their apparent failure to do so only further demonstrates why relief is both equitable and desperately needed.

3. State Defendants' Timing Arguments Are Meritless

Lacking any credible argument regarding significant expense or effort required to implement HMPBs now, Defendants argue that there is no time for a

change because "the November 2020 election is underway for all practical purposes." (Dkt. No. 821 at 28-29.) Again, the only support Defendants rely on to buttress this claim is the Harvey Declaration. While Mr. Harvey notes that the process for building ballots has begun, he makes no attempt to explain how this process would be altered or delayed if the Court ordered the use of HMPBs.²⁰ Mr. Harvey admits that it will be another month and a half before in-person voting begins. Mr. Harvey provides no information on how the large expected numbers of absentee voting are expected to reduce the amount of in-person voting. And, tellingly, Mr. Harvey provides mere speculation as to counties' ability to train their workers and obtain ballots in time, with no factual support.

D. The Heavy Burden on Plaintiffs' Rights Outweighs State Defendants' Purported Interests

Defendants' purported interests in using barcoded BMDs range from the unsupported to the absurd. Each stem from the faulty premise that the "lower-scrutiny" test established in *Burdick v. Takushi*, 504 U.S. 428 (1992) applies simply because Curling Plaintiffs challenge Georgia's "electronic-voting method." (Dkt. No. 821 at 14 (citing *Wexler v. Anderson*, 452 F.3d 1226, 1232 (11th Cir. 2006).)

²⁰ Dr. Coomer acknowledges that scanner settings can be changed but only makes vague statements about training and application privileges. He does not state that this could not be done in time for before early voting.

The Court has already rejected this argument and found *Wexler* inapposite as to Plaintiffs' DRE challenge. *Curling I*, 334 F. Supp. 3d at 1325. That reasoning still applies with equal force, because votes cast by BMDs still pose the significant risk of having a vote "altered, diluted, or effectively not counted on the same terms as someone using another method – or that there is a serious risk of this under the circumstances. *Id.* Defendants must identify an interest of "compelling importance," but they cannot do so. *Burdick*, 504 U.S. at 434. Indeed, Defendants fail to identify *any* state interest with respect to barcode-based BMDs, which were condemned by their own prior experts. This is dispositive.

1. Curling Plaintiffs' Proposed Relief Secures the Rights of Voters with Disabilities

Defendants confusingly argue both that Curling Plaintiffs "consistently ignore" that voters with disabilities may not be able to use HMPBs but also that Plaintiffs' proposal to use limited BMDs creates security, ballot secrecy, and ADA concerns. (Dkt. No. 821 at 23-24.) Defendants are wrong on all counts. Defendants' argument that the limited use of BMDs would create systems that are inherently "separate and unequal" is not only mere speculation, it directly contradicts their claim that there is no burden on Curling Plaintiffs because they are able to use mailin voting instead of BMDs. Defendants cannot have it both ways. They also ignore the reality that BMDs typically are used across the country by those who need them.

Similarly, Defendants' argument that Curling Plaintiffs' proposed relief "can create a greater risk to election security" is unsupported and backward. [1] (Id. (citing Dkt. No. 821-8).) That relief would drastically lower the probability and impact of malicious interference with a small number of voters using appropriate BMDs. (Halderman Decl. Dkt No. 682 ¶ 34) Such a system would make it much more difficult (if not impossible) for an attacker to change enough votes to have a significant impact on an election. (Dkt. No. 554 at 87:10-13 ("if you infect a small number of machines, you have to change a lot" of votes).) Defendants' BMD system, on the other hand, drastically increases the risk of outcome-determinative fraud, when manipulation is spread across a large number of voters. (Halderman Decl. Dkt No. 682 ¶ 34(d)).²²

The other speculative claims Defendants raise regarding voters with disabilities do not hold water. While Defendants claim that having only voters with disabilities vote on BMDs could threaten ballot secrecy, Defendants also note that over 600,000 disabled voters cast votes Georgia in 2016. (Dkt. No. 821-2 ¶ 40(E).) Defendants also do not rebut the number of ways this issue could be eliminated.

²¹ Mr. Riccobono does not claim to be an election security expert and does not to any additional evidence in his Declaration.

 $^{^{22}}$ Mr. Riccobono's unsupported argument also wrongly assumes that the best way to prevent hacking is by using *more* machines susceptible to hacking. (Dkt. No. 658-4 ¶ 11.)

(Halderman Decl. Dkt No. 682 ¶¶ 34-37) Defendants also claim that the poll workers will be less familiar with BMDs if only disabled voters use them. Not only can this easily be addressed through appropriate training and monitoring,²³ it seems even less of a concern given the "months" that have been used training poll workers on BMDs. (Dkt. No. 821 at 27.)

2. State Defendants' Other "Interests" Are Unsupported or Undermined by the BMD System

Curling Plaintiffs agree that Georgia has "an important interest in the integrity of elections and maintaining voter confidence," (Dkt. No. 821 at 22), but Defendants' claim that barcoded BMDs further this interest remains unsupported and contrary to Defendants' experts and published studies. Defendants similarly cite nothing for the claim that BMDs are "easier to administer and count" than handmarked paper ballots, and the overwhelming evidence supports the contrary result, particularly the barcode BMDs Defendants have implemented. Defendants' unwavering adherence to a system that *undermines*, rather than supports, the integrity and safety Georgia's elections is simply inexplicable.

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²³ Such training and monitoring would also avoid Defendants' concern over additional litigation, given that the central allegation in *Lamone* is Maryland's neglect in maintaining BMDs and knowledgeable poll workers to assist voters. *See Nat'l Fed'n of the Blind, Inc. v. Lamone*, 438 F. Supp. 3d 510 (D. Md. 2020). Defendants' insistence that counties cannot be trusted to adequately assist disabled voters highlights the weakness of their argument.

Defendants also provide no actual information as to any costs associated with implementing HMPBs and have refused discovery that would enable a comparison of the costs of using BMDs versus the costs of HMPBs.²⁴ Instead, Defendants cite to two Court decisions to argue that "imposing additional costs on the State now is not wise and is an interest that outweighs other constitutional claims." Neither case supports this sweeping claim. The Court's May 26, 2020 Order solely addressed Plaintiffs' interim motions for attorney's fees, and did not address any substantive issues. In Black Votes Matter Fund v. Raffensberger, No. 1:20-cv-01489-AT, 2020 WL 4597053 (N.D. Ga. Aug. 11, 2020), the Court simply noted that it would "be cautious in second guessing" steps taken "by the state to protect the right to vote" in response to the COVID-19 pandemic. *Id.* at *35. However, the Court also cautioned that "[w]hat constitutes sufficient action to satisfy such a standard under the circumstances of a given case is a whole other question." Id. Defendants undertook the implementation of the BMD system long before the pandemic, and its conduct in securing the vote falls below any standard that would warrant deference to Defendants' actions.

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²⁴ Evidence from Pennsylvania suggests that BMD-only configurations cost almost twice as much as HMPB configurations. Christopher Deluzio & Kevin Skoglund, *Pennsylvania Counties' New Voting Systems: An Analysis*, Univ. of Pittsburgh (Feb. 28, 2020), https://www.cyber.pitt.edu/votingsystemsanalysis.

Defendants' claim that the state has an interest in "electronic voting" highlights the absurdity of their position: "The State of Georgia has used electronic voting for almost two decades, so Georgia voters are already familiar with an electronic in-person voting experience." (Dkt. No. 821 at 24-25.) Defendants essentially argue that the state has an interest in replacing one unsecure, flawed system with another simply because it is what the state is used to.²⁵ Thus, Defendants have come full circle from their position two years ago, when they asked the Court to maintain the "status quo" of using DREs because it was what Georgia had used since 2002. (Dkt. No. 265 at 14, 37.) Maintaining a flawed system for consistency's sake is not a state interest that justifies placing such a heavy burden on the right to vote.

E. State Defendants Repeat Their Arguments about Irreparable Harm

Defendants' arguments regarding irreparable harm are meritless. First, the Court already rejected Defendants' claim that Curling Plaintiffs suffer no harm because they can vote absentee. Specifically, the Court found that the use of DREs

²⁵ This claim is also a gross overstatement, and ignores not only the 2019 Cobb County pilot election but the many instances in which HMPBs have had to be used because of errors with both the DREs and now BMDs.

constituted irreparable, "threatened, ongoing injury" despite the availability of absentee voting. *Curling II*, 397 F. Supp. 3d at 1402.

Second, Defendants' claim that the BMD leaves "paper audit trails" is misleading. It is undisputed that Georgia's BMD only leaves a barcode that the voter cannot read (if the voter bothers to verify their vote at all, which many do not). The audit procedures Defendants' have put in place are also woefully inadequate: (1) they only require an audit after elections, and only in even-numbered years; (2) the audit only applies to a single contest; and (3) they do not follow the guidelines of election security experts, and amount to little more than "security theater." (Halderman Decl. ¶¶ 2-6; see Dkt. No. 809-2.)

Finally, the Court has already refuted Defendants' argument that there is no harm absent "evidence of any actual tampering of equipment in use in elections." (Compare Dkt. No. 821 at 26 with Dkt. No. 579 at 145.) Not only have many of those vulnerabilities persisted, but Defendants still miss the fundamental point—the right to vote is infringed not at the moment an election is actually compromised, but when the state fails to provide the means for voters to know that their votes will be counted. To hold otherwise would mean that no relief is available until it is too late. Defendants have done little to address the threat of

election interference in Georgia, while the threat itself remains unchanged. (*See* Dkt. No. 785-1 at 23.)

F. Fulton Defendants Repeat Unsupported Arguments

Fulton Defendants only offer vague, unsupported claims in their Opposition. Fulton Defendants claim that moving to a HMPB system would "cause significant administrative upheaval, voter confusion, and unnecessary costs on the Country and its citizens," but, tellingly, Fulton Defendants do not cite *any* evidence for any of these speculative fears. (Dkt. 818 at 15). Whereas in the past Fulton Defendants have at least submitted declarations to support their claims of burden and cost—which the Court previously rejected—here they offer nothing to substantiate their claims. *See Curling II*, 397 F. Supp. 3d at 1405. Fulton Defendants are also wrong on the facts, as Fulton, like every other county in the State, has been given the key elements necessary to run an election with HMPBs.

Moreover, Fulton Defendants claim that Plaintiffs are not entitled to injunctive relief against them because voting equipment is determined by the Secretary of State. (Dkt. No. 818 at 16-17.) But, Fulton Defendants admit that "[s]tate law provides that counties . . . must conduct elections," (*id.*), and thus Curling Plaintiffs may properly seek an order directly preventing the county from conducting elections in a way that would deprive voters of their constitutional

rights. *See e.g., Edge v. Sumter Cty. Sch. Dist.*, 541 F. Supp. 55, 57-58 (M.D. Ga. 1981) (enjoining county-level officials from conducting elections under at-large election system enacted by General Assembly), *aff'd*, 456 U.S. 1002 (1982).

III. CONCLUSION

Defendants have had multiple chances to secure Georgia's elections. In 2018, Defendants misled the Court about many already-documented security vulnerabilities with many aspects of the DRE/GEMS system. In 2019, those and other vulnerabilities finally came to light. Now, many of those vulnerabilities remain and new ones exist with a new system that is no more constitutional than the last. Defendants' response is to claim that it is too late for secure, reliable, verifiable elections in Georgia. Not so. It is never too late to protect the right to vote. Forcing voters to rely on a system no election security expert supports and that has been utterly chaotic each time it has been used in Georgia is indefensible. The Constitution requires more. And so should the Court.

Dated: September 1, 2020 Respectfully submitted,

/s/ David D. Cross

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IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF GEORGIA ATLANTA DIVISION

DONNA CURLING, ET AL.,	
Plaintiffs,	
v.	Civil Action No. 1:17-CV-2989-AT
BRAD RAFFENSPERGER, ET AL.,	
Defendants.	

CERTIFICATE OF COMPLIANCE

I hereby certify that the foregoing document has been prepared in accordance with the font type and margin requirements of LR 5.1, using font type of Times New Roman and a point size of 14.

/s/ David D. Cross

David D. Cross

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CERTIFICATE OF SERVICE

I hereby certify that on September 1, 2020, a copy of the foregoing CURLING PLAINTIFFS' REPLY IN SUPPORT OF MOTION FOR PRELIMINARY INJUNCTION was electronically filed with the Clerk of Court using the CM/ECF system, which will automatically send notification of such filing to all attorneys of record.

/s/ David D.	Cross
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