

Kevin M. Moncla
824 Lake Grove Drive
Little Elm, TX 75068
469-588-7778
kmoncla@gmail.com

Joseph Rossi
2007 Cedar Ridge Dr.
Perry, GA 31069
478-955-0977
jrossiops@gmail.com

July 8, 2022

Georgia State Election Board
2 MLK Jr. Drive
Suite 802 Floyd West Tower
Atlanta, Georgia 30334

Mr. Matt Mashburn
mmashburn@georgia-elections.com

Dr. Jan Johnston
JJohnstonMD.seb@gmail.com

Mrs. Sara Tindall Ghazal
SaraGhazal.seb@gmail.com

Mr. Edward Lindsey
Edwardlindsey.seb@gmail.com

Ex officio:
Mr. Brad Raffensperger
Secretary of State
214 State Capitol
Atlanta, Georgia 30334

RE: OFFICIAL COMPLAINT

Board Members:

We are submitting this official complaint regarding the following election irregularities that have not been identified, discussed, or corrected from the general election held on November 3, 2020 and the recount certified in December 2020 (the “Recount”):

1. Irregularities in the Recount that lead to the addition of 16,382 votes to the “Batches Loaded Report” (BLR) of December 3, 2020 to the “certified result,” on December 4, which included 3,125 duplicate ballots and 17,852 votes of unknown provenance – that is, for which no physical ballot was in evidence.¹
2. Additional tabulator results from unreported and unidentifiable tabulators that accounted for 20,713 votes in the November 3rd vote totals.

What is clear is that the Recount was supposed to confirm the reported vote totals from Election Night, and it could not. As a result, votes were simply added onto batches or “discovered” to make up the difference – sometimes the same ballots appear to have been added in two places. With the additional 20,713 votes counted from unidentified tabulators that had already been added to the initial count, there is no paper documentation of ballots for nearly 42,000 votes.

¹ As used herein, “vote” refers to the number reported as persons who voted, whereas “ballot” refers to the physical evidence that recorded a vote. In a perfect world, there should be one ballot for every vote recorded. As will become evident, it is unclear whether Fulton County can produce the physical ballots needed to support the voters counted.

1. IRREGULARITIES IN THE RECOUNT

Following the certification of the November 3, 2020 General Election, President Trump’s campaign requested an official recount, which is referenced herein as the Recount. Pursuant to Georgia law, a recount is performed by machine. But the machines must have a physical ballot to read in order to count a vote. On November 24, 2020, the Recount began and lasted until the deadline of midnight on Wednesday, December 2, 2020.

On December 3, 2020, Georgia Secretary of State Raffensperger ordered the supervisor of elections of Fulton County to reconcile their totals because – based on the count of physical ballots – Fulton County had submitted vote totals (511,543) lower than that of the original count from Election Night (528,777). What was not made public and is central to this complaint is that those results were 17,234 below the vote counts reported on Election Night.

By the time of the certification on December 4, 2020, Fulton County claimed to have found 16,382 votes – nearly all of the shortfall.

According to the Associated Press on Monday, December 7, 2020:

The total number of votes in the recount results certified Monday and posted on the secretary of state’s website was 766 fewer than the number certified when the ballots were first tallied after the election. Biden’s lead dropped from 12,670 to 11,779. That appears to be largely due to a discrepancy in Fulton County, the state’s most populous county that includes most of Atlanta.

<https://apnews.com/article/election-2020-joe-biden-donald-trump-georgia-elections-4e4ea3b24f10de886bcdeab6c26b680a> (retrieved June 23, 2020).

We have found several major deficiencies in that “final” certified vote count. See the initial summary below of the November 3, 2020 Recount results:

Through an Open Records Request submitted to Fulton County for email communications on unrelated topics, the following email from Fulton County Elections Director, Rick Barron to Ryan Macias was returned:

From: [Barron, Richard L.](#)
To: RYan.macias@electionsgroup.com
Date: Thursday, December 3, 2020 12:13:15 PM
Attachments: [Batches Loaded Report.xml](#)

To convert Zulu Time to Eastern Standard Time (EST) as it was in December, is to subtract 5 hours. Therefore, the date and time of the Batches Loaded Report is:

Thursday December 3rd at 12:06:29 PM.

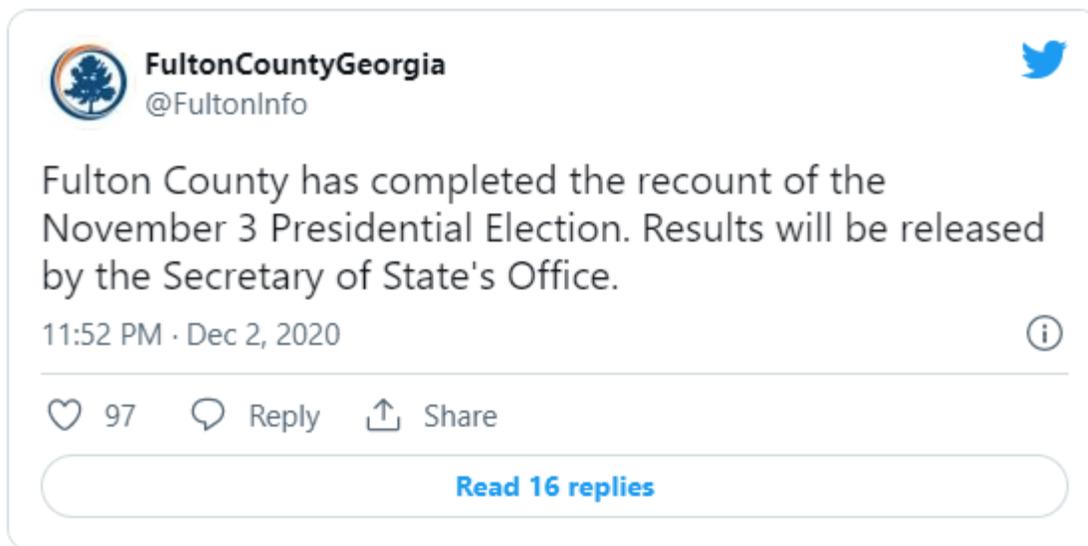
The email timestamp is converted to EST as:

Thursday December 3rd at 12:13:02 PM

The email was sent approximately 6 minutes after the Batches Loaded Report was saved. This timestamp also correlates with the email timestamp of 12:13 PM, shown on the previous page. These separately sourced timestamps are reasonably synchronized, thereby removing the possibility that there was incorrect time set on any of the servers or workstations involved

It's also important to establish the time in relation to the Machine Recount results deadline, which was Wednesday December 2nd at 12-midnight. Or nearly 12 hours *before* the email discussed above. In a tweet posted at 11:52 PM December 2nd, 2020, or 8 minutes before the official deadline.

Fulton County declared that they "...completed the recount of the November 3 Presidential Election."



Simply put, the Recount results that the Election Director emailed to Ryan Macias a few minutes after noon on Thursday December 3, 2020 (the day *after* the recount deadline), showed only 511,543 votes. Twelve hours later, Fulton County reported the official certified vote tally of 527,925 – an increase in votes counted of 16,382.

Below is the Fulton County Board of Registration and Elections meeting minutes during which

the Recount results were officially certified:

Approved Minutes

Special Meeting- December 4, 2020

3 | Page

- External Affairs was there until 11:15
- 11:42 or 52pm SOS Monitor Carter Jones arrived
- 12:15am SOS Personnel arrived
- Recording: The timeline and processing was reviewed thoroughly
 - No Wrongdoing was discovered
- 2 ways to verify Signature Match:
 - ElectioNet
 - Original VR Application
- Hand Scanned to give the voter credit
- Enveloped then sorted
- Recount:
 - 528,777 Election Day Results
 - **527,925 Recount/ Reconciled**

In an attempt to discover the physical ballots that were used to source these new votes, we submitted an Open Records Request to Fulton County specifically for the Recount Batches Loaded Report.

In response, Fulton County returned the requested Batches Loaded Report (Electronic file attached as “Batches_Loaded_Report_2”) The relevant portion of the report is shown below:

	A	B	C	D	E	F	G	H	I	J
8774	12/2/2020 15:49:37	5174	Provisional ICC 3	14	1_7220_5174_14_DETAIL.DVD	63		63 Published	Adjudicated	
8775	12/2/2020 15:49:37	5174	Provisional ICC 3	9	1_7220_5174_9_DETAIL.DVD	99		99 Published	Adjudicated	
8776	12/2/2020 15:49:38	5174	Provisional ICC 3	12	1_7220_5174_12_DETAIL.DVD	145		145 Published	Adjudicated	
8777	12/2/2020 15:49:38	5174	Provisional ICC 3	13	1_7220_5174_13_DETAIL.DVD	154		154 Published	Adjudicated	
8778	12/2/2020 15:49:42	5174	Provisional ICC 3	1	1_7220_5174_1_DETAIL.DVD	179		179 Published	Adjudicated	
8779	12/2/2020 15:49:44	5174	Provisional ICC 3	10	1_7220_5174_10_DETAIL.DVD	94		94 Published	Adjudicated	
8780	12/2/2020 15:49:46	5174	Provisional ICC 3	15	1_7220_5174_15_DETAIL.DVD	60		60 Published	Adjudicated	
8781	12/2/2020 15:49:46	5174	Provisional ICC 3	16	1_7220_5174_16_DETAIL.DVD	5		5 Published	Adjudicated	
8782	12/2/2020 15:49:47	5174	Provisional ICC 3	2	1_7220_5174_2_DETAIL.DVD	129		129 Published	Adjudicated	
8783	12/2/2020 15:49:49	5174	Provisional ICC 3	7	1_7220_5174_7_DETAIL.DVD	102		102 Published	Adjudicated	
8784	12/2/2020 15:49:51	5174	Provisional ICC 3	8	1_7220_5174_8_DETAIL.DVD	102		102 Published	Adjudicated	
8785	12/2/2020 15:49:52	5174	Provisional ICC 3	5	1_7220_5174_5_DETAIL.DVD	24		24 Published	Adjudicated	
8786	12/2/2020 15:49:52	5174	Provisional ICC 3	6	1_7220_5174_6_DETAIL.DVD	60		60 Published	Adjudicated	
8787	12/2/2020 15:49:53	5174	Provisional ICC 3	3	1_7220_5174_3_DETAIL.DVD	99		99 Published	Adjudicated	
8788	12/2/2020 15:49:54	5174	Provisional ICC 3	4	1_7220_5174_4_DETAIL.DVD	16		16 Published	Adjudicated	
8789										
8790				TOTAL VOTES TABULATED AND PUBLISHED				527741		

To avoid confusion, the Batches Loaded Report acquired from Rick Barron’s December 3rd email at noon will be referenced hereinafter, as “BLR 1”. The Batches Loaded Report pictured immediately above and received second will be referred to as “BLR 2”.

BLR 2’s total somehow includes 16,198 more votes than BLR 1. (Note: This is not the 16,382 referenced above.)

During the Fulton County Board of Registration and Elections (FCBRE) meeting, Mr. Barron

summarized the results of the recount. Video of the December 4th, 2020 meeting can be found at [\(437\) Fulton County Board of Elections meeting - YouTube](#). A transcript of the relevant portions can be found attached as “Appendix A”.

Mr. Barron claimed that the vote totals were uploaded on Wednesday, December 2, at which time they learned they were “short”. Then on Thursday morning, December 3, the Secretary of State told Fulton County to “reconcile” their results. Thursday afternoon Fulton County claimed to have discovered a scanner had 2 sets of 62 batches with the same identification that caused a conflict leading to the failure to count one set of the 62 batches. Mr. Barron explained that the issue was resolved by rescanning one set of those ballots on different scanners.

We do not believe that this is a full and truthful report to the FCBRE.

Mr. Barron attributed the cause for the vote deficiency was that there were two sets of 62 batches each that were in conflict. One set of batches needed to be rescanned from a different scanner to clear the conflict and identify those batches separately. He provided more detail later in the meeting:

(29:57) Mr. Barron:

*Once that occurs there are only 2 ways you can do it, either you have to append those batches at the end or you can scan them on different scanners. So we used the different scanners rather than **appending them on the end.***

Mr. Barron stated that he chose to rescan the outstanding batches rather than appending them to the end. The record shows that he did, notwithstanding his comment, append 49 batches, containing 5,119 voter records, to the end of seven tabulators on the evening of December 3:

1. 10 Batches containing 875 votes were added to tabulator 742 on December 3rd, 2020, at 8:11 PM.
2. 5 Batches containing 789 votes were added to tabulator 785 on December 3rd, 2020, at 8:15 PM
3. 5 Batches, containing 589 votes were added to tabulator 786 on December 3rd, 2020, at 8:11 PM
4. 8 Batches, containing 692 votes were added to tabulator 788 on December 3rd, 2020, at 8:13 PM
5. 6 Batches, containing 686 votes were added to tabulator 789 on December 3rd, 2020, at 8:14 PM
6. 7 Batches, containing 795 votes were added to tabulator 793 on December 3rd, 2020, at 8:10 PM
7. 8 Batches, containing 693 votes were added to tabulator 5164 on December 3rd, 2020 at 8:10 PM

Example below showing the highlighted batches which were added to the end of Tabulator 793

	A	B	C	D	E	F	G	H	I	J
1213	12/1/2020 16:54:07	793	Absentee By Mail 5 ICC	54	1_7220_793_54_DETAIL.DVD	83	83	Published	Adjudicated	
1214	12/1/2020 16:54:07	793	Absentee By Mail 5 ICC	53	1_7220_793_53_DETAIL.DVD	25	25	Published	Adjudicated	
1215	12/1/2020 16:54:08	793	Absentee By Mail 5 ICC	52	1_7220_793_52_DETAIL.DVD	74	74	Published	Adjudicated	
1216	12/1/2020 16:54:08	793	Absentee By Mail 5 ICC	50	1_7220_793_50_DETAIL.DVD	64	64	Published	Adjudicated	
1217	12/1/2020 16:54:08	793	Absentee By Mail 5 ICC	51	1_7220_793_51_DETAIL.DVD	35	35	Published	Adjudicated	
1218	12/1/2020 16:54:08	793	Absentee By Mail 5 ICC	6	1_7220_793_6_DETAIL.DVD	2	2	Published	Adjudicated	
1219	12/1/2020 16:54:09	793	Absentee By Mail 5 ICC	66	1_7220_793_66_DETAIL.DVD	104	104	Published	Adjudicated	
1220	12/1/2020 16:54:09	793	Absentee By Mail 5 ICC	65	1_7220_793_65_DETAIL.DVD	100	100	Published	Adjudicated	
1221	12/1/2020 16:54:09	793	Absentee By Mail 5 ICC	58	1_7220_793_58_DETAIL.DVD	97	97	Published	Adjudicated	
1222	12/1/2020 16:54:09	793	Absentee By Mail 5 ICC	59	1_7220_793_59_DETAIL.DVD	81	81	Published	Adjudicated	
1223	12/1/2020 16:54:10	793	Absentee By Mail 5 ICC	64	1_7220_793_64_DETAIL.DVD	100	100	Published	Adjudicated	
1224	12/1/2020 16:54:10	793	Absentee By Mail 5 ICC	62	1_7220_793_62_DETAIL.DVD	100	100	Published	Adjudicated	
1225	12/1/2020 16:54:10	793	Absentee By Mail 5 ICC	67	1_7220_793_67_DETAIL.DVD	98	98	Published	Adjudicated	
1226	12/1/2020 16:54:10	793	Absentee By Mail 5 ICC	60	1_7220_793_60_DETAIL.DVD	85	85	Published	Adjudicated	
1227	12/1/2020 16:54:10	793	Absentee By Mail 5 ICC	61	1_7220_793_61_DETAIL.DVD	35	35	Published	Adjudicated	
1228	12/1/2020 16:54:11	793	Absentee By Mail 5 ICC	63	1_7220_793_63_DETAIL.DVD	98	98	Published	Adjudicated	
1229	12/1/2020 16:54:12	793	Absentee By Mail 5 ICC	1	1_7220_793_1_DETAIL.DVD	139	139	Published	Adjudicated	
1230	12/3/2020 20:10:34	793	Absentee By Mail 5 ICC	94	1_7220_793_94_DETAIL.DVD	141	141	Published	Adjudicated	
1231	12/3/2020 20:10:36	793	Absentee By Mail 5 ICC	89	1_7220_793_89_DETAIL.DVD	134	134	Published	Adjudicated	
1232	12/3/2020 20:10:38	793	Absentee By Mail 5 ICC	93	1_7220_793_93_DETAIL.DVD	111	111	Published	Adjudicated	
1233	12/3/2020 20:10:39	793	Absentee By Mail 5 ICC	90	1_7220_793_90_DETAIL.DVD	120	120	Published	Adjudicated	
1234	12/3/2020 20:10:39	793	Absentee By Mail 5 ICC	91	1_7220_793_91_DETAIL.DVD	101	101	Published	Adjudicated	
1235	12/3/2020 20:10:40	793	Absentee By Mail 5 ICC	92	1_7220_793_92_DETAIL.DVD	119	119	Published	Adjudicated	
1236	12/3/2020 20:10:40	793	Absentee By Mail 5 ICC	88	1_7220_793_88_DETAIL.DVD	69	69	Published	Adjudicated	
1237										

The exchange detailed below reveals that members of the FCBRE were completely unaware as to the size of the discrepancy which precipitated the reconciliation:

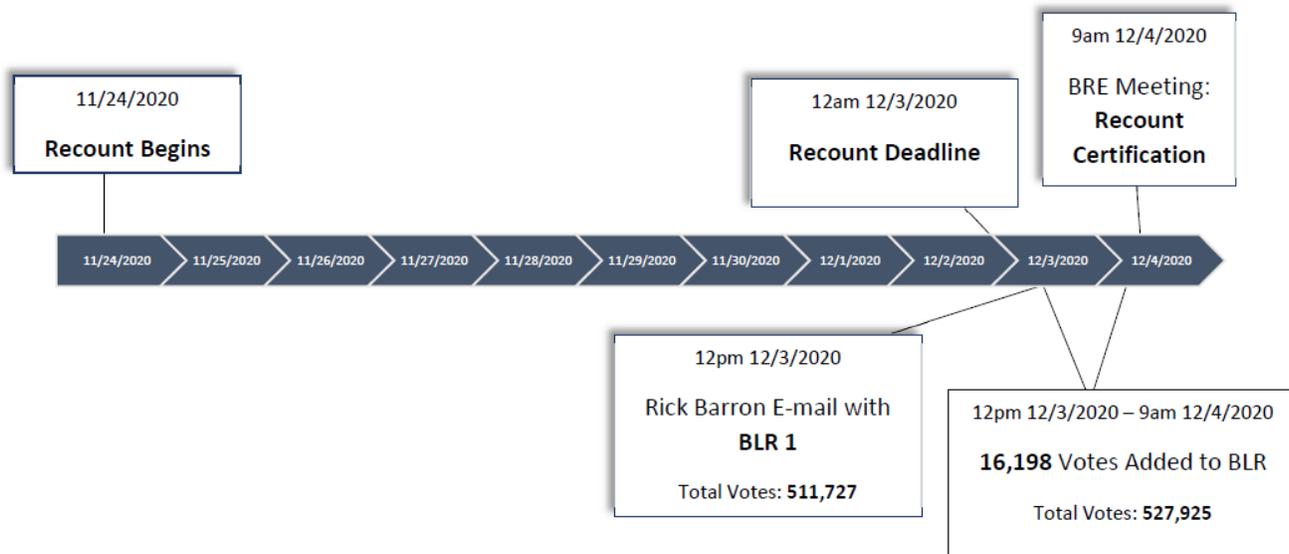
(59:14) Mr. Wingate:

We have counted 3 different times and you have gotten 3 different results. When you did the hand recount you were at 742 less than what we certified on 11/13 and now we are recertifying 852 less than what was originally certified on 11/13. It's hard for people to understand buckets and why they become unreconcilable and then why you have to go back, like this time, to try and come up with some reconciliation because if you wouldn't have done that you would have been what, some 3 or 4 thousand votes even less?

(1:00:16) Mr. Barron:

Yeah. Essentially.

Mr. Barron provided several explanations as to why the submitted results were deficient and what actions were taken to remedy the deficiencies. Those explanations are all contradicted by other actions and facts in the record.



However it was done, 16,198 votes *were* in-fact added to the recount between the time of Mr. Barron’s email to Ryan Macias³ at noon on December 3rd and the time of the FCBRE meeting the following morning.

We know that voter records were not added for the reasons Mr. Barron explained, derived from the source he described, nor distributed the way he stated. These actions can be easily verified to demonstrate that the added votes had no known provenance, and there are no physical ballots for these votes.

Mr. Barron also claimed there was no way to know the Recount results before they were uploaded to the Secretary of State. Mr. Wingate questioned that statement – and was right to do so. In fact, the Dominion Voting System manual identifies several steps of verification before results can be submitted, or “published”:

³ It is also important to note that Ryan Macias was not a Fulton County employee, Happy Faces employee, Fulton County Contractor nor Fulton County Vendor. Mr. Macias was working in Fulton County on behalf of The Elections Group, whose services were provided in association with the Center for Tech and Civic Life (CTCL) grants. The details of that engagement will be provided in a forthcoming complaint)

8.3 Result State Management

Result Files have an associated Results State which can change during the Result File lifetime and have effect on what operations are allowed on the Result Files, and on what results are included in reports. The Result State is visible per Result File in the Result Files screen, see Figure 8-2, which can be reached by clicking on the Result Files option in the Activities Navigation Panel (General Group). The following Result States exist:

- **Initial:** this is the first Result State that is assigned once a Result File is loaded or manually entered into the system. In this state Write-in resolution is allowed. If the result file is manually entered, the result data is still editable. Result files in this state can be deleted by the user.
- **Validated:** this state indicates that a user has reviewed the results and the result file can be moved to the Published state by a more senior election official. Manual results in this state are no longer editable.
- **Published:** this state indicates that the results will be included in reports and exports.



Figure 8-2: Results Files Screen

From the main menu there are three options available to change the result files for all result files that apply at once by clicking the Actions menu, Results and selecting one of the following options:

- **Validate All:** all result files that are in Initial or Rejected state will be set to Validated state.
- **Validate and Publish All:** all result files that are in Initial state will be set to Published state.
- **Reject All:** all result files will be set to Rejected state in the Result Files, and on what results are included in reports.

We are left with no credible explanation for what happened, and voter records (or “votes”) that are not supported by physical ballot images:

1. **17,852 missing ballot images.** (Votes were counted and included in the official recount results) Fulton County has confirmed in recent filings in a pending Federal lawsuit that it does not have the 17,852 ballot images. See attached filing.
2. **3,125 duplicate ballot images.** (Votes were counted and included in the official recount results); List of duplicates attached; Original and corresponding duplicate ballot images are shown here seeforyourself.us:8080/duplicatecheck.php?cid=60

Presumably, the duplicate ballot images were produced by scanning physical ballots more than once; however, Georgia state law prohibits the use of a ballot scanner capable of counting the same ballot twice:

Ga. Code § 21-2-322 (5) It shall preclude each elector from voting for any candidate or upon any question for whom or upon which he or she is not entitled to vote; from voting for more persons for any office than he or she is entitled to vote for; and from voting for any candidate for the same office or upon any question more than once;

1 and 2 above total 20,977 ballots for which Fulton County reported votes with no corresponding ballot images. We cannot explain how the 3,125 additional duplicate ballot images were generated to create the new voter records. But in total, we do know that, contemporaneously with the need for more votes in the Recount, an additional **20,977 unsubstantiated votes** made their way into the official results for the election and were in fact **counted** and **included** in the official results for the Recount.

2. ADDED TABULATOR RESULTS

In addition to the problems detailed above, the original Election Night vote count includes results for **ten** (10) Advance Voting tabulators for which Fulton County has **no** records. That is, **the tabulators do not exist** – there are no poll open tapes, no daily status tapes and no poll closing tapes.. We submitted Open Records Requests to Fulton County specifically seeking the 10 tabulator tapes, but Fulton County responded by saying that they had “***No such records***”.

To follow up, we sent two emails to the Fulton County Records Department and the Fulton County Custodian of Records, Steve Rosenberg, seeking clarification to determine if the records were missing or if they exist; the Records Department replied, “***The records do not exist.***” See attached emails and official certification of records.

These ten (10) tabulator tapes total **20,713 votes**, all of which were included in Election Night results:

NAME	TAB ID	VOTES
AV-State Farm Arena ICP 3	303	133
AV-State Farm Arena ICP 1 0	311	198
AV-State Farm Arena ICP 1 1	312	558
AV-So Fulton Srv Center ICP3	712	3377
AV-Wolf Creek Library ICP4	714	2252
AV-Park Place at Newtown ICP3	724	4216
AV-Northeast Library ICP3	727	2511
AV-Ponce De Leon Library ICP3	754	1830
East Point Library ICP3	763	1396
AV-Johns Creek ENV Campus ICP 2	2535	4242

TOTAL

20,713

Without further investigation by a trained investigator, it would be hard to know the provenance of these votes – there appear to be no supporting physical ballots for this number (20,713) as well, in addition to the lack of ballots reported above (20,977). It is possible these are related errors as the deficit from the original count could have been carried over to the Recount. But if not, the total number of votes in Fulton County for which there are no supported ballot images appears to be 41,690.

These margins of error are individually larger than the margins of victory in several elections in November 2020, including state-wide races, and could thus have influenced the outcome in those races.

If there is a legitimate explanation for the provenance of “discovered” ballots and tabulation tapes, the public would be well served by having an accounting of the explanation. If not:

1. These significant discrepancies should be investigated and, if possible corrected.
2. Unsupervised insertion of votes with no supporting ballot images and unidentified tabulation tapes should be sanctioned
3. Steps should be taken to prevent – on a basis that is auditable in real time – similar conduct in the future.
4. The paper ballots cast in the 2020 General Election, along with the Presidential contest Recount records, should be ordered to be preserved in anticipation of probable civil litigation and/or criminal inquiry.

This data has been provided to Governor Brian Kemp; we are given to understand that his office has been working to independently verify these findings over the past few weeks. But the Governor’s office is far too busy to address these and similar concerns that have been reported to the Governor, so we ask that the State Election Board proceed with an independent investigation of these issues.

Electronic file provided via email with original copy provided via U.S. First Class Mail.

Respectfully Submitted this 8th day of July, 2022,

Kevin Moncla

Kevin M. Moncla

Joseph Rossi

APPENDIX A

(11:53) Mr. Barron:

*Now with regard to the recount we concluded that on Wednesday night we **submitted our results and then yesterday the state allowed us to do reconciliation.** The results changed from election night. We were at 528 777. We scanned in 527,925 votes in the recount and so these are the results that we are going to change for um, election or for the president vote for president for election.*

(13:19) Mr. Wingate:

When you went back to do this coined “reconciliation”, can you explain for all of us exactly how that happened; why it happened and who actually caught that.

(13:46) Mr. Barron:

We went back and checked all the batch sheets, we made sure everything went through the scanners to make sure all the batches were uploaded. We also went through each one of the scanners to make sure that the batch amounts were on the scanners themselves were also on the server, and then we checked all the paperwork to make sure that all of the batches that were checked out actually made it to the scanners

We made a determination midway through the afternoon that one of the scanners that was brought in on Tuesday that scanned absentee by mail, when the operator (a different one than the previous day) the next morning got on the scanner they zeroed it out, the results had already been pulled off; but once it was zeroed out it started the batch numbers over. So, we had 2 sets of batch numbers from the same scanner, ICC 14. You can't upload another set of the exact same batch numbers from that scanner. There were 62 batches, that had identical numbers from that scanner, so what we had to do was go back through and rescan those on different scanners so that we could upload those results.

(15:42) Mr. Wingate:

That was not something you would have had any idea of on Wednesday, before we were able to upload those results to the SOS?

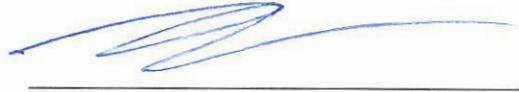
(15:55) Mr. Barron:

Correct. When we start uploading your looking at final numbers and you can see that it is short. The only thing you can do is go back and reconcile to see where those are. We were in touch with the state, and they told us on Thursday morning to go back and reconcile before we went through certification.

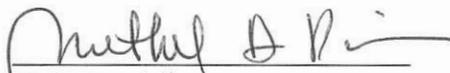
Open Records Requests & Certification of Records

CERTIFICATION OF RECORDS

I, **Steven Rosenberg**, as Open Records Custodian in the Office of the Fulton County Attorney, do hereby certify and declare that the attached request and responses to Request Reference # R008635-120121 seeking *all Tabulator Poll Tapes for the 11/3/2020 General Election, including those used for advanced voting and Logic and Accuracy Testing* are true and correct copies and are maintained in the normal course of Fulton County business.



Sworn to and subscribed
Before me, this 22nd
day of March, 2022.



Notary Public

My Commission Expires:



✉ On 1/2/2022 1:23:06 PM, Fulton County, Georgia wrote:

Subject: [Records Center] Open Records Request :: R008635-120121

Body:

January 02, 2022

SENT VIA EMAIL:

Dear Kevin Moncla:

This correspondence is in response to your Open Records Act Request Reference#: R008635-120121 dated December 01, 2021. Your request sought the following:

Please provide all Tabulator Poll Tapes for the 11/3 2020 General Election, advanced voting.

After reviewing the aforementioned request, we have identified responsive records. Records that were previously discussed are available electronically, you will not be charged.

Fulton County has uploaded the response records to your request to the portal. You can log into the system at [Open Records Center](#).

Please feel free to contact me at if you have any questions.

Sincerely,

Mariska Bodison
Registration & Elections

xc: Steven E. Rosenberg, Open Records Custodian
Shana Eatmon, Legal Assistant
Unique McCray, Administrator Coordinator II

↩ On 12/14/2021 5:58:55 PM, Kevin Moncla wrote:

Please provide the advanced polling tapes that you referenced were provided for a previous request.

✉ On 12/8/2021 11:30:19 AM, Fulton County, Georgia wrote:

Subject: [Records Center] Open Records Request :: R008635-120121

Body:

December 08, 2021

SENT VIA EMAIL:

Dear Kevin Moncla:

This correspondence is in response to your Open Records Act Request Reference#: R008635-120121 dated December 01, 2021. Your request sought the following:

Please provide all Tabulator Poll Tapes for the 11/3 2020 General Election, including those used for advanced voting and Logic and Accuracy Testing.

After reviewing the aforementioned request, we believe we may have responsive records. As permitted by O.C.G.A. § 50-18-71(c), a fee will be charged to cover the administrative costs associated with the time spent searching for, retrieving, redacting, and supervising access to the requested documents. The fee represents the hourly rate of the lowest paid full-time employee(s) with the necessary skill and training to respond to your request. However, no charge will be made for the first fifteen minutes of staff time expended in complying with your request. Unless otherwise provided by law, the charge for copies is generally \$0.10 per page, as permitted by O.C.G.A. § 50-18-71(c).

Because this amount is in excess of \$500, we will delay producing said records until such time as you pay the estimated costs. You may do so forwarding a check, payable to Fulton County, to the attention of Steven Rosenberg, at the address above. The estimated cost for search, retrieval, and copying of the responsive records is \$15,800.00. This amount includes the following fees listed below:

Advanced voting poll tapes was done for a previous request and these will be uploaded as soon as they are located.

L&A Testing polls tapes will be at a cost for personnel for completions.

7 Personnel for completion
14-21 business days.

It is anticipated that responsive records can be made available by December 08, 2021.

Finally, please be advised that certain requested documents, or portions thereof, have been redacted pursuant to the Georgia Open Records Act. Specifically, the following records may be exempted or redacted:

Please feel free to contact me at if you have any questions.
Sincerely,

Mariska Bodison
Registration & Elections

xc: Steven E. Rosenberg, Open Records Custodian
Shana Eatmon, Legal Assistant
Unique McCray, Administrative Coordinator II

← On 12/7/2021 2:09:01 PM, Kevin Moncla wrote:

TO: "Fulton County Georgia"[fultoncountyga@mycusthelp.net]

Thank you Shana

On Tue, Dec 7, 2021 at 12:56 PM Fulton County Georgia wrote:

✉ On 12/7/2021 1:55:49 PM, Fulton County, Georgia wrote:

Subject: [Records Center] Open Records Request :: R008635-120121

Body:



December 07, 2021

SENT VIA EMAIL:

Dear Requester Moncla:

This correspondence is in response to your Open Records Act Request Reference#: R008635-120121 dated December 01, 2021. Your request sought the following:

Please provide all Tabulator Poll Tapes for the 11/3 2020 General Election, including those used for advanced voting and Logic and Accuracy Testing.

Fulton County is in receipt of your request for records. We are currently in the process of locating responsive records to the extent they exist. We believe we can provide you with the same by Wednesday, December 8th. Thank you for your consideration.

Sincerely,

Shana Eatmon
Legal Assistant

xc: Steven E. Rosenberg, Open Records Custodian

✉ On 12/1/2021 4:19:21 AM, Fulton County, Georgia wrote:

Dear Kevin Moncla:

Thank you for submitting an Open Records Request to Fulton County, Georgia.

The County received your Open Records Act request dated December 01, 2021 and has assigned the reference number R008635-120121 for tracking purposes.

Record(s) Requested: *Please provide all Tabulator Poll Tapes for the 11/3 2020 General Election, including those used for advanced voting and Logic and Accuracy Testing.*

We will send out the request to the appropriate department(s). If you should have any questions or concerns about the requested documents, please feel free to contact the Fulton County Open Records team. If there should be a cost associated with the Open Records Request we will contact you in a timely manner.

Fulton County has a new Open Records Center that allows you to submit and track Open Records Act requests. Please visit the link below to monitor request progress and submit future requests.

[Open Records Center](#)

Fulton County Open Records

✉ On 12/1/2021 4:19:20 AM, Kevin Moncla wrote:

Request Created on Public Portal

[Records Center] Open Records Request :: R000522-012322

2 messages

Fulton County Georgia <fultoncountyga@mycusthelp.net>
To: "kmoncla@gmail.com" <kmoncla@gmail.com>

Fri, Feb 4, 2022 at 10:15 AM

--- Please respond above this line ---

OFFICE OF THE COUNTY ATTORNEY**141 PRYOR STREET, S.W.
SUITE 4038
ATLANTA, GEORGIA 30303****STEVEN ROSENBERG
OPEN RECORDS CUSTODIAN****TELEPHONE (404) 612-0259
FACSIMILE (404) 730 -6324**

This request has no additional responsive records. The records received in ORR R008635-120121 were complete.

To monitor the progress, update this request, and retrieve responsive records, please log into the [Fulton County Open Records Center](#).

Kevin Moncla <kmoncla@gmail.com>
To: Fulton County Georgia <fultoncountyga@mycusthelp.net>

Fri, Feb 4, 2022 at 10:42 AM

I'm not sure who I'm corresponding with, but as far as the outstanding tabulator tapes listed below, please confirm they do don't exist so I can remove them from my list:

1. State Farm Arena ICP11 (Tabulator ID: 312)
2. State Farm Arena ICP3 (Tabulator ID: 303)
3. State Farm Arena ICP10 (Tabulator ID: 311)
4. Park Place at Newtown ICP3 (Tabulator ID: 724)
5. Ponce De Leon Library ICP3 (Tabulator ID: 754)
6. East Point Library ICP3 (Tabulator ID: 763)
7. Johns Creek ENV Campus ICP2 (Tabulator ID: 2535)
8. Wolf Creek Library ICP4 (Tabulator ID: 714)
9. NortheEast Library ICP3 (Tabulator ID: 727)
10. So Fulton Srv Center ICP3 (Tabulator ID:712)

R000522-012322 - Open Records Request

Message History (7)

✉ On 2/4/2022 3:05:32 PM, Fulton County, Georgia wrote:

Subject: [Records Center] Open Records Request :: R000522-012322

Body:

The requested documents do not exist.

↩ On 2/4/2022 11:45:04 AM, Kevin Moncla wrote:

TO: "Fulton County Georgia"[fultoncountyga@mycusthelp.net]

I'm not sure who I'm corresponding with, but as far as the outstanding tabulator tapes listed below, please confirm they do don't exist so I can remove them from my list:

1. State Farm Arena ICP11 (Tabulator ID: 312) 2. State Farm Arena ICP3 (Tabulator ID: 303) 3. State Farm Arena ICP10 (Tabulator ID: 311) 4. Park Place at Newtown ICP3 (Tabulator ID: 724) 5. Ponce De Leon Library ICP3 (Tabulator ID: 754) 6. East Point Library ICP3 (Tabulator ID: 763) 7. Johns Creek ENV Campus ICP2 (Tabulator ID: 2535) 8. Wolf Creek Library ICP4 (Tabulator ID: 714) 9. NortheEast Library ICP3 (Tabulator ID: 727) 10. So Fulton Srv Center ICP3 (Tabulator ID:712)

Thank you for your help.

Kevin

On Fri, Feb 4, 2022 at 10:15 AM Fulton County Georgia wrote:

✉ On 2/4/2022 11:14:59 AM, Fulton County, Georgia wrote:

Subject: [Records Center] Open Records Request :: R000522-012322

Body: This request has no additional responsive records. The records received in ORR R008635-120121 were complete.

↩ On 1/26/2022 1:45:04 PM, Kevin Moncla wrote:

TO: "Fulton County Georgia"[fultoncountyga@mycusthelp.net]

Thank you Jessica.

On Wed, Jan 26, 2022 at 12:38 PM Fulton County Georgia wrote:

✉ On 1/26/2022 1:37:23 PM, Fulton County, Georgia wrote:

Subject: [Records Center] Open Records Request :: R000522-012322

Body:



January 26, 2022

SENT VIA EMAIL:

Dear Kevin Moncla:

This correspondence is in response to your Open Records Act Request Reference#: R000522-012322 dated January 23, 2022. Your request sought the following:

I previously submitted an ORR for the AV Poll Tapes for the 2020 General Election (R008635-120121) which returned documents but several poll tapes were not included. Specifically, the following poll tapes from AV were not returned:

1. State Farm Arena ICP11 (Tabulator ID: 312)
2. State Farm Arena ICP3 (Tabulator ID: 303)
3. State Farm Arena ICP10 (Tabulator ID: 311)
4. Park Place at Newtown ICP3 (Tabulator ID: 724)
5. Ponce De Leon Library ICP3 (Tabulator ID: 754)
6. East Point Library ICP3 (Tabulator ID: 763)
7. Johns Creek ENV Campus ICP2 (Tabulator ID: 2535)
8. Wolf Creek Library ICP4 (Tabulator ID: 714)
9. NortheEast Library ICP3 (Tabulator ID: 727)
10. So Fulton Srvc Center ICP3 (Tabulator ID: 712)

Please expedite the return of the outstanding poll tapes detailed above.

Fulton County is in receipt of your request for records. We are currently in the process of locating responsive records to the extent they exist. We believe we can provide you with the same by Friday, February 4, 2022.

Please feel free to contact me at if you have any questions.

Sincerely,

Jessica Robinson
Registration & Elections

xc: Steven E. Rosenberg, Open Records Custodian
Shana Eatmon, Legal Assistant
Unique McCray, Administrative Coordinator II

✉ On 1/23/2022 3:57:47 AM, Fulton County, Georgia wrote:

Dear Kevin Moncla:

Thank you for submitting an Open Records Request to Fulton County, Georgia.

The County received your Open Records Act request dated January 23, 2022 and has assigned the reference number R000522-012322 for tracking purposes.

Record(s) Requested: *I previously submitted an ORR for the AV Poll Tapes for the 2020 General Election (R008635-120121) which returned documents but several poll tapes were not included. Specifically, the following poll tapes from AV were not returned:*

- 1. State Farm Arena ICP11 (Tabulator ID: 312)*
- 2. State Farm Arena ICP3 (Tabulator ID: 303)*
- 3. State Farm Arena ICP10 (Tabulator ID: 311)*
- 4. Park Place at Newtown ICP3 (Tabulator ID: 724)*
- 5. Ponce De Leon Library ICP3 (Tabulator ID: 754)*
- 6. East Point Library ICP3 (Tabulator ID: 763)*
- 7. Johns Creek ENV Campus ICP2 (Tabulator ID: 2535)*
- 8. Wolf Creek Library ICP4 (Tabulator ID: 714)*
- 9. NortheEast Library ICP3 (Tabulator ID: 727)*
- 10. So Fulton Srvc Center ICP3 (Tabulator ID:712)*

Please expedite the return of the outstanding poll tapes detailed above.

We will send out the request to the appropriate department(s). If you should have any questions or concerns about the requested documents, please feel free to contact the Fulton County Open Records team. If there should be a cost associated with the Open Records Request we will contact you in a timely manner.

Fulton County has a new Open Records Center that allows you to submit and track Open Records Act requests. Please visit the link below to monitor request progress and submit future requests.

[Open Records Center](#)

Fulton County Open Records

✉ On 1/23/2022 3:57:45 AM, Kevin Moncla wrote:

Request Created on Public Portal

List of Duplicate Ballot Images

DUPLICATES INCLUDED IN THE FULTON COUNTY RECOUNT

Total Duplicates Included in Recount:

3,125

Count only includes the duplicates (copy)

Note: In the list below, "Length" = number of consecutive duplicates in the listed batch. Specific details follow each listing as to exactly which ballots match.

Duplicate Ballots:

Batch 00742_040 matched batch 00742_042 length 95

002->008 matches 074->080 010->076 matches 001->067 072->074 reversed 065->063 077->081 matches 069->073 084->096 reversed 095->083

Batch 00773_022 matched batch 00773_024 length 128

001->017 matches 001->017 015->017 reversed 017->015 018->022 reversed 021->017 022->124 matches 022->124

Batch 00788_056 matched batch 00788_059 length 18

003->008 matches 001->006 010->013 matches 007->010 016->023 matches 011->018

Batch 00791_017 matched batch 00791_024 length 110

001->099 reversed 100->002 012->014 matches 087->089 028->030 matches 071->073 054->058 same 043->039

Batch 00791_017 matched batch 00794_011 7

001->014 reversed 014->001 012->014 matches 001->003

Batch 00791_017 matched batch 00794_012 length 23

015->030 matches 032->047 028->030 reversed 047->045 031->034 reversed 031->028

Batch 00791_017 matched batch 00794_016 length 40

060->099 matches 002->041 Batch 00791_018 matched batch 00791_025 length 104 001->032 reversed 032->001 033->101 matches 033->101 096->098 reversed 098->096

Batch 00791_018 matched batch 00794_013 length 48

056->100 reversed 057->013 096->098 matches 015->017

Batch 00791_018 matched batch 00794_014 length 15

014->028 matches 003->017

Batch 00791_018 matched batch 00794_015 length 33

001->006 matches 001->006 029->032 matches 007->010 033->055 reversed 034->012

Batch 00791_019 matched batch 00791_026 length 100

003->096 reversed 098->005 072->074 matches 027->029 087->089 matches 012->014 Batch 00791_019 matched batch 00794_017 length 19 003->021 matches 017->035

Batch 00791_019 matched batch 00794_018 length 48

055->092 reversed 038->001 072->074 matches 019->021 087->089 matches 004->006 093->096 matches 039->042

Batch 00791_019 matched batch 00794_019 length 29

022->035 matches 002->015 040->054 matches 018->032

Batch 00791_020 matched batch 00791_023 length 86

002->011 reversed 015->006 012->084 reversed 093->021 082->084 matches 021->023

Batch 00791_020 matched batch 00794_008 length 31

003->011 reversed 032->024 066->069 reversed 052->049 070->073 reversed 056->053 074->084 reversed 048->038 082->084 matches 038->040

Batch 00791_020 matched batch 00794_011 length 24

012->035 matches 016->039

Batch 00791_020 matched batch 00794_012 length 27

036->062 reversed 027->001

Batch 00791_021 matched batch 00794_009 length 13

006->018 matches 022->034

Batch 00791_022 matched batch 00794_008 length 17

045->047 reversed 019->017 050->063 reversed 014->001

Batch 00791_022 matched batch 00794_009 length 20

069->080 matches 010->021 081->088 matches 001->008

Batch 00791_022 matched batch 00794_010 length 45

001->003 reversed 049->047 005->008 matches 048->051 009->020 matches 029->040 023->044 matches 001->022 028->031 same 009->006

Batch 00791_023 matched batch 00794_008 length 40

002->014 matches 020->032 016->031 matches 033->048 021->023 reversed 040->038 032->035 matches 053->056 036->039 matches 049->052

Batch 00791_023 matched batch 00794_011 length 23

070->092 reversed 039->017 Batch 00791_023 matched batch 00794_012 length 27 043->069 matches 001->027

Batch 00791_024 matched batch 00794_011 length 14

087->100 matches 001->014

Batch 00791_024 matched batch 00794_016 length 40

002->041 reversed 041->002

Batch 00791_025 matched batch 00794_013 length 48

056->100 reversed 057->013 096->098 matches 015->017

Batch 00791_025 matched batch 00794_014 length 15

005->019 reversed 017->003

Batch 00791_025 matched batch 00794_015 length 33

001->004 reversed 010->007 027->032 reversed 006->001 033->055 reversed 034->012

Batch 00791_026 matched batch 00794_017 length 18

080->097 reversed 035->018

Batch 00791_026 matched batch 00794_018 length 51

002->008 reversed 045->039 009->046 matches 001->038 012->014 reversed 006->004 027->029 reversed 021->019

Batch 00791_026 matched batch 00794_019 length 29

047->061 reversed 032->018 066->079 reversed 015->002

Batch 00791_027 matched batch 00794_019 length 15

001->015 matches 033->047

Batch 00791_028 matched batch 00794_020 length 38

001->038 matches 009->046

Batch 00791_029 matched batch 00794_021 length 25

001->018 matches 008->025 019->025 reversed 007->001

Batch 00791_030 matched batch 00794_023 length 23

013->027 reversed 021->007 028->030 reversed 025->023 031->035 reversed 006->002

Batch 00791_031 matched batch 00794_024 length 21
003->015 matches 001->013 017->024 reversed 021->014

Batch 00791_032 matched batch 00794_025 length 34
001->034 matches 006->039

Batch 00792_007 matched batch 00792_008 length 27
001->010 reversed 013->004 011->027 matches 001->017

Batch 00801_043 matched batch 00801_044 length 214
001->214 matches 001->214

Batch 00802_078 matched batch 00802_080 length 168
001->162 matches 001->162 048->050 reversed 050->048 131->133 reversed 133->131

Batch 00816_001 matched batch 00816_010 length 24
199->222 matches 001->024

Batch 00816_001 matched batch 00816_011 length 119
080->198 matches 001->119

Batch 00816_001 matched batch 00816_012 length 79
001->039 matches 041->079 040->079 matches 001->040

Batch 00816_002 matched batch 00816_008 length 25
001->025 matches 001->025

Batch 00816_002 matched batch 00816_009 length 207
026->060 matches 165->199 061->077 matches 095->111 078->118 matches 124->164 099->101
reversed 147->145 109->111 reversed 157->155 120->145 matches 001->026 146->162 matches 078->094
163->194 matches 039->070 195->205 matches 112->122 210->221 matches 027->038 222->228
matches 071->077 224->226 reversed 075->073

Batch 00816_002 matched batch 00816_010 length 55
206->209 matches 086->089 229->264 matches 050->085 266->280 matches 035->049

Batch 00816_003 matched batch 00816_007 length 193
001->193 matches 023->215

Batch 00816_004 matched batch 00816_008 length 192
001->186 reversed 211->026 150->152 matches 060->062 175->177 matches 035->037

Batch 00816_004 matched batch 00816_010 length 68

187->235 reversed 149->101 236->245 reversed 099->090 246->254 reversed 034->026

Batch 00816_005 matched batch 00816_006 length 213

001->018 matches 001->018 019->021 reversed 022->020 025->197 matches 025->197 050->052 reversed 052->050 198->203 reversed 203->198 204->213 matches 204->213

Batch 00816_005 matched batch 00816_007 length 22

214->235 matches 001->022

Batch 05160_067 matched batch 05160_074 length 25

001->025 reversed 030->006

Batch 05160_068 matched batch 05160_073 length 31

001->031 matches 001->031

Batch 05160_097 matched batch 05160_101 length 15

005->019 matches 001->015

Batch 05160_098 matched batch 05160_100 length 14

008->010 reversed 003->001 011->021 matches 004->014 Batch 05162_001 shuffled batch 05162_002

Referenced Filing:

“Fulton County Request for Admissions-2”

EXHIBIT F

**Fulton County Defendants' Response to Coalition Plaintiffs' Second
Requests for Admissions**

2. Admit that You did not preserve until the present time the majority of ballot images from in-person voting for the June 19, 2020 election.

Response: Admitted.

3. Admit that You did not preserve until the present time the majority of ballot images from in-person voting for the August, 2020 election.

Response: Admitted.

4. Admit that one of Your Dominion tabulating servers crashed during the machine recount of the November 3, 2020 election.

Response: Admitted.

5. Admit that the Dominion tabulating server crash was reported to the Fulton County Board of Registration and Elections during the recount of the November 3, 2020 election.

Response: Admitted.

6. Admit that the Dominion tabulating server crash during the machine recount of the November 3, 2020 election interrupted ballot tabulation.

Response: Admitted.

7. Admit that as mail ballots are scanned, the ballot scanner is ordinarily connected to the Dominion tabulating server.

Response: Denied.

8. Admit that, immediately after a mail ballot is scanned, the ballot image, including AuditMark, ordinarily may be accessed on the Dominion server.

Response: Denied.

9. Admit that in some Fulton County polling places, voters and other persons in the polling place during the November 3, 2020 election could have a line of sight permitting them to see selections being made on the touchscreen machines when other voters are voting on those machine.

Response: Denied.

10. Admit that the privacy screens provided by the Georgia Secretary of State during the November 3, 2020 election did not always protect voters' ballot touchscreen selections from being seen by other people in the polling place.

Response: Denied. No privacy screens were provided by the Secretary of State.

11. Admit that the Georgia Secretary of State has not consistently enforced requirements for physically protecting voters' ballot secrecy when using the touchscreens on the Dominion BMDs in Fulton County.

Response: Defendants are without knowledge sufficient to either or admit this request.

12. Admit that You have received complaints from voters regarding the lack of voter privacy using the Dominion touchscreen machines.

Response: Admitted.

13. Admit that, in some polling places, the limited available space and the number of voting machines required at those polling places, makes it infeasible to provide absolute ballot secrecy for the voters using the touchscreens.

Response: Denied.

14. Admit that You do not require poll managers to arrange polling place equipment in a manner to provide absolute ballot secrecy.

Response: Denied.

15. Admit that in some polling places poll managers and poll workers can routinely see the display screens with voters' vote selections visible.

Response: Denied.

16. Admit that the Fulton County Board of Registration and Elections members have discussed during board meetings how the use of Dominion touchscreen BMD machines adversely impacts ballot secrecy.

Response: Admitted.

17. Admit that You have not deployed equipment in a manner that provides absolute ballot secrecy for voters using the touchscreen voting machines.

Response: Denied.

18. Admit that You were initially informed by the Georgia Secretary of State that the November 3, 2020 election hand-counted audit would also be an official recount.

Response: Denied.

19. Admit that You were initially informed by the Georgia Secretary of State that the official vote tallies for the November 3, 2020, election would be corrected as needed based on the results of the hand-counted audit.

Response: Denied.

20. Admit that the hand-counted audit tallies were not used as official results.

Response: Admitted.

21. Admit that, during the hand-counted audit of the November 3, 2020 election, duplicated ballots were counted without referencing or reviewing the original ballot.

Response: Denied.

22. Admit that You have not undertaken a reconciliation of the discrepancies between the original count, the hand-counted audit, and the official recount tallies in the November 3, 2020 election.

Response: Denied.

23. Admit that You received, from the Georgia Secretary of State, some instructions, guidelines, or recommended procedures for reconciling the discrepancies between the original count and the hand-counted audit in the November 3, 2020 election.

Response: Denied.

24. Admit that You have not been required by the Georgia Secretary of State to provide an explanation for discrepancies of audit tallies and machine tallies in the November 3, 2020 election.

Response: Admitted.

25. Admit that the ballot images delivered to Coalition for Good Governance on June 3, 2021 on two USB drives are true and correct copies of the original ballot images created during from the November 3, 2020 election.

Response: Upon information and belief, admitted.

26. Admit that in the Audit Report generated by the Arlo audit software for the November 3, 2020, election, the batches labeled “AbsenteeScanner3Batch174-178,” “AbsenteeScanner3Batch175-176,” and “AbsenteeScanner3Batch177” all count the same physical batch of ballots.

Response: Denied.

27. Admit that the one physical batch of ballots referenced in the immediately preceding Request was counted three times in the hand-counted audit.

Response: Denied.

28. Admit that in the Audit Report generated by the Arlo audit software for the November 3, 2020, election, the batches labeled “AbsenteeScanner2batch244-249” and “AbsenteeScanner2Batch244-249” each count the same physical batch of ballots.

Response: Denied.

29. Admit that the one physical batch of ballots referenced in the immediately preceding Request was counted twice in the hand-counted audit.

Response: Denied.

30. Admit that Fulton County's Dominion system user manuals are available to and accessible by Your technical staff.

Response: Admitted.

31. Admit that more than five of Your staff members have physical access to and authority to consult the Dominion user manuals.

Response: Admitted.

32. Admit that the Dominion server in the Election Preparation Center is configured to be connected to the internet if operators choose to do so.

Response: Denied.

33. Admit that Dominion has the ability to remotely access the Dominion server in the Election Preparation Center.

Response: Denied.

34. Admit that the operator of the Dominion server in the Election Preparation Center has administrative access to delete and edit Windows activities logs.

Response: Denied.

35. Admit that the Dominion server in the Election Preparation Center has been connected to the Internet on more than one occasion since the server's installation.

Response: Denied.

36. Admit that during November 2020 BMD Logic and Accuracy Testing, testing technicians did not test every candidate position and every contest in every configuration on each machine before the machines were installed in the polling places.

Response: Denied.

37. Admit that You did not perform your own county-directed acceptance testing of the Dominion BMDs purchased by Fulton County before using them in an election.

Response: Denied.

38. Admit that ballot scanning equipment was put into service in Fulton County without county-directed acceptance testing.

Response: Denied.

39. Admit that more than one public building used as a polling place in the January 2021 runoff in Fulton County had operational video surveillance cameras installed at the time of that election for use during the overnight storage of voting machines and during the voting process.

Response: Denied.

40. Admit that provisional voters were permitted to vote on the BMD machines at C. T. Martin Recreation Center polling place in January 2021 runoffs.

Response: Denied

41. Admit that during the November 3, 2020 election more than 100 voted provisional ballots were rejected because the voter was not identified on the outer envelope.

Response: Denied

42. Admit that some or all of the voters who did not place their name on the outer envelope of provisional ballots were not told by poll managers to do so.

Response: Denied.

43. Admit that You received no instructions from the Georgia Secretary of State regarding scanner settings for overvotes for the November 3, 2020 election.

Response: Admitted.

44. Admit that the default settings for the ICC scanners used during the November 3, 2020 election allowed overvotes to be counted as valid votes in some races.

Response: Denied.

45. Admit that, in the November 3, 2020, election, some overvotes were counted as valid votes.

Response: Denied.

46. Admit that more than 50 people voted more than once in the November 3 election, and their extra votes were counted.

Response: Denied.

47. Admit that during the November 3, 2020 election, volunteers acting as absentee ballot clerks were permitted to have access to E-Net on their personal computers in the polling places.

Response: Admitted.

48. Admit that during certain days of early voting in October 2020, voter records were not promptly updated in E-Net and My Voter Page to show that voters had actually voted.

Response: Admitted.

49. Admit that the votes of at least two precincts were not counted in the original certification of the January, 2021 election.

Response: Admitted.

50. Admit that current board canvassing procedures do not always detect errors such as votes missing for whole precincts.

Response: Denied.

51. Admit that You did not make images or complete copies of the ballot scanner memory cards after each election in 2020.

Response: Admitted.

52. Admit that the memory cards used in the ballot scanners in elections in 2020 were reused and overwritten in subsequent elections.

Response: Admitted.

53. Admit that You did not received any instructions from the Secretary of State prior to November 1, 2020 for preserving Windows activities logs of the Dominion server in the Election Preparation Center.

Response: Admitted.

54. Admit that You did not preserve to the current time the Windows activities logs of the Dominion server in the Election Preparation Center for the period August 1, 2020 through February 1, 2021.

Response: Denied.

55. Admit that the mail ballot process used in Fulton County during the November 3, 2020 election included instructing workers to retain ballots and envelopes in matching sequential order.

Response: Admitted.

56. Admit that workers in Fulton County polling places have encountered malfunctions in the operation of the PollPads since their initial deployment.

Response: Admitted.

57. Admit that in the November 3, 2020 presidential contest recount, with respect to duplicated ballots, You did not review the original ballots to check the accuracy of the duplicated ballot for voter intent.

Response: Denied.

58. Admit that the Vote Review Panel did not maintain an independent paper audit trail reviewed by the vote review panels for votes adjudicated during 2020 elections.

Response: Admitted.

59. Admit that the Vote Review Panel did not review or approve an adjudication log of votes adjudicated after each adjudication decision in the 2020 elections.

Response: Defendants are without knowledge sufficient to either or admit this request.

60. Admit that bi-partisan vote review panels did not adjudicate ballots earlier than 7 am during the days of election processing, in November 2020.

Response: Admitted.

61. Admit that no bi-partisan vote review panel adjudicated ballots later than 11pm during the days of election processing in November 2020.

Response: Admitted.

62. Admit that more than 50 ballots were adjudicated using the Dominion adjudication application without a bi-partisan vote review panel present.

Response: Denied.

63. Admit that You do not permit party-appointed monitors or watchers to have visual access to read the ICC scanner monitor screens or ICC public counters.

Response: Denied.

64. Admit that during Logic and Accuracy testing for some 2020 elections You prevented appointed poll watchers and members of the public from having visual access to the voting equipment display screens during the testing of the majority of the BMD and scanner units.

Response: Denied.

65. Admit that during Logic and Accuracy testing for some 2020 elections You prevented appointed poll watchers and members of the public from being in the same room as where the testing of the majority of the BMD and scanner units took place.

Response: Denied.

66. Admit that Richard Barron was told by the Secretary of State's office that it was not necessary to review hand-marked paper ballots for lightly marked votes or marginal marks for the June 9, 2020 election to determine if such votes had not been tabulated.

Response: Upon information and belief, admitted.

67. Admit that the Fulton County Board of Registration and Elections received a request from candidate Beth Beskin on or around June 18, 2020 for a review of the ballots with light marks and marginal marks.

Response: Upon information and belief, admitted.

68. Admit that the Fulton County Board of Registration and Elections did not discuss or vote on Beth Beskin's request prior to certification of the election.

Response: Defendants are without knowledge sufficient to either or admit this request.

69. Admit that You received complaints of hand marked votes not being counted by the scanners in the June 9, 2020 election.

Response: Denied.

70. Admit that You have not reviewed hand marked votes that were the subject of complaints You received about such votes not being counted by the scanners in the June 9, 2020 election.

Response: Denied.

71. Admit that You have not counted hand marked votes that were the subject of complaints You received about such votes not being counted by the scanners in the June 9, 2020 election.

Response: Denied.

72. Admit that during 2020 the Fulton Board of Elections conducted meetings (including electronic meetings by email) with a quorum of members without advance public notice.

Response: Denied.

Respectfully submitted this 30th day of August, 2021.

**OFFICE OF THE COUNTY
ATTORNEY**

Cheryl Ringer
Georgia Bar Number: 557420
cheryl.ringer@fultoncountyga.gov
Kaye Burwell
Georgia Bar Number: 775060
kaye.burwell@fultoncountyga.gov
/s/ David R. Lowman
David R. Lowman
Georgia Bar Number: 460298
david.lowman@fultoncountyga.gov

ATTORNEYS FOR DEFENDANTS
ALEX WAN, VERNETTA KEITH
NURIDDIN, KATHLEEN RUTH,
AARON JOHNSON, AND MARK
WINGATE, AND THE FULTON
COUNTY BOARD OF
REGISTRATION & ELECTIONS

OFFICE OF THE COUNTY ATTORNEY
141 Pryor Street, S.W.
Suite 4038
Atlanta, Georgia 30303

Supplemental Reference

“Declaration of Philip Stark”

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

DONNA CURLING, et al.

Plaintiff,

vs.

BRAD RAFFENSPERGER, et al.

Defendant.

**CIVIL ACTION FILE NO.:
1:17-cv-2989-AT**

DECLARATION OF PHILIP B. STARK

PHILIP B. STARK hereby declares as follows:

1. This statement supplements my declarations of September 9, 2018; September 30, 2018; October 22, 2019; December 16, 2019; August 23, 2020; August 31, 2020; September 13, 2020; and August 2, 2021. I stand by everything in the previous declarations and incorporate them by reference. *This declaration includes and augments a declaration submitted on 11 January 2022. Aside from adding the italicized material in this paragraph and correcting minor typographical errors, the differences between the previous version and this version are confined to (new) paragraphs 58 through 84. Paragraphs 85 through 89 were in the earlier version but have been renumbered. Appendix 1 has been updated to the current version of my CV. Appendices 2, 3, and 4 are unchanged. Appendices 5 through 9 are new.*

Qualifications and Background

2. I am Professor of Statistics at the University of California, Berkeley, where I am also a faculty member in the Graduate Program in Computational Data Science and Engineering; a co-investigator at the Berkeley Institute for Data Science; principal investigator of the Consortium for Data Analytics in Risk; director of Berkeley Open Source Food; and affiliated faculty of the Simons Institute for the Theory of Computing, the Theoretical Astrophysics Center, and the Berkeley Food Institute. Previously, I was Associate Dean of Mathematical and Physical Sciences, Interim Regional Associate for the College of Chemistry and the Division of Mathematical and Physical Sciences, Chair of the Department of Statistics, and Director of the Statistical Computing Facility.
3. I have published more than two hundred articles and books. I have served on the editorial boards of archival journals in physical science, Applied Mathematics, Computer Science, and Statistics. I currently serve on three editorial boards. I have lectured at universities, professional societies, and government agencies in thirty countries. I was a Presidential Young Investigator and a Miller Research Professor. I received the U.C. Berkeley Chancellor's Award for Research in the Public Interest, the Leamer-Rosenthal Prize for Open Social Science, and a Velux/Villum Foundation Professorship. I am a member of the Institute for Mathematical Statistics and the Bernoulli Society. I am a Fellow of the American Statistical Association, the Institute of Physics, and the Royal Astronomical Society. I am professionally accredited as a statistician by the American Statistical Association and as a physicist by the Institute of Physics.

4. I have consulted for many government agencies, including the U.S. Department of Justice, the U.S. Department of Agriculture, the U.S. Department of Commerce, the U.S. Department of Housing and Urban Development, the U.S. Department of Veterans Affairs, the Federal Trade Commission, the California Secretary of State, the California Attorney General, the California Highway Patrol, the Colorado Secretary of State, the Georgia Department of Law, the Illinois State Attorney, the New Hampshire Attorney General, and the New Hampshire Secretary of State. I currently serve on the Board of Advisors of the U.S. Election Assistance Commission and its Cybersecurity Subcommittee. (The opinions expressed herein are, however, my own: I am not writing as a representative of any entity.)
5. I have testified before the U.S. House of Representatives Subcommittee on the Census; the State of California Senate Committee on Elections, Reapportionment and Constitutional Amendments; the State of California Assembly Committee on Elections and Redistricting; the State of California Senate Committee on Natural Resources; and the State of California Little Hoover Commission.
6. I have been an expert witness or non-testifying expert in a variety of state and federal cases, for plaintiffs and for defendants, in criminal matters and a range of civil matters, including, *inter alia*: truth in advertising, antitrust, construction defects, consumer class actions, credit risk, disaster relief, elections, employment discrimination, environmental protection, equal protection, fairness in lending, federal legislation, First Amendment, import restrictions, insurance, intellectual property, jury selection, mortgage-backed securities, natural resources, product liability class actions, *qui tam*,

risk assessment, toxic tort class actions, trade secrets, utilities, and wage and hour class actions.

7. I have been qualified as an expert on statistics in federal courts, including the Central District of California, the Northern District of Georgia, the District of Maryland, the Southern District of New York, and the Eastern District of Pennsylvania.
8. I have also been qualified as an expert on statistics in state courts.
9. I have used statistics to address a wide range of questions in many fields.¹
10. I served on former California Secretary of State Debra Bowen's Post-Election Audit Standards Working Group in 2007.
11. In 2007, I invented a statistical approach to auditing elections ("risk-limiting audits," referred to below as "RLAs") that has been incorporated into statutes in California (AB 2023, SB 360, AB 44), Colorado (C.R.S. 1-7-515), Rhode Island (RI Gen L §17-19-37.4 (2017)), Virginia (Code of Virginia 24.2-671.1), and Washington (RCW 29A.60.185), and which are in pending federal legislation (the PAVE Act of 2018 and S.1 of 2021). My election auditing methods have been used in roughly 20 U.S. States and in Denmark. (The State of Georgia has piloted some RLA procedures, but has not conducted an actual RLA, as I explain below.)
12. RLAs are widely viewed as the best way to check whether the reported winner(s) of an election really won. They have been endorsed by the Presidential Commission on

¹ For example, I have used statistics to analyze the Big Bang, the interior structure of the Earth and Sun, earthquake risk, the reliability of clinical trials, the accuracy of election results, the accuracy of the U.S. Census, the risk of consumer credit default, food safety, the causes of geriatric hearing loss, the effectiveness of water treatment, sequestration of carbon in agricultural soils, the fragility of ecological food webs, risks to protected species, the effectiveness of Internet content filters, high-energy particle physics data, and the reliability of models of climate, among other things.

Election Administration; the U.S. National Academies of Sciences, Engineering, and Medicine; the American Statistical Association; the League of Women Voters; Verified Voting Foundation; Citizens for Election Integrity Minnesota; and other groups concerned with election integrity.

13. I have worked closely with state and local election officials in California and Colorado to pilot and deploy RLAs. The software Colorado uses to conduct RLAs is based on software I wrote. All of the genuinely risk-limiting methods in VotingWorks “Arlo” software used by the State of Georgia were invented by me.²
14. I worked with Travis County, Texas, on the design of STAR-Vote, an end-to-end cryptographically verifiable voting system.
15. I testified as an expert witness in the general area of election integrity, including the reliability of voting equipment, in 2016 presidential candidate Jill Stein’s recount suit in Wisconsin, and filed a report in her suit in Michigan.
16. I have testified as an expert in election auditing and the accuracy of election results in two election-related lawsuits in California.
17. I have testified to both houses of the California legislature regarding election integrity and election audits. I have testified to the California Little Hoover Commission about election integrity, voting equipment, and election audits.
18. I have advised the election commissions of Denmark, Mongolia, and Nigeria on issues related to election integrity, security, and audits.

² Arlo also implements a method that is not risk-limiting in practice.

19. I was a member of the three-person team that conducted a statutory forensic audit of the State Representative contest in Windham, NH, in 2021.³
20. Since 1988, I have taught statistics at the University of California, Berkeley, one of the top two statistics departments in the world (see, e.g., QS World University Rankings, 2014) and the nation (US News and World Reports, 2018). I teach statistics regularly at the undergraduate and graduate levels. I have created five new statistics courses at Berkeley. I developed and taught U.C. Berkeley's first for-credit online course in any subject, and among the first approved for credit throughout the ten campuses of the University of California system. I also developed and co-taught online statistics courses to over 52,000 students, using an online textbook and other pedagogical materials I wrote and programmed.
21. Appendix 1 is my current *curriculum vitae*, which includes my publications for the last ten years and all cases in the last four years in which I gave deposition or trial testimony.

Opinions

22. I have been asked to assess whether the State of Georgia's current Dominion Ballot Marking Device ("BMD") voting system and the protocols for its use—including audits—provides reasonable assurance that voters' selections will be counted, and counted as cast. The answer is a clear "no."

The 2020 "Audit"

23. Georgia Secretary of State Brad Raffensperger has claimed, referring to the post-election audit of the November 3, 2020 presidential contest, "Georgia's historic first

³ See <https://www.doj.nh.gov/sb43/index.htm>, last accessed 8 January 2022.

statewide audit reaffirmed that the state’s new secure paper ballot voting system accurately counted and reported results.”⁴ And “[] we did a 100 percent risk-limiting audit with a hand recount which proved the accuracy of the count and also proved that the machines were accurately counting it, and that no votes were flipped.”⁵

VotingWorks Executive Director Ben Adida claimed “Georgia’s first statewide audit successfully confirmed the winner of the chosen contest and should give voters increased confidence in the results.”⁶ Per the official report of the audit, “The audit confirmed the original result of the election, namely that Joe Biden won the Presidential Contest in the State of Georgia. The audit [] provides sufficient evidence that the correct winner was reported.”⁷ I shall explain why these claims about the audit are false.

24. There are many things the audit did not check (including the outcome), and the thing it was positioned to check—the tabulation of validly cast ballots—was not checked properly, as data from the audit itself show.

25. I shall start by listing some things the audit did not check. My statements are true and correct to the best of my knowledge, and they are consistent with the audit documentation available at the Secretary of State’s website at the URL

https://sos.ga.gov/index.php/elections/2020_general_election_risk-limiting_audit (last accessed 9 January 2022).

⁴https://sos.ga.gov/index.php/elections/historic_first_statewide_audit_of_paper_ballots_upholds_result_of_presidential_race, last accessed 9 January 2022

⁵ <https://www.effinghamherald.net/local/raffensperger-spread-election-misinformation-bipartisan-endeavor/> last accessed 9 January 2022.

⁶ Ibid.

⁷ https://sos.ga.gov/admin/uploads/11.19_20_Risk_Limiting_Audit_Report_Memo_1.pdf. last accessed 9 January 2022

26. The audit did not check whether BMDs correctly printed voters' selections. No audit can check that, as I have previously declared. (As a consequence, Secretary Raffensperger has no basis to assert that no votes were flipped.) The declarations and testimony of Prof. J. Alex Halderman establish that BMDs can be hacked, misprogrammed, or misconfigured to print votes that differ from voters' selections as confirmed onscreen or through audio. As Prof. Andrew Appel has testified and as elaborated in my declarations, only voters are in a position to check—but few do, and those who do check generally check poorly. To the best of my knowledge, the State of Georgia has no procedures in place to log, investigate, or report complaints from voters that BMDs altered votes, so it is not clear whether any voters did notice problems. My previous declarations also explain why logic and accuracy testing can never be adequate to establish that BMDs behave correctly in practice.⁸
27. The audit did not check whether every validly cast ballot was scanned exactly once. The audit could not check whether every validly cast ballot was scanned, because Georgia's rules for ballot accounting, pollbook and voter participation reconciliation, physical chain of custody, etc., are not adequate to ensure that every cast ballot is accounted for.
28. The audit did not check whether every memory card used in the election was accounted for, nor whether every memory card containing votes was uploaded to a

⁸ See, e.g., Stark, P.B. and R. Xie, 2019. Testing Cannot Tell Whether Ballot-Marking Devices Alter Election Outcomes, ArXiv, <https://arxiv.org/abs/1908.08144>, last accessed 9 January 2022.

tabulator. The audit found that some had not been,⁹ but to my knowledge, there has been no check to confirm there are no other cards with votes outstanding.

29. The audit did not check whether any scans were duplicated, deleted, replaced or altered.
30. The audit did not check whether QR code encoding the votes on BMD printout matches the human-readable selections on any ballot.
31. The audit did not check whether the voting system correctly interpreted any ballot or BMD printout. (Again, as a consequence, Secretary Raffensperger has no basis to assert that no votes were flipped.)
32. The audit did not do a very good job of checking the tabulation, as I shall demonstrate. I focus on Fulton County. I have not investigated other counties, but I have no reason to believe the problems and errors are confined to Fulton County. I have been told by Coalition Plaintiffs that similar problems occurred in other counties, but I have not independently verified their findings.
33. I downloaded the detailed “audit spreadsheet” from the URL <https://sos.ga.gov/admin/uploads/audit-report-November-3-2020-General-Election-2020-11-19.csv> on 9 January 2022.
34. I downloaded images of the Fulton County RLA manual tabulation batch sheets (“Audit Board Batch Sheets”, ABBSs henceforth) from <https://sos.ga.gov/admin/uploads/Fulton%20RLA%20Batches.zip> on 9 January 2022. That file contains five .pdf files, “Fulton Audit Documents 1_redacted.pdf,” through “Fulton Audit Documents 4_redacted.pdf,” which contain images of ABBSs, and

⁹ See notes 13 and 14, *infra*.

“Fulton Audit Documents 5.pdf” which contains images of “Vote Review Panel Tally Sheets.”

35. My understanding is that ABBSs are filled in by hand by the counting teams who counted the votes from the paper ballots (including BMD printout). Each ABBS reflects the manual tally of votes from one physically identifiable batch of ballots. I understand that after the ABBSs were filled out, other workers transcribed data from the ABBSs into VotingWorks audit software “Arlo.” My understanding is that every ballot validly cast in Fulton County in the 2020 Presidential Election should be reflected in exactly one ABBS, and data from every ABBS should have been entered exactly once into the database from which the audit spreadsheet was exported.
36. The four ABBS image files contain 349 pages, 636 pages, 578 pages, and 364 pages, respectively, a total of 1,927 ABBSs. But the audit spreadsheet contains only 1,916 rows of data for Fulton County. It appears that at least eleven ABBSs are entirely missing, not counting possible duplicate entries in the spreadsheet.¹⁰ This sort of “sanity check” is simple to perform, but apparently was not performed by the auditors, the County, or the Secretary of State.
37. Many ABBSs were not completely filled in. The “Batch Type,” signifying the mode of voting (absentee, election day, advance) was often blank, and many numbers were blank, presumably intended to denote zeros.

¹⁰ However, I did see at least one ABBS marked “Dup” (presumably meaning “duplicate”) for instance, page 11 of “Fulton Audit Documents 2_redacted.pdf.” However, as the table after paragraph 38, *supra*, shows, there are at least 11 ABBSs that are not accounted for in the audit spreadsheet. Thus, there are presumably duplicated entries in the audit spreadsheet.

38. Coalition Plaintiffs have identified a sample of at least eleven ABBSs for Fulton County that do not appear in the audit spreadsheet, and I have verified their work. The software I wrote for that purpose is in Appendix 2.

39. The following table lists these examples; the final column indicates which page of which ABBS image file contains the image (for instance, “4 at 162” means page 162 of “Fulton Audit Documents 4_redacted”). The fact that the vote data in the last two rows are identical is suspicious, but the corresponding ABBS images are clearly different; see Appendix 3. Regardless, neither appears in the audit spreadsheet.

	Scanner	Batch	Mode of voting	Trump	Biden	Jorgensen	Write-In	Undervote or blank	Overvote	Image source
1	3	48	absentee	4	93	2	0	0	0	4 at 162
2	2	52	absentee	6	92	0	0	0	0	1 at 1
3	3	12–14	?	12	83	1	0	0	0	4 at 128
4	3	239	?	13	87	0	0	0	0	3 at 177
5	1	80–84	?	118	329	3	2	2	1	3 at 519
6	3	260	absentee	30	66	0	0	0	0	4 at 355
7		AP01A-1	election day	84	62	6	2	1	0	1 at 170
8	3	179–181	absentee	85	224	5	1	2	0	4 at 293
9	2	239	absentee	4	42	0	0	0	0	2 at 153
10	Chastain	12	advance	613	605	24	7	4	0	3 at 351
11	Chastain	114	advance	613	605	24	?	4	0	3 at 270

40. I searched the audit spreadsheet for tallies that matched the numbers in these missing ABBSs. There are no data in the audit spreadsheet matching rows 4–11 of the table. There are data that match rows 1, 2, and 3, but with distinctively different batch identifiers.¹¹ It is plausible that these are genuinely different batches, and I have no reason to believe otherwise: some identical counts in different batches are to be

¹¹ The data that match row 1 are identified as “Scanner 3 Ballot [sic] 162” rather than batch 48. The data that match row 2 are identified as “Absentee Scanner 2 Batch 400” rather than batch 52. The data that match row 3 are identified as Absentee Scanner 3 Batch 253 rather than batches 12–14.

expected. Indeed, in the entire audit spreadsheet, there are 16,807 rows that duplicate other ABBS vote counts within the same county, out of a total of 41,881 rows.

41. I checked vote totals for Donald J. Trump, Joseph R. Biden, and Jo Jorgensen derived by summing ABBS entries in the audit spreadsheet against the vote totals in the summary audit result spreadsheet posted by the Secretary of State at the URL <https://sos.ga.gov/admin/uploads/Georgia%202020%20RLA%20Report.xlsx>, which I downloaded on 9 January 2022. (The spreadsheet does not list write-ins, undervotes, or overvotes.) Both show Trump receiving 137,620 votes, Biden receiving 381,179, and Jorgensen receiving 6,494. Thus, the ABBSs that are missing from the audit spreadsheet are also missing from the audit's reported vote totals.
42. On the assumption that the ABBSs—the original source of the manual tally data entered into the audit spreadsheet—are correct, the omission of that sample of 11 ABBSs deprived Trump of 1,582 votes, Biden of 2,288, and Jorgensen of 65, not to mention write-ins. This sample alone has a total of over 3,900 votes that the audit tabulated but were not included in the audit's reported vote totals.
43. The original tabulation in Fulton County showed 524,659 votes; the reported audit results showed 525,293, a difference of 634 votes, about 0.12 percent.¹² Accounting for those 11 omitted ABBSs increases the apparent error of the first count from 634 votes to over 4,569 votes or 0.87 percent, far larger than the statewide margin of

¹² Data from <https://sos.ga.gov/admin/uploads/Georgia%202020%20RLA%20Report.xlsx>, last accessed 9 January 2022.

victory. It is also larger than 0.73 percent, which Secretary of State Raffensperger claimed was the maximum miscount in any Georgia county.¹³

44. However, there is no way to know whether including that sample of 11 ABBSs would make the audit tabulation a complete count of the votes in Fulton County. That is because Georgia's canvass is inadequate: many ballots might still remain untabulated. The proof that at least some of Georgia's jurisdictions do not keep adequate track of ballots, memory cards, and other election materials is reflected in the fact that thousands of ballots and scans were "discovered" during the audit.¹⁴ There is no trustworthy inventory of ballots to check the results against, because of Georgia's lax canvass.
45. Governor Brian P. Kemp has pointed out similar flaws in the audit, saying the audit report was "sloppy, inconsistent, and presents questions about what processes were used by Fulton County to arrive at the result."¹⁵ Governor Kemp's letter points out that

¹³ Per Secretary Raffensperger, "[i]n Georgia's recount, the highest error rate in any county recount was 0.73%." https://sos.ga.gov/index.php/elections/2020_general_election_risk-limiting_audit, last accessed 9 January 2022.

¹⁴ https://www.cbs46.com/news/floyd-county-election-director-fired-after-audit-reveals-2-600-votes-went-uncounted/article_bbd08d90-2aa2-11eb-9e4d-bf96ac56ad54.html, last accessed 10 January 2022. <https://www.news4jax.com/news/georgia/2020/11/18/4th-georgia-county-finds-uncounted-votes-as-hand-count-deadline-approaches/>, last accessed 10 January 2022. https://www.mdjonline.com/elections/cobb-elections-finds-350-uncounted-ballots-during-audit/article_0d93e26e-22bd-11eb-8bce-17067aceee33.html, last accessed 10 January 2022. <https://www.11alive.com/article/news/politics/elections/fayette-county-election-results-ballots-uncovered-during-audit/85-f79dd838-a15c-4407-80b2-9dfbc2466188>, last accessed 10 January 2022.

¹⁵ Letter from Brian P. Kemp, Governor, to the Georgia State Election Board, dated 17 November 2021, addressing the work of Mr. Joseph Rossi; Review of Inconsistencies in the Data Supporting the Risk Limiting Audit Report, Office of Governor Brian P. Kemp, 17 November 2021. These documents are attached hereto as Appendix 4.

the audit data include duplicated entries, which I understand Coalition Plaintiffs have verified. I have not tried to verify those findings.

First Count, Audit, and Recount Differ Substantially

46. I understand that Plaintiff Donna Curling votes in Fulton County precinct RW01. On 10 January 2022, I downloaded the official precinct-level results for the original tabulation from

<https://results.enr.clarityelections.com//GA/Fulton/105430/271723/reports/detailxls.zip> and for the recount from

<https://results.enr.clarityelections.com//GA/Fulton/107292/275183/reports/detailxls.zip> to examine the results in that precinct.

47. The following table shows the counts of election-day votes in Fulton County precinct RW01 for the three presidential candidates, according to the original machine count, the machine recount, and the “audit,” and vote-by-mail and advance votes for the original election and the recount. (The audit did not report precinct-level results for vote-by-mail or advance voting.)

Count	Election Day			Advance			Absentee by Mail			Provisional		
	Trump	Biden	Jorgensen	Trump	Biden	Jorgensen	Trump	Biden	Jorgensen	Trump	Biden	Jorgensen
Original	193	88	11	1455	1003	23	619	833	15	9	4	1
Recount	162	73	9	1487	1015	25	619	809	15	5	3	1
Audit	243	88	11									

48. There are large, unexplained differences among these results.¹⁶ I do not see how Plaintiff Donna Curling can have reasonable confidence that her vote was counted at all, much less counted as cast.

¹⁶ There appears to be some cancellation of error, but I understand that the hand count kept ballots cast in different ways (advance in-person, absentee by mail, and election day) separate. It

49. The Secretary of State attributed all differences between the audit and the original count to human counting error, citing a 2012 study that found hand-count error rates as high as 2 percent.¹⁷ This is simplistic, unfounded, and disingenuous.
50. While human error almost certainly accounts for *some* of the difference, there is no evidence that it accounts for most of the difference, much less the entire difference, as Secretary of State Raffensperger claimed.
51. The original count and audit agree with each other (but not with the recount) regarding the number of election-day votes for Biden and Jorgensen. The audit found 50 more election-day votes for Trump than the original tally, and 81 more than the machine recount found: a difference of almost 50 percent. These differences have not been investigated and are unexplained. A hypothesized error rate of 2 percent in hand counts does not suffice.
52. A fact central to this case is that the differences might result from discrepancies between the QR-encoded votes and the human-readable votes on BMD printout and/or from misconfiguration, bugs, or malware on the scanners or tabulators. As discussed above, the audit checked none of these things. There is no basis whatsoever to conclude that the differences result entirely from human error without investigating the other possibilities.

is not clear how misclassification of the mode of voting would affect one candidate's totals much more than the other candidates. Regardless, these discrepancies are large and should be investigated, including inspecting the physical ballots.

¹⁷

https://sos.ga.gov/index.php/elections/historic_first_statewide_audit_of_paper_ballots_upholds_result_of_presidential_race, last accessed 10 January 2022.

53. The hand count could easily be more accurate than the machine count. Indeed, it is well known that hand counts of hand-marked paper ballots are often more accurate than machine counts, in part because human readers can interpret light, improper, and ambiguous marks better than machines can, even when the machines are working properly. Similarly, experience in Georgia in 2020 shows that Dominion’s scanner settings (low resolution, black-and-white) can cause voters’ selections not to appear at all in images of ballots, selections that human readers looking at the actual ballots can easily discern.¹⁸
54. Evidence that hand counts are more accurate than machine counts comes from recounts and studies of the “residual vote,”¹⁹ the number of undervotes and overvotes. Hand counts generally find more valid votes than machine counts.²⁰
55. Hand-count error rates are known to depend on many factors, including ballot design, the method for hand counting (“sort-and-stack” versus “read-and-mark”), and the size of each counting team. They presumably also depend on whether there are additional

¹⁸ See, e.g., Judge Amy Totenberg’s Opinion and Order of 11 October 2020 in the present matter, at 4, 30, 95, 101, 103, 114–135.

¹⁹ Ansolabehere, S., and Reeves, A., 2004. Using Recounts to Measure the Accuracy of Vote Tabulations: Evidence from New Hampshire Elections 1946–2002, in *Confirming Elections: Creating Confidence and Integrity Through Election Auditing*, Alvarez, R.M., L.R. Atkeson, and T.E. Hall, eds., Palgrave MacMillan, NY. Alvarez, R.M., D. Beckett, D., and C. Stewart, 2013. Voting Technology, Vote-by-Mail, and Residual Votes in California, 1990–2010. *Political Research Quarterly*, 66(3), 658–670. <https://doi.org/10.1177/1065912912467085>. Alvarez, R.M., L.R. Atkeson, and T.E. Hall, 2013. *Evaluating Elections: A Handbook of Methods and Standards*, Cambridge University Press, NY.

²⁰ See, e.g., Ansolabehere, S., and C. Stewart, 2005. Residual Votes Attributable to Technology. *The Journal of Politics*, 67(2), 365–389. <https://doi.org/10.1111/j.1468-2508.2005.00321.x>; Carrier, M.A., 2005. Vote Counting, Technology, and Unintended Consequences, *St. John’s Law Review*, 79(3), 645–687; Ansolabehere, S., B.C. Burden, K.R. Mayer, and C. Stewart III, 2018. Learning from Recounts, *Election Law Journal*, 17(2), 100–116, DOI: 10.1089/elj.2017.0440

quality control measures in place, such as checking sorted piles of ballots to ensure that each pile really has votes for just one candidate.

56. The study²¹ cited by the Georgia Secretary of State is a laboratory study with 108 subjects and 120 ballots, each containing 27 contests with two candidates. It used three kinds of “ballots”: printout from two kinds of DRE (direct-recording electronic) voting system and an optical scan ballot. The highest error rates were for thermal printout from DREs, which does not resemble Georgia’s BMD printout nor Georgia’s hand-marked paper ballots. The method with the highest error was the “sort-and-stack” tally method that Georgia chose to use in its audit. This study did not observe hand vote tabulation in a real election, nor did it involve BMD summary printout. To my knowledge, there is no study of the accuracy of counting votes from BMD summary printout.

57. Differences between the original count and the machine recount are also large and unexplained. The difference between the two machine counts of Biden’s Absentee votes is almost 3 percent. Absent access to the physical ballots, software, and equipment, it is impossible to know what went wrong, nor whether the differences are primarily attributable to malware, bugs, misconfiguration, or human error.

Pursuant to the Court’s Order (Order Doc. 1322) permitting the supplementation of this report in the context of my engagement concerning the processes, adequacy, and quality of

²¹ Goggin, S.N., M.D. Byrne, and J.E. Gilbert, 2012. Post-Election Auditing: Effects of Procedure and Ballot Type on Manual Counting Accuracy, Efficiency, and Auditor Satisfaction and Confidence, *Election Law Journal: Rules, Politics, and Policy*, 36–51, DOI: 10.1089/elj.2010.0098

Georgia’s audit procedures, Paragraphs 58–84, *infra*, were added in the 9 March 2022 version.

The two machine counts in Fulton County

58. I examined the internal consistency of the two machine counts (the original machine count and the machine recount) in Fulton County. I relied on election data provided in electronic form by Coalition Plaintiffs. I understand those data to be the election management system data for Fulton County for the two machine counts. A declaration from Marilyn Marks attesting to the provenance of the data is attached hereto as Appendix 5. The data include cast vote records, scanned images of ballots and BMD printout, and other files.
59. I analyzed the Fulton County election data using software I wrote, attached hereto as Appendix 6. I also relied on two spreadsheets provided by the Coalition Plaintiffs. Those spreadsheets purport to identify groups of images (among the Fulton County election materials) that appear to be repeated images of the same pieces of paper. I do not know in detail how those spreadsheets came to exist—but as described below, I checked the accuracy of those spreadsheets as part of this report.
60. To confirm that I had received the correct Fulton County election data from Coalition Plaintiffs and that I was reading it correctly, I counted the votes for Donald J. Trump,

Joseph R. Biden, and Jo Jorgensen. For both machine counts, I found the same totals officially reported for Fulton County:²²

Candidate	First machine count	Second machine count
Donald J. Trump	137,240	137,247
Joseph R. Biden	381,144	380,212
Jo Jorgensen	6,275	6,320

61. The number of cast vote records (the voting system’s record of the votes on each ballot or BMD printout card, from which the system tabulates results) in the two machine counts in Fulton County were rather different: 528,776 in the first count and 527,925 in the second count, a difference of 851. To my knowledge, Fulton County has not explained this discrepancy.

62. The number of cast vote records in the two machine counts should be equal.

Differences might occur if (i) some ballots or BMD printout cards were misplaced or found between the two machine counts, so a different number pieces of paper was scanned in the two machine counts; (ii) malware, bugs, misconfiguration, or a bad actor added, deleted, or altered records in the election management system in one or both machine counts; (iii) Fulton County did not scan every validly cast ballot or BMD printout card exactly once in each machine count. Below, I present compelling evidence that (ii) or (iii) is true, but all three possibilities could be true simultaneously. In particular, without further discovery, it is impossible to rule out any of the possibilities.

²² First machine count results: <https://results.enr.clarityelections.com/GA/Fulton/105430/web.264614/#/summary> (last visited 8 March 2022) Second machine count results: <https://results.enr.clarityelections.com/GA/107231/web.264614/#/detail/5000?county=Fulton> (last visited 8 March 2022)

63. Fulton County did not produce the image file corresponding to every cast vote record.

For the first machine count, production included images of ballots or BMD printout cards for only 168,726 of the 528,776 cast vote records: 376,863 image files are missing. For the second machine count, Fulton County's production included images of ballots or BMD printout cards for 510,073 of the 527,925 cast vote records: 17,852 image files are missing.

64. Entire batches of images are missing from Fulton County's production, for example, images from Scanner 801 batch 117 and Scanner 801 batch 118 are referred to in the cast vote records for the second machine count but the images were not among the electronic records. Without additional discovery it is impossible to determine whether the missing images are missing because of human error, programming errors (bugs), or malware in Fulton County's election management system (EMS). Of course, those possibilities are not mutually exclusive.

65. It is nonetheless possible to use the produced images to show that Fulton County's election results included many votes more than once in the reported tabulations. The full extent of this multiple-counting problem cannot be determined without additional discovery, but there is ample evidence that it added thousands of bogus votes to the reported machine-count results. That is, thousands of Fulton County voters' votes were included in the reported totals more than once. From the production so far, it is not possible to determine conclusively whether any voter's votes were omitted from the reported totals.

66. I now describe how I established that some votes were included in the reported totals more than once.

67. Repeatedly scanning the same piece of paper generally does not produce images that are bitwise identical, because of variations in the alignment of the paper, illumination within the scanner, dirt on scanner lenses, etc. Similarly, a single scan can be altered digitally to produce multiple images that look similar but are not bitwise identical.
68. Small variations in voters' marks (e.g., not filling an oval completely or straying outside the oval) on hand-marked paper ballots generally make it possible to tell whether two separate scans of hand-marked paper ballots that contain the same votes are scans of the same physical ballot.
69. It is not generally possible to tell whether two 200dpi black-and-white scans of BMD printout cards are scans of the same piece of paper simply by looking at those two scans, because BMD printout cards containing the same votes look the same at low resolution in black-and-white.²³ However, if both scans contain a rare write-in name or rare combination of write-in names, that is evidence of a duplicate. Similarly, if a series of votes is repeated in in the same order (or reverse order) in different scan batches of BMD printout, that is also evidence that they are repeated images of the same collection of paper. If the duplicated (or reversed) vote sequences are long and include rare write-in names, the evidence that they are scans of the same physical pieces of paper is particularly compelling.
70. As mentioned in paragraph 46, *supra*, I understand that plaintiff Donna Curling votes in Fulton County precinct RW01. In one of the spreadsheets mentioned in paragraph

²³ A sufficiently high-resolution scan might make it possible to identify differences in the arrangement of the paper fibers. See W. Clarkson, T. Weyrich, A. Finkelstein, N. Heninger, J. A. Halderman and E. W. Felten, 2009. Fingerprinting Blank Paper Using Commodity Scanners, *2009 30th IEEE Symposium on Security and Privacy*, 301–314, doi: 10.1109/SP.2009.7

58, *supra*, Coalition Plaintiffs identified 12 hand-marked ballots from Fulton County precinct RW01 that were scanned twice in the first machine count (the original election). The pairs of images are listed in the table below. The format of the numbers is

[scanner number]_[batch number]_[image number].

pair	Image A	Image B
1	05162_00234_000096	05162_00235_000057
2	05162_00234_000093	05162_00235_000054
3	05162_00234_000074	05162_00235_000036
4	05162_00234_000072	05162_00235_000034
5	05162_00234_000068	05162_00235_000030
6	05162_00234_000069	05162_00235_000031
7	05162_00234_000054	05162_00235_000014
8	05162_00234_000031	05162_00235_000090
9	05162_00234_000026	05162_00235_000085
10	05162_00234_000017	05162_00235_000076
11	05162_00234_000013	05162_00235_000072
12	05162_00234_000014	05162_00235_000073
13	05162_00234_000003	05162_00235_000062
14	05162_00234_000001	05162_00235_000060

71. I wrote a program to display ballot images of ballots side by side to check whether they look the same. The software is in Appendix 6. Appendix 7 shows these 14 pairs of repeated images. I confirmed that they are indeed duplicated scans by visually matching slight irregularities in the voters' marks in each pair.
72. Coalition Plaintiffs identified at least three BMD cards from precinct RW01 that each appear to have been scanned twice in the machine recount in RW01, based on the votes and the order in which they were scanned in two batches. In particular, Scanner 801, batches 43 and 44—both comprising scans of advance in-person BMD printout cards—start with images of 214 BMD cards that appear to be the same in both batches: the same sets of votes in the same order. The two batches were scanned within about five minutes of each other, according to the timestamps in the images.

Many of the images show write-in votes²⁴ or votes for third-party candidates, further evidence that the similarity was no coincidence. I visually inspected²⁵ all 214 pairs and confirmed that they match: compelling evidence that those BMD cards were scanned twice in the machine recount. The other 211 (214–3=211) duplicated scans are of BMD cards from other precincts in Fulton County.

73. Coalition Plaintiffs also identified one hand-marked paper ballot that was scanned twice in RW01 in the machine recount, and at least seven hand-marked paper ballots that were scanned thrice in RW01 in the machine recount. I used the software in Appendix 6 to check their work: the twenty-nine images indeed seem to represent only eleven distinct pieces of paper, even though they contributed twenty-nine votes to some contests, including the presidential contest. Appendix 8 shows the sets of images. The table below lists the pairs and triples.

Multiple	Image A	Image B	Image C
1	00801_00044_000168	00801_00043_000168	
2	00801_00044_000083	00801_00043_000083	
3	00801_00044_000042	00801_00043_000042	
4	05160_00074_000023	05160_00067_000008	
5	00794_00017_000024	00791_00026_000091	00791_00019_000010
6	00794_00017_000029	00791_00026_000086	00791_00019_000015
7	00794_00018_000001	00791_00026_000009	00791_00019_000092
8	00794_00018_000011	00791_00026_000019	00791_00019_000082
9	00794_00019_000002	00791_00026_000079	00791_00019_000022
10	00794_00019_000005	00791_00026_000076	00791_00019_000025
11	00794_00019_000006	00791_00026_000075	00791_00019_000026

²⁴ Write-ins included votes for “Anyone,” “XXX,” “Willie Nelson,” and “Alexander Hamilton,” as well as write-in votes for “Donald Trump” for District Attorney, Clerk of the Superior Court, Tax Commissioner, Sheriff, Solicitor General, and Surveyor.

²⁵ I used the software in Appendix 6 to facilitate the process.

74. To confirm that the duplicate and triplicate images were included in the reported vote tabulation, I searched the cast-vote records (CVRs) produced by Fulton County for each image identifier among the duplicates and triplicates of images of RW01 ballots and BMD printout cards. All twenty-four from the original count and all twenty-nine from the machine recount were among the CVRs. I conclude that the duplicate and triplicate votes were included in the reported machine tabulations, since the vote totals derived from the CVRs agree with the reported vote totals, as mentioned in paragraph 60, *supra*.
75. For Fulton County as a whole, Coalition plaintiffs gave me a list that identified images of 2,871 ballots and BMD printout cards that they believe were counted two or three times in the second machine count. Some were identified by visual inspection of the images; others were inferred to be duplicates because a sequence of cast vote records was identical (or reversed) for long portions of two scan batches. As mentioned in paragraph 72, *supra*, I confirmed that 214 of the purported duplicate scans of BMD cards were indeed duplicates. I understand that this list of 2,871 are a sample from a larger list of images of ballots and BMD printout cards that Coalition Plaintiffs assert were included in the tabulation twice or more. I confirmed that all 6,118 images in question were referenced in cast vote records in the second machine count, so all presumably contributed to the tabulation.
76. Nine hundred sixteen (916) of the 2,871 sets of images were identified as images of hand-marked paper ballots. I drew a random sample of 100 of those 916 using software in Appendix 6. I set the seed for the pseudo-random number generator using

ten rolls of ten-sided dice. Appendix 9 is an image of the dice with the digits they showed, in order: 8, 6, 2, 8, 9, 2, 2, 1, 8, 4.

77. Of the 100 sets of images in the sample, 46 contained triplicate images.
78. I examined the sets of images visually, aided by software in Appendix 6. I agreed with the Coalition Plaintiffs' determination for 98 of the 100 sets. I disagreed with the determination for one of the sets, and I was unable to verify one set. To be conservative, I treat this as 98 agreements in 100 checks. The resulting 95 percent lower confidence bound for the number of hand-marked paper ballots represented by two or more scans is 891 ballots. That is, there is 95 percent statistical confidence that at least 891 of the 918 claimed multiples are genuine multiples.
79. I did not have time to examine more purported replicate images of BMD printout beyond the 214 mentioned in paragraph 72, but I might examine more before trial.
80. Based on the observations in paragraphs 58 through 78, *supra*, it seems that Fulton County did not keep track of which ballots and BMD cards had been scanned and which had not, in both the original count and in the machine recount. Alternatively or additionally, the electronic records were altered accidentally or intentionally. The electronic records of the election are not intact. This is a surprising lack of tracking and protecting election materials: the most basic election safeguard is to check whether the number of voters who participated is equal to the number of ballots and BMD printout cards that were cast and to the number that were tabulated. Moreover, I would expect all electronic election materials to be backed up onsite and offsite, at least for the federally mandated retention period of twenty-two months, so the loss of

hundreds of thousands of image files from the first machine count and of nearly 18,000 images from the second machine count is hard to fathom.

81. Fulton County would have noticed these errors had they simply kept track of ballots and BMD printout cards and checked the total number against the number reported in the electronic tabulation. It seems that Fulton County does not know how many ballots and BMD printout cards were cast in the election, how many voters cast votes, or how many pieces of paper were scanned—nor how those numbers compare to each other. Absent basic ballot accounting, pollbook reconciliation, and counting of electronic records, it is unsurprising that the two machine tallies differ so much (see the table below paragraph 47, *supra*). The U.S. Election Assistance Commission has published best practices for chain of custody.²⁶
82. Fulton County’s chaotic, unaccountable curation and processing of cast ballots, cast BMD printout, and electronic records make a true risk-limiting audit impossible. It is unreasonable for voters to trust that their votes were counted at all, much less counted correctly. Voters have good reason to believe that some votes counted more than others: some votes were included twice or thrice in the totals. There is no way to know how many votes were omitted from the tabulation, absent access to the physical ballots and BMD printout and evidence that the chain of custody is intact. From the records produced so far, it is impossible to determine whether malware, bugs, misconfiguration, or malfeasance disenfranchised voters or altered the election results.

²⁶ https://www.eac.gov/sites/default/files/bestpractices/Chain_of_Custody_Best_Practices.pdf (last visited 9 March 2022)

83. Based on my review of the Fulton County post-election audit, it is clear that the audit planning, process, and controls did not detect the double and triple counting documented above. Even if Fulton County did not rely on ballot-marking devices for virtually all in-person voters, the lack of basic accounting controls makes it impossible to determine who really won an election contest, even by hand counting the votes: the record of the vote could easily be incomplete or adulterated. This remains true even if BMDs could be relied upon to print voters' selections accurately.
84. I have no reason to believe that problems of the kinds described above are limited to Fulton County, but because of time constraints, I have not yet investigated other counties. I might examine data from other Georgia counties before trial, including comparing the tabulations based on images and cast-vote records to the ABBSs, other RLA workpapers, and reported results.

The paragraphs below were in the version of this report submitted 11 January 2022, but they have been renumbered.

Summary

85. A rigorous audit can provide confidence that a well-run election found the true winner(s). But it cannot compensate for using untrustworthy technology to record votes or for a poorly run election; in such circumstances, it distracts attention from the real problems rather than improving election integrity and justifying confidence in electoral outcomes. Absent a trustworthy record of the votes, no procedure can provide affirmative evidence that the reported winner(s) really won. Georgia lacks such a

record, for many reasons, including the heavy reliance on BMDs and the lack of physical accounting of ballots, memory cards, and other election materials; lack of pollbook and voter participation reconciliation; etc.

86. By claiming to perform risk-limiting audits when its paper trail is not trustworthy, the State of Georgia is in effect adding stories to a building that needs its foundation replaced. First things first.

87. To provide reasonable assurance that every voter's selections are counted and counted accurately requires systematic improvements to how Georgia conducts elections:

a) For every voter to be assured the right to cast an accountable vote, every voter should have the opportunity to mark a ballot by hand, whether voting in person in advance, in person on election day, or absentee by mail.

b) The use of ballot-marking devices should be reduced to a minimum, for reasons I have explained in previous declarations. In particular:

i. BMDs do not necessarily print voters' selections accurately. They can be hacked or misconfigured, as explained in Prof. J. Alex Halderman's testimony.

ii. A growing body of empirical work shows that few voters check the BMD printout, and those who do rarely catch errors.

iii. There is no way for a voter to prove to an election official or anyone else that a BMD malfunctioned. Hence, there is no way to "close the loop" to ensure that malfunctioning devices are removed from service, even if some voters notice BMDs misbehaving. And even if a device is caught misbehaving, there is no way to reconstruct the correct election outcome.

- iv. There is no way to test BMDs adequately prior to, during, or after an election to establish whether they altered votes, even if they altered enough votes to change electoral outcomes.²⁷
- c) Georgia must implement better procedures and checks on chain of custody of election materials, especially voted ballots. Currently, Georgia is not in a position to determine whether every validly cast ballot was included in the reported results, nor whether there was electronic or physical “ballot-box stuffing” or votes were altered.²⁸ Georgia needs better protocols for using and checking physical security seals on ballots and voting equipment—and demonstrating that it has followed those protocols. It needs to perform routine scrutiny of custody logs and surveillance video, and to institute other related security measures.
- d) Internal consistency checks and physical inventories must be performed as part of Georgia’s canvass, including, among other things:
- i. Verifying that the number of ballots sent to each polling location (and blank paper stock for ballot-marking devices and ballot-on-demand printers) equals the number returned voted, spoiled, or unvoted. This must

²⁷ See note 8, *supra*.

²⁸ This is evidenced by the fact that the 2020 audit found thousands of untabulated ballots. See note 14, *supra*. Per the Secretary of State’s office, “[t]he audit process also led to counties catching making mistakes they made in their original count by not uploading all memory cards.” https://sos.ga.gov/index.php/elections/historic_first_statewide_audit_of_paper_ballots_upholds_result_of_presidential_race, last accessed 9 January 2022. Because of Georgia’s inadequate physical accounting for voting materials, there is no way to know how many more votes validly cast in that election have not been included in any of the reported results. Moreover, the lax recordkeeping evidently resulted in scanning the same batches of ballots more than once. Similarly, some ABBSs were presumably entered more than once, and as shown above, some were not entered at all.

- be a physical check based on manual inventories, not on reports from the voting system.
- ii. Checking pollbooks and other voter participation records against the number of voted ballots received, including checking whether the appropriate number of ballots of each “style” were received.
 - iii. Checking whether the number of electronic vote records (“scans” and cast-vote records) agrees with the physical inventory of ballots of each style.
- e) Georgia should conduct routine “compliance” audits, a necessary precursor to conducting risk-limiting audits. For a list of what compliance audits should include, see, for example, Appel, A., and P.B. Stark, 2020. Evidence-Based Elections: Create a Meaningful Paper Trail, Then Audit, *Georgetown Law Technology Review*, 4, 523–541.
- f) Georgia should conduct routine, genuine,²⁹ risk-limiting audits of *every* contested race in every election. The audits must have the ability to correct the reported outcome if the outcome is wrong, before the outcome is certified. I understand that under current Georgia law, audits take place only every other year, for only one contest, and cannot change electoral outcome or trigger a recount—even if the audit finds that the outcome is wrong. No matter how rigorous an audit is, an audit of one or more contests provides no evidence that the outcome of any unaudited contest is correct. Errors and malware may affect some contests but not others.

²⁹ The pilots of RLA procedures in Georgia were not genuine RLAs, nor was the “full hand-count audit.”

g) A genuine RLA requires far more than Georgia has yet attempted. First and foremost, it requires a trustworthy record of voter intent. Georgia's records are untrustworthy for a range of reasons, starting with the fact that all in-person voters are expected or required to use ballot-marking devices (BMDs). As discussed at length in previous declarations and in testimony by Prof. Andrew Appel and Prof. J. Alex Halderman, BMD printout is not a trustworthy record of the vote. There are also issues with Georgia's verification of voter eligibility and voter participation. But even if every voter used a hand-marked paper ballot and there were no issues with voter eligibility, Georgia simply does not keep track of their election materials well enough. As discussed in my previous declarations, the foundation for a risk-limiting audit is a *ballot manifest*, a physical inventory of the paper ballots describing in detail how they are stored. This must be derived without reliance on the voting system; otherwise, the audit is trusting the voting system to check itself. For example, if there are ballots that were never scanned or scans that were never uploaded (as discovered during the 2020 "audit"), they will be missing from a manifest derived from voting system reports. The ballot manifest must be based on physical inventories of the ballots, keeping track of where the ballots are and how they are organized. Absent that, it is impossible to account for votes reliably, and impossible to limit the risk that an incorrect electoral outcome will be certified: applying risk-limiting audit procedures to an untrustworthy collection of ballots is "security theater."

88. There are additional checks that could be performed to determine the root cause of the discrepancies among the first machine tabulation, hand count, and machine recount. Those checks require access to the physical ballots (for instance, to determine whether

every scan batch from the tabulators reflects a distinct collection of actual physical ballots) and access to the tabulators, software, and servers (by other experts in this matter).

89. I would like to supplement my report once the Plaintiffs have had the opportunity to review materials that Defendants have not yet produced or provided access to, including ballots, and to review Plaintiffs' experts' reports once they have inspected the hardware and software used in the November 2020 election.

I declare under penalty of perjury, in accordance with 28 U.S.C. § 1746, that the foregoing is true and correct.

Executed on this date, ~~11 January 2020~~ 9 March 2022,



Philip B. Stark