

# **Expert Report of Bryan Geels, CPA**

**In the Matter of  
*Trump v. Raffensperger*  
Fulton County - 2020 CV 343255**

## **Introduction**

I am an expert witness on behalf of the Petitioners in the above captioned proceeding. I have been retained to review and evaluate the State of Georgia's (the "State") publicly available voter files from the November 3, 2020, Presidential Election (the "Contested Election") and to provide my expert opinions regarding the validity of votes cast in the Contested Election and regarding whether there are sufficient voting irregularities to place the results of the Contested Election in doubt. This report and the exhibits attached hereto contain my relevant opinions and an outline of the factual basis for these opinions. The facts and opinions contained herein are based on the information I reviewed prior to preparation of this report, as well as my professional experience as an established data analytics and risk assessment expert.

## **Scope of review**

In connection with this engagement and the preparation of this report, I (and individuals in my firm under my direct supervision and direction) have performed an independent examination of pleadings, publicly accessible documents, and data sets, including official State voter records, address records maintained by the United States Postal Service ("USPS"), and other official State records obtained through open records requests. This information is consistent with that generally used and relied upon by experts in my field. In addition, I have performed independent research and had conversations State election officials to gain a deeper understanding of the State's data protocols, election code, and conduct in administering the Contested Election.

## **Professional Background**

Throughout my career as a Certified Public Accountant (CPA), where I practiced public accounting as an auditor, I have developed advanced skills in business compliance, risk assessments, control environments, and data analytics. See **Exhibit 1** for my curriculum vitae. I have performed hundreds of financial statement audits as well as scores of Service Organization Controls (SOC) attest examinations. I have identified issues and findings using data analytics techniques over how an election was administered by a voting vendor for a non-profit organization. I have discovered previously undiscovered fraudulent transactions using an account combinations data analytics routine and was a presenter on the topic at the 2020 IDEA Innovations Conference. I successfully performed data analytics routines on applicable audits often throughout my career. These data analytics routines have been widely accepted by peers and colleagues as efficient and effective procedures. I taught internal data analytics courses to my peers at a top 5 national accounting firm. I leveraged my success in public accounting to launch my own advisory firm, Geels Consulting, an entity which helps organizations discover insights in their data to improve operations and compliance with internal policies and internal controls. I am a licensed Certified Public Accountant (CPA), a Certified IDEA Data Analyst (CIDA), and I graduated with a double major in accounting and information systems from Dordt University, a private university in Sioux Center, IA. I am familiar with accessing files on the internet, including those provided by state and federal governments. I have years of experience working with zip files, Microsoft Excel spreadsheets, Power Query, Power BI, and SQL code from my career as an auditor.

## **Responsibilities in this Matter**

I have been retained on behalf of Petitioners to assess voter irregularities and evaluate the validity of the results in the Contested Election. My specific responsibilities include:

- identifying and gathering the requisite data to analyze the Contested Election;
- assessing the quality of the data;
- conducting various analyses on the data, based on the generally accepted standards of experts in my field, to assess the validity of individual votes, as well as to identify statistically significant irregularities in the overall results;
- reviewing the work of other experts retained in this matter to validate their analyses and determine the significance of their results; and
- providing written opinions based on my findings.

### **Methods Followed**

During my work on this matter, I followed the 5 Step Approach that is detailed in the AICPA’s Guide to Audit Data Analytics for this analysis (<https://future.aicpa.org/cpe-learning/publication/guide-to-audit-data-analytics>): (1) Plan the analysis, (2) Access and prepare the data for purposes of the analysis, (3) Consider the relevance and reliability of the data used, (4) Perform the analysis, and (5) Evaluate the results and conclude on whether the purpose and specific objectives of performing the analysis have been achieved.

Plan the Analysis: The first step is to gain an understanding of the goals and objectives for the analysis, make a plan for the analysis, gain an understanding of the systems containing the data and the tools that are necessary for the analysis, and decide whether the system data is relevant to the analysis and if the planned analysis steps will achieve the necessary objectives. For this analysis, I consulted materials on the Georgia Secretary of State’s website to gain an understanding of the voting rules and safeguards in place in Georgia (the “Election Code” or “Code”). Using this knowledge, I created a list of various data routines that were designed to help validate that the Secretary of State’s official voting data conforms with the State’s Election Code. Second, I gained

an understanding of the data available on the Georgia Secretary of State’s website by reviewing the tables and fields that were available and clarifying any questions that I had about the data with an employee in the Secretary of State’s office. I concluded that the planned analysis steps were suitable to achieve the objectives.

Access and Prepare the Data: The second step is to access the data from the identified source systems and get the data ready for the analysis. For this analysis, I accessed the data via the relevant websites. See “Data Sets Considered” section for a detailed list of datasets that were accessed.

Relevance and Reliability of the Data: The third step is to assess the relevance and reliability including completeness and accuracy considerations and to ensure the data is relevant and reliable for the planned analysis steps. I assessed relevance and reliability by checking completeness and accuracy of the source data that was imported into the analysis model, such as verifying that the row counts in the data model matched the source tables. For purposes of my analysis and drawing conclusions therefrom, I presume the data from official government sources—notably the Secretary of State’s official voter data used to administer the Contested Election—to be true and accurate.

Perform Analysis: The fourth step is to perform calculations necessary for the analysis. The analysis steps performed are detailed in the “Analysis” section of this report.

Evaluate Results: The fifth step is to make conclusions about the analysis performed and determine whether the planned objectives were achieved. The steps performed are detailed in the “Analysis” section of this report.

The primary tool used for the analysis was Microsoft Power BI. Microsoft Power BI is a widely used business analytics service by Microsoft which provides interactive visualization and

business intelligence capabilities with a simple interface. Power BI has been widely used in data driven organizations since 2014. In this analysis, Power BI was used to perform mathematical calculations on the data and to reorganize it into a suitable format for each analysis. Apache Spark was used for the large-scale data processing tasks that required API calls to the web. Apache Spark is an open-source computer programming framework which allows users to use the programming language of their choice to perform computations. Apache Spark was primarily used to facilitate moving data from official text files to the API tool using Python and SQL computer programming languages. Apache Spark is widely used by many Fortune 500 companies for big data projects.

In conducting my analysis, no data was altered or otherwise manipulated.

### **Compensation**

Fees for services in this matter have been charged, to date, based upon a standard hourly rate of \$250 per hour, depending of the level of staff utilized, plus out-of-pocket expenses, if any. My compensation is not contingent on the outcome of this matter. I was not told what opinion, if any, I was supposed to have, nor is my compensation conditioned on what opinions I reached herein. All work done for this report was performed utilizing due care and performed under my direct supervision.

### **Summary of Opinions**

Based on my education, training, skill, and professional experience as a professional accountant and an established data analytics and risk assessment expert, and through my fact finding and analysis of the Georgia Secretary of State's voter databases and other data, I have developed opinions regarding whether certain sets of voters identified in the State's voter database were actually qualified to vote on Election Day; opinions that certain sets of votes should be rejected unless additional information is provided to prove the votes were valid, that certain sets

of votes should be further investigated to determine vote validity; opinions regarding the quality of the data that the Georgia Secretary of State and election officials relied upon to administer the Contested Election; an opinion regarding the validity of the rejection rate of absentee ballots in the Contested Election; and (based on the 11,779-vote margin separating President Trump from former Vice President Biden according to the State's certified results (see <https://results.enr.clarityelections.com/GA/107231/web.264614/#/summary>)), an overall opinion that the results of the Contested Election are in doubt.

### **Restriction**

This report summarizes my initial analysis, observations, conclusions, and opinions based upon the work I have performed to date. I understand that discovery may still be ongoing and additional information may be produced. Accordingly, I reserve the right to amend or supplement my report and/or findings on the basis of further information obtained prior to the time of trial or in order to clarify or correct the information contained herein. The attached exhibits and accompanying notes to the schedules are an integral part of this report. This report is not intended for general circulation or publication.

### **Data Sets Considered**

I reviewed the following documents and data in arriving at my opinions:

- a. The 2016 Voter Registration File (maintained by Georgia's Secretary of State) - contains the full record of all voters who were registered to vote in the 2016 General Election. The 2016 Voter Registration file was timestamped 5/10/2017.
- b. The 2020 Voter Registration File (maintained by Georgia's Secretary of State) - contains the full record of all voters who were registered to vote in the 2020 General Election. The 2020 Voter Registration file was timestamped 10/27/2020.

- c. The 2020 Voter History File (maintained by Georgia's Secretary of State) - contains the full record voters who cast a vote in the 2020 General Election. The version of the file used was timestamped 11/28/2020.
- d. The 11/3/2020 Absentee Early Voting File (maintained by Georgia's Secretary of State) - contains records of all voters in the State who voted absentee by mail or early in person, in the 2020 General Election. The data constitutes official records which are public and publicly available online. The version of the file used was timestamped 11/16/2020.
- e. The 6/9/2020 Absentee Early Voting File (maintained by Georgia's Secretary of State) - contains records of all voters in the State who voted absentee by mail or early in person, in the 2020 Primary Election. The data constitutes official records which are public and publicly available online. The version of the file used was timestamped 7/3/2020.
- f. The 11/6/2018 Absentee Early Voting File (maintained by Georgia's Secretary of State) - contains records of all voters in the State who voted absentee by mail or early in person, in the 2018 General/Special Election. The data constitutes official records which are public and publicly available online. The version of the file used was timestamped 1/3/2019.
- g. The 11/8/2016 Absentee Early Voting File (maintained by Georgia's Secretary of State) - contains records of all voters in the State who voted absentee by mail or early in-person, in the 2016 General Election. The data constitutes official records which are public and publicly available online. The version of the file used was timestamped 11/13/2018.

- h. An official list containing information from death certificates for individuals who died in the State in the calendar year 2020 (the “Deceased Individuals File”). This file was obtained through an open records request with the Georgia Department of Public Health (GDPH).
- i. An official list of incarcerated felons in the State (the “Felons File”). This file was obtained through an open records request with the Georgia Department of Corrections (GDOC).
- j. SmartyStreets US Street Address API call, as maintained by SmartyStreets, an industry standard address validation tool and an official Coding Accuracy Support System (CASS)-certified USPS vendor. Using SmartyStreets, a user provides a bulk list of addresses to SmartyStreets, and SmartyStreets returns official USPS data for addresses that match to valid postal addresses.
- k. A list of postal facilities and their location addresses. Postal facilities addresses were downloaded from the respective websites of USPS, UPS, FedEx, PakMail, Anytime Mail, and Postnet. These locations were verified visually using Google Maps.

The data sets in paragraphs a through g above constitute official government records which are publicly available online on the Georgia Secretary of State’s website. The data sets in paragraphs h and i are also available to the public through open records requests. The dataset in paragraph j is from a USPS-certified, industry standard, enterprise level address validation tool which is available for use with a subscription to the service. According to SmartyStreets, “SmartyStreets is an official CASS-certified USPS vendor. The Coding Accuracy Support System (CASS) enables the USPS to evaluate the accuracy of software that corrects and matches street addresses.” The data set in paragraph k is publicly available from respective websites.

Once downloaded, the data was moved to a secured cloud file server for storage. It was not altered or otherwise manipulated in any way. The following software applications were used to create data models and queries needed for analysis: Apache Spark (with Python and SQL programming languages) and Microsoft Power BI.

## **Analysis**

### **Section I: Categories of Voting Irregularities in the Contested Election**

As more fully described below (and in the summary in **Exhibit 2**), I analyzed voter data from the Contested Election that was housed and maintained by official State sources and, where indicated, compared that data to other data sets to draw conclusions about voters in the Contested Election. I categorized data sets that contained votes that, in my expert opinion, were not consistent with the State's Election Code and/or showed significant risk of illegal voting in the Contested Election. The data reviewed was grouped into "categories" of irregularities based on the unique analysis performed. All vote totals listed below represent individuals whose ballots were accepted and whose votes were included in the State's election results, unless otherwise indicated. Based on my analysis of each category, I reach the following conclusions:

**Category (1): PO Box as Residential Address.** At least 907 individuals voted in the Contested Election who were registered using residential addresses that are, in fact, PO boxes.

**Category (2): Vacant Mailing Address.** At least 2,326 individuals who voted absentee by mail in the Contested Election used mailing addresses that are listed as "vacant" by the USPS.

**Category (3): Vacant Residential Address.** At least 18,325 individuals voted in the Contested Election who were registered using residential addresses that are listed as "vacant" by the USPS.

**Category (4): Non-permanent Residential Address.** At least 1,377 individuals voted in the Contested Election who were registered using courthouses, churches, or hotels as their permanent residential address.

**Category (5): Suspicious Pre-2016 Registration.** At least 86,880 individuals voted in the Contested Election who the State lists in its 2020 Voter Registration File as having registered prior to the 2016 General Election, but who are not listed in the State's 2016 Voter Registration File. If a voter was not registered to vote in the last election, he or she should not show a registration date that is prior to the last election.

**Category (6): Missing Registration.** At least 4,502 individuals voted in the Contested Election who do not appear in the State's 2020 Voter Registration File.

**Category (7): Excessively Early Application.** At least 305,701 individuals voted in the Contested Election who requested their ballots more than 180 days prior to the 2020 General Election (i.e., prior to 5/6/2020), potentially in excess of the statutory maximum. The Election Code permits narrow exceptions to this rule, the applicability of which to this voter population cannot be determined from the data provided to the public by the Georgia Secretary of State.

**Category (8): Excessively Early Ballot Issuance.** At least 2,664 individuals voted in the Contested Election to whom the State issued absentee mail-in ballots prior to the earliest possible date allowed under the State's Election Code (i.e., September 15, 2020).

**Category (9): Same-day Mail-in Ballot Application, Issuance, Return and Acceptance.** At least 217 individuals voted in the Contested Election who, according to the State's records, applied for an absentee mail-in ballot by mail, received the absentee ballot by mail, returned the absentee ballot by mail, and whose absentee ballot was accepted by the State all on the same day.

**Category (10): Late Registration.** At least 142 individuals voted in the Contested Election who, according to the State's records, did not register to vote until after the State's voter registration deadline (October 5, 2020).

**Category (11): Ballot Acceptance Precedes Issuance.** At least 92 individuals voted in the Contested Election whose ballots the State accepted prior to the date the State records as having issued them.

**Category (12): Ballot Acceptance Precedes Earliest Mailing Date.** At least 50 individuals voted in the Contested Election whose ballots the State accepted prior to the earliest possible date the State was permitted to mail them under the Election Code (i.e., September 15, 2020).

**Category (13): Ballot Issuance Precedes Ballot Application.** At least 29 individuals voted in the Contested Election to whom the State issued absentee ballots prior to receiving the voters' applications for those ballots.

**Category (14): Ballot Application Precedes Registration.** At least 13 individuals voted in the Contested Election who, according to the State's records, applied for a ballot before they were registered to vote.

**Category (15): Voted Outside Legal Window.** At least 10 individuals voted in the Contested Election whose early, in-person ballots the State records as having accepted outside the timeframe for early voting in Georgia.

**Category (16): Ballot Acceptance Despite Ballot Application Rejection.** At least 2 individuals voted in the Contested Election whose votes were accepted but whose ballot applications were rejected, according to the State's records.

**Category (17): Underage Registrations.** At least 2,047 individuals voted in the Contested Election who, according to the State's records, were registered to vote prior to their 17th birthday, below the minimum age permitted under the Election Code.

**Category (18): Inconsistent Voter Birth Records.** At least 2,525 individuals voted in the Contested Election whose birth years were different in the State's 2016 Voter Registration File than the State's 2020 Voter Registration File.

**Category (19): Voters Over 105 Years of Age.** At least 134 individuals voted in the Contested Election who, according to the State's records, were over 105 years old.

**Category (20): Potential Deceased Voters.** As many as 10,315 individuals voted in the Contested Election who, according to the State's records, died prior to November 3, 2020, based on a match of the voters' full name and birth year.

**Category (21): Potential Felon Voters.** As many as 2,560 individuals voted in the Contested Election who, according to the State's records, were incarcerated felons, based on a match of the voters' full name and birth year.

**Category (22): Incorrect Voter Identification.** At least 4 individuals voted in the Contested Election whose names in the State's 11/3/2020 Absentee Early Voting File matched to the wrong person in the 2020 Voter Registration file, based on a match of the voters' unique voter identification number.

**Absentee Mail-in Ballot Rejection Rates.** The data also revealed an average rejection rate for mail-in ballots of 0.34% for the 2020 General Election. This rate is in stark contrast to the average rejection rate for mail-in ballots for the 2016 and 2018 general elections of 2.91% and 3.47%, respectively. The 0.34% rejection rate in 2020 represents an approximate 90% decrease in the rate of mail-in ballot rejections compared to the 2016 and 2018 general elections. The 0.34%

rejection rate appears to be the lowest mail-in ballot rejection rate in the history of the State of Georgia, despite an increase of over one million mail-in ballots to an all-time historic high.

## **Section II: Analysis of Voter Irregularities**

Based upon my analysis as detailed further below, I have formed the following opinions to a reasonable degree of scientific certainty. These opinions are summarized in “Table 1: Illegal Vote Totals, Presuming State of Georgia Election Data is Reliable.” First, 97,382 votes in the Contested Election should not have been accepted in the State’s total vote count. I derive this number by adding the totals from the irregularities that show sets of voters whose registrations, applications, and/or votes were inconsistent with Georgia law.<sup>1</sup> Second, 19,702 votes should not have been accepted in the State’s total vote count, unless other evidence is provided to verify the validity of the votes. It is likely that these voters do not reside at the addresses used to register to vote, or they were not registered to vote at all in the Contested Election. Third, 2,264 votes should be examined for error/invalidity and the specific risks further reviewed. Fourth, the remaining categories of irregularities (i.e., categories 18-22, which contain hundreds of thousands of votes) require further scrutiny, as the data reviewed is not specific enough to draw definitive conclusions about the voters within those categories. **Based on these findings, it is my opinion that the number of illegal votes exceeds the margin of victory, thereby placing the outcome of the Contested Election in doubt.**

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<sup>1</sup> For each of the categories identified, I have aggregated, summarized, and cross-referenced vote counts by Voter ID in each category to prevent counting the same voter twice.

## A. Categories of Irregular Votes That Should Be Rejected

### Category (1): PO Box as Residential Address

According to the State's official voting records, at least 907 individuals voted in the Contested Election who were registered using residential addresses that are, in fact, PO boxes.

Per Georgia OCGA § 21-2-217(a)(1), the residence of a person is in the place where that "person's habitation is fixed, without any present intention of removing therefrom." Per the Georgia Secretary of State's Voter Registration Rules and Procedures Manual ([https://sos.ga.gov/admin/files/Voter\\_Registration\\_Rules\\_and\\_Procedures\\_Manual\\_IO\\_v\\_2\\_2011.pdf](https://sos.ga.gov/admin/files/Voter_Registration_Rules_and_Procedures_Manual_IO_v_2_2011.pdf)), "A person must only register to vote in the county in which he or she lives. A house number and street name must be provided. Business addresses, P.O. boxes, and rural routes are not accepted as residential addresses for voter registration purposes." The Georgia voter registration form makes clear that one must reside at the address provided on the form ([https://sos.ga.gov/admin/files/GA\\_VR\\_APP\\_2019.pdf](https://sos.ga.gov/admin/files/GA_VR_APP_2019.pdf)). The Federal Assistance Voting Program is unequivocal: "You cannot use a post office box mailing address." (<https://www.fvap.gov/guide/chapter2/georgia>).

From the Postal Facilities Match file (**Exhibit 3**), based on matches between the residential address in the 11/3/2020 Absentee Early Voting File and lists of addresses of postal facilities, it is my opinion, to a reasonable degree of scientific certainty, that there were at least 907 votes counted in the Contested Election whose residence was listed as an address of a postal facility or PO Box. 907 is the absolute floor of possible matches within the absentee early voter population based on the conservative address matching methodology that was used. Each unique address (Street #, Street Name, City, and State) in the file was matched to a name and address in the State's 11/3/2020

Absentee Early Voting File, and the addresses were visually validated to be an address of a postal facility via a Google Maps search.

The number of invalid postal facility addresses would increase if the analysis were expanded to include an address matching methodology to flag addresses that are the same, but have variations in spelling (i.e. ST vs. Street, Ave vs. Avenue, etc.). Here, only exact address matches were flagged as matches.

For 173 of the records, the nature of the address was disguised as an apartment with “Apt” in the Apt/Unit field, instead of as a PO Box. For another 187 of the records, the address was disguised with a “Unit” in the Apt/Unit field. In fact, none of the records in the list of 907 were properly labeled as a PO Box. USPS guidance for writing the address of a PO Box states that a PO Box label must be included ([https://pe.usps.com/text/pub28/28c2\\_037.htm#ep526575](https://pe.usps.com/text/pub28/28c2_037.htm#ep526575)). It is my opinion that this may demonstrate intent to avoid detection of the fact that these were PO boxes, not valid residential addresses.

See **Exhibit 4** for an example Postal Facility Matching Validation Technique with examples and screenshots captured showing that (1) the addresses in question are clearly not residential buildings or apartments; and (2) the addresses in the 11/3/2020 Absentee Early Voting file appear to have been disguised with Apt, Ste, or Unit number.

I have a high degree of confidence in the 907 votes in this category due to the strict address matching technique that was used to limit false positives and based on the visual validation of each address in the list via a Google Maps search.

It is my opinion that the votes in this population should not have been accepted due to the violation of the State’s Election Code.

*I conducted this analysis after I submitted my initial affidavits with the original petition in this matter.*

Category (2): Vacant Mailing Address

According to the State's official voter records and USPS address records, 2,326 individuals who voted absentee by mail in the Contested Election had their ballots sent to mailing addresses that were designated as "vacant" by the USPS. These ballots should not have been deliverable according to the USPS; it is my opinion that that the votes in this category should be rejected.

From the list of Absentee Early Voters, it is my opinion to a reasonable degree of scientific certainty that there were 2,326 Absentee mail-in voters who voted by mail with mailing addresses that returned with a Vacant DPV\_Vacant code of "Y" from the SmartyStreets API call that was run on December 23, 2020 at 9:05 AM Pacific Standard Time (PST). From the documentation on SmartyStreet's website about the DPV\_Vacant code, a "Y" return indicates "that a delivery point was active in the past, but is currently vacant (in most cases, unoccupied over 90 days) and is not receiving deliveries. This status is often obtained when mail receptacles aren't being emptied and are filling up, so mail is held at the post office for a certain number of days before the delivery point is marked 'vacant' (<https://smartystreets.com/docs/cloud/us-street-api>)."

This definition was also confirmed directly with USPS ([https://about.usps.com/publications/pub32/pub32\\_terms.htm#ep1011282](https://about.usps.com/publications/pub32/pub32_terms.htm#ep1011282)). The impact of this status means that a voter with a mailing address located at a location that has been marked vacant by the USPS could not have voted by mail in the November 3, 2020 election since the mail would not have been delivered, and most likely would have been returned to sender. It is significant in my analysis that there were thousands of mail-in votes counted from addresses that were not

accepting mail according to the USPS vacant flag. It should not be possible for a voter to vote by mail from an address that is marked vacant.<sup>2</sup>

See **Exhibit 5** for a list of the votes that were mailed to addresses that are marked with a positive vacant USPS code. **Exhibit 5** displays each of the absentee mail-in votes in this population who are associated with a mailing address that was marked vacant by the USPS at the time that the API call was run on December 23, 2020. Per the SmartyStreets documentation for the DPV\_Vacant field, “in most cases, [the address has been] unoccupied over 90 days.” This means that the addresses in question would likely have been marked vacant on or before September 24, 2020 (40 days before the election) as the API call in this analysis was performed on December 23, 2020.<sup>3</sup>

To validate the results of the query, I randomly selected 20 individuals<sup>4</sup> from the API output file with a positive DPV\_vacant code to verify the addresses that were returned from the API call for that individual’s registration number matched up to the address in the Voter Registration file, and I manually uploaded the single address to the SmartyStreets website to manually validate the DPV\_vacant code result to help ensure validity, accuracy, and integrity of the positive the results from the website’s API script. For all 20 of my selections, the results were validated affirmatively. See **Exhibit 6** for documentation of the query validation steps performed. Based on the validation steps performed in **Exhibit 6**, I believe the results of the query are displayed accurately in **Exhibit 5**.

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<sup>2</sup> To follow up on this finding and to confirm that ballots sent to these addresses will be returned to sender, I mailed postcards to all 2,326 voters in this list on December 29, 2020. I expect preliminary results from this mailing to be returned by mid-January 2021.

<sup>3</sup> **Exhibit 7** provides an outline of the steps that were followed to achieve the results stated. Any query run at a later point in time may yield different results, depending on when the API call is made and any updates that have been made since the API call on December 23, 2020. I have retained the data from the December 23<sup>rd</sup> API call.

<sup>4</sup> The purpose of taking this sample was to validate the query steps performed. Statistical significance was deemed not necessary for this purpose. A sample of 20 showed that the query steps were applied accurately.

It is my opinion that each of the votes in this population of absentee Mail-in Voters with a mailing address at a vacant property should not have been accepted due to the violation of Georgia voting rules. Further, it is my opinion that this category of votes demonstrates deficiencies in the State's controls in place to prevent or detect invalid or fraudulent votes from being cast in the Contested Election.

*I conducted this analysis after I submitted my initial affidavits with the original petition in this matter.*

#### Category (5): Suspicious Pre-2016 Registration

Data shows 86,880 individuals who voted in the Contested Election by having been added to the State's 2020 Voter Registration File prior to the 2016 General Election, but were not listed in the State's 2016 Voter Registration File. If a voter was not registered to vote in the last election, they should not show a registration date that is prior to the last election, because for them to have been added to the voter roll, they would have to have been added subsequent to the last election. These votes should be examined to establish that the votes are valid and to discover how and why the data does not conform to expected rules. See **Exhibit 8** for the detailed list of voters in this population.

Votes in this category are extremely questionable because if a voter was added to the registration list after the 2016 election, they should not have a DATE\_ADDED (registration date) that is before the 2016 election. If these individuals were registered to vote before the 2016 election, they should have been included in the 2016 Voter Registration File. Votes in this category cannot be reconciled with a logical and expected fact pattern and may indicate data integrity issues due to fraud or error—in my opinion, these votes should not have been accepted.

#### Category (6): Missing Registration

Data shows 4,502 individuals who voted in the Contested Election who the State has no record of being registered to vote by the registration deadline (i.e., October 5, 2020). These votes should be examined to establish that the votes are valid and to discover how and why the data does not conform to expected rules. See **Exhibit 9** for the detailed list of voters in this population.

From the State’s database for the November 3, 2020 election, it is my opinion to a reasonable degree of scientific certainty that 4,502 records in the 2020 Voter History File did not match to a record in the 2020 Voter Registration File and therefore show no apparent record of having been registered to vote in time for the November 3, 2020 election. Votes in this category are questionable because October 5, 2020 was the last day a person could have registered and have been eligible to vote in the November General Election per the Georgia state rules found here: <https://sos.ga.gov/admin/files/2020%20Revised%20Short%20Calendar.pdf>. See also OCGA § 21-2-216(a)(1) (“No person shall vote in any primary or election held in this state unless such person shall be: (1) Registered as an elector in the manner prescribed by law”); OCGA § 21-2-224(g) (“No person whose name does not appear on the official list of electors shall vote or be allowed to vote at any election, except as otherwise provided in this article.”); OCGA § 21-2-224(a) (“If any person whose name is not on the list of registered electors maintained by the Secretary of State under this article desires to vote at any general primary, general election, or presidential preference primary, such person shall make application as provided in this article by the close of business on the fifth Monday or, if such Monday is a legal holiday, by the close of business on the following business day prior to the date of such general primary, general election, or presidential preference primary.”).

It is my opinion that votes in this category should not have been accepted.

Category (8): Excessively Early Ballot Issuance

From the State's database for the Contested Election, it is my opinion to a reasonable degree of scientific certainty that 2,664 individuals have records indicating that they were issued mail-in absentee ballots prior to the earliest possible date that ballots could have been mailed per Georgia voting rules (i.e., September 15, 2020). See **Exhibit 10** for the detailed list of voters in this population.

Votes in this category are questionable because Absentee Ballots should not be mailed to voters until September 15, 2020, as per the Georgia state rules found here: <https://sos.ga.gov/admin/files/2020%20Revised%20Short%20Calendar.pdf>. A ballot should not have been issued before the date the ballots were eligible to be sent out to voters. Votes in this category indicate a lack of compliance with the State's Election Code. These votes should not have been accepted.

#### Category (10): Late Registration

From the State's database for the Contested Election, it is my opinion to a reasonable degree of scientific certainty that 142 individuals whom the State's database identifies as having cast a ballot show that they did not register until after the last day a person could register to vote per the Election Code (i.e., October 5, 2020). See **Exhibit 11** for the detailed list of voters in this population.

Votes in this category are questionable because October 5, 2020, was the last day a person could register and be eligible to vote in the Contested Election per the Code: <https://sos.ga.gov/admin/files/2020%20Revised%20Short%20Calendar.pdf>. It is my opinion that these votes should not have been accepted.

#### Category (11): Ballot Acceptance Precedes Issuance

Data shows 92 individuals who voted in the Contested Election returned absentee ballots before the ballots were issued. These votes should be examined to establish that the votes are valid and to discover how and why the data does not conform to expected rules. See **Exhibit 28** for the detailed list of voters in this population.

From the State’s database for the Contested Election, it is my opinion to a reasonable degree of scientific certainty that 92 individuals whose ballots, according to State records, were returned and accepted by the State before the ballot was ever issued to the voter. Votes in this category are questionable because ballots, as a matter of fact, cannot be returned before they were issued. That State election officials appear to have allowed a ballot to be returned before the State records it as having been issued highlights a lax data governance policy. These votes should not have been accepted.

Category (12): Ballot Acceptance Precedes Earliest Mailing Date

From the State’s database for the Contested Election, it is my opinion to a reasonable degree of scientific certainty that 50 individuals have records indicating that their absentee mail-in ballots were accepted prior to the earliest possible date that ballots could have been mailed per the Election Code (i.e., September 15, 2020). See **Exhibit 12** for the detailed list of voters in this population.

Votes in this category are questionable because Absentee Ballots were not to be mailed until September 15, 2020, per the State’s Election Code: <https://sos.ga.gov/admin/files/2020%20Revised%20Short%20Calendar.pdf>. A ballot cannot legally be returned before ballots were eligible to be mailed out to voters by the State. Votes in this category indicate a lack of compliance with the State’s Election Code. These ballots should not have been accepted.

Category (13): Ballot Issuance Precedes Ballot Application

From the State’s database for the Contested Election, it is my opinion to a reasonable degree of scientific certainty that 29 individuals whom the State’s database identifies as having cast a ballot show that the State issued the absentee ballot before the voter ever applied for the ballot. See **Exhibit 13** for the detailed list of voters in this population.

The Election Code requires that a voter first request a ballot before it is issued by the State. The votes in this category should not have been accepted.

Category (14): Ballot Application Precedes Registration

From the State’s database for the Contested Election, it is my opinion to a reasonable degree of scientific certainty that 13 individuals, according to the State, applied for a ballot prior to their voter registration dates. See **Exhibit 14** for the detailed list of voters in this population. The votes in the category should not have been accepted for violation of the State’s Election Code.

Category (15): Voted Outside Legal Window

From the State’s database for the Contested Election, it is my opinion to a reasonable degree of scientific certainty that 10 individuals have records which, according to the State, indicate that their early in-person ballots were accepted either prior to the start or after the end of early in-person voting in the state of Georgia (i.e., prior to October 12 or after November 3). See **Exhibit 15** for the detailed list of voters in this population.

Votes in this category are questionable because the period for Early Voting is October 12, 2020 – November 3, 2020 per the Georgia state rules found here: <https://sos.ga.gov/admin/files/2020%20Revised%20Short%20Calendar.pdf>. The votes in this category should not have been accepted.

Category (16): Ballot Acceptance Despite Ballot Application Rejection

Data shows 2 individuals who voted in the Contested Election had their votes accepted despite the fact that, according to the State’s records, their ballot application was rejected. The votes in this population category should be rejected due to the violation of the State’s Election Code. See **Exhibit 16** for the detailed list of voters in this population.

From the State’s database for the November 3, 2020, election, it is my opinion to a reasonable degree of scientific certainty that 2 individuals had their votes accepted even though their ballot application was rejected. A voter with an application that was rejected should not have had their vote counted in the Contested Election. This finding appears to indicate an internal control issue over the State’s ballot review process. Each of these instances should be investigated to understand how a vote could have been accepted, when the application was rejected. It is my opinion that the facts and circumstances discovered here likely will show more votes in question in the same batch of votes that were counted because this finding indicates poor internal controls around the review of absentee mail-in ballots. The votes in this category should not have been accepted.

**B. Categories of Irregular Votes that Should be Rejected Unless Other Evidence is Provided**

Category (3): Vacant Residential Address

Data shows 18,235 individuals who voted in the Contested Election had residential addresses that were designated as “vacant” by the USPS. The votes in this dataset should be rejected unless other evidence is provided to validate the votes and show they were cast in accordance with the Election Code. See **Exhibit 17** for the list of voters with a residential address at a vacant property.

Per the Georgia Secretary of State’s Voter Registration Rules and Procedures Manual ([https://sos.ga.gov/admin/files/Voter\\_Registration\\_Rules\\_and\\_Procedures\\_Manual\\_IO\\_v\\_2\\_2011.pdf](https://sos.ga.gov/admin/files/Voter_Registration_Rules_and_Procedures_Manual_IO_v_2_2011.pdf)), “A person must only register to vote in the county in which he or she lives. If a person

moves, he or she must complete a new voter registration application and designate the change of address in the appropriate section. A house number and street name must be provided. Business addresses, P.O. boxes, and rural routes are not accepted as residential addresses for voter registration purposes.” See also OCGA § 21-2-217(a)(1): “In determining the residence of a person desiring to register to vote ... the residence of any person shall be held to be in that place in which such person's habitation is fixed, without any present intention of removing therefrom.”

From the list of individuals in the 2020 Voter Registration File who are on record as having voted in the 2020 General Election on November 3, 2020, it is my opinion to a reasonable degree of scientific certainty that there were 18,325 registered voters who voted in Georgia with a residential address that returned with a Vacant DPV\_Vacant code of “Y” from the SmartyStreets API call that was run on December 12, 2020 at 9:51 PM Pacific Standard Time (PST). From the documentation on SmartyStreet’s website about the DPV\_Vacant code, a “Y” return indicates “that a delivery point was active in the past, but is currently vacant (in most cases, unoccupied over 90 days) and is not receiving deliveries. This status is often obtained when mail receptacles aren’t being emptied and are filling up, so mail is held at the post office for a certain number of days before the delivery point is marked ‘vacant’ (<https://smartystreets.com/docs/cloud/us-street-api>).” The impact of this status is that the voter was not residing at the residential address that the Georgia Secretary of State had on record because mail was not being delivered to these addresses.

**Exhibit 17** displays each of the registered votes in question who are associated with a residential address that was marked vacant by the USPS at the time that the API call was run on December 12, 2020.<sup>5</sup> Per the SmartyStreets documentation for the DPV\_Vacant field, “in most

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<sup>5</sup> **Exhibit 7** provides an outline of the steps that were followed to achieve the results stated. Any query run at a later point in time may yield different results depending on when the API call is made and any updates that have been made since I ran the API call on December 12, 2020, I have retained the data from our API call.

cases, [the address has been] unoccupied over 90 days.” This means the addresses in question would likely have been vacant on or before September 13, 2020 (51 days before the election) as the API call in this analysis was performed on December 12, 2020. Many of the residential addresses listed for voters in the 2020 Voter Registration File are unlikely to be a valid address where the voter lives since the code for that address was listed by the USPS as vacant.

To validate the results of the query, I randomly selected 20 individuals<sup>6</sup> from the API output file with a positive DPV\_vacant code to verify the addresses that was returned from the API call for that individual’s registration number matched up to the address in the 2020 Voter History File, and I manually uploaded the single address to the SmartyStreets website to manually validate the DPV\_vacant code result to help ensure validity, accuracy, and integrity of the positive the results from the website’s API script. For all 20 of my selections, the results were validated affirmatively. See **Exhibit 18** for documentation of the query validation steps performed. Based on the validation steps performed in **Exhibit 18**, it is my opinion that the results of the query are displayed accurately in **Exhibit 17**.

It is my opinion that votes in this category should not have been accepted, unless other evidence is provided to verify the validity of the votes.

*I conducted this analysis after I submitted my initial affidavits with the original petition in this matter.*

#### Category (4): Non-permanent Residential Address

Data shows 1,377 individuals who voted in the Contested Election by listing the addresses of courthouses, churches, and hotels as their permanent residential addresses. These votes should be

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<sup>6</sup> The purpose of taking this sample was to validate the query steps performed. Statistical significance was deemed not necessary for this purpose. A sample of 20 showed that the query steps were applied accurately.

examined to determine the validity of these registrations and, accordingly, of these votes. See **Exhibit 19** for the detailed list of voters in this population.

Per the Georgia Secretary of State's Voter Registration Rules and Procedures Manual ([https://sos.ga.gov/admin/files/Voter\\_Registration\\_Rules\\_and\\_Procedures\\_Manual\\_IO\\_v\\_2\\_2011.pdf](https://sos.ga.gov/admin/files/Voter_Registration_Rules_and_Procedures_Manual_IO_v_2_2011.pdf)), "A person must only register to vote in the county in which he or she lives. If a person moves, he or she must complete a new voter registration application and designate the change of address in the appropriate section. A house number and street name must be provided. Business addresses, P.O. boxes, and rural routes are not accepted as residential addresses for voter registration purposes." See also OCGA § 21-2-216(a)(4) ("No person shall vote in any primary or election held in this state unless such person shall be: ... (4) A resident of this state and of the county or municipality in which he or she seeks to vote ...."); OCGA § 21-2-217(a)(1) ("In determining the residence of a person desiring to register to vote," the "residence of any person shall be held to be in that place in which such person's habitation is fixed, without any present intention of removing therefrom").

From the list of registered voters who the State records as having voted in the Contested Election, it is my opinion to a reasonable degree of scientific certainty that there were 1,377 registered voters who voted with a residential address located at selected courthouses, churches, and hotels, which are generally not considered to be permanent residences. The paragraphs below summarize the results by address.

From the list of registered voters who the State records as having voted in the Contested Election, it is my opinion to a reasonable degree of scientific certainty that there were 914 registered voters who voted with a residential address located at 556 N McDonough St Decatur 30030. 556 N McDonough St is, in fact, the address of the Superior Court of DeKalb County.

From the list of registered voters who the State records as having voted in the Contested Election, it is my opinion to a reasonable degree of scientific certainty that there were 144 registered voters who voted with a residential address located at 136 Pryor Street SW Atlanta, GA 30303. 136 Pryor Street is, in fact, the address of the Fulton County Courthouse.

From the list of registered voters who the State records as having voted in the Contested Election, it is my opinion to a reasonable degree of scientific certainty that there were 36 registered voters who voted with a residential address located at 75 Langley Drive Lawrenceville, GA 30046. 75 Langley Drive is, in fact, the address of a Gwinnett County court.

From the list of registered voters who the State records as having voted in the Contested Election, it is my opinion to a reasonable degree of scientific certainty that there were 15 registered voters who voted with a residential address located at 4380 Memorial Drive Decatur, GA 30032. 4380 Memorial Drive is, in fact, the address of a DeKalb County building.

From the list of registered voters who the State records as having voted in the Contested Election, it is my opinion to a reasonable degree of scientific certainty that there were 3 registered voters who voted with a residential address located at 1 Broad Street Ellijay, GA 30540. 1 Broad Street is, in fact, the address of a Gilmer County Government building.

From the list of registered voters who the State records as having voted in the Contested Election, it is my opinion to a reasonable degree of scientific certainty that there were 43 registered voters who voted with a residential address located at 1328 Peachtree St NE Atlanta, GA 30309. 1328 Peachtree St NE is, in fact, the address of First Presbyterian Church.

From the list of registered voters who the State records as having voted in the Contested Election, it is my opinion to a reasonable degree of scientific certainty that there were 26 registered

voters who voted with a residential address located at 2625 Highway 212 SW Conyers, GA 30094. 2625 Highway 212 SW is, in fact, the address of Monastery of the Holy Spirit spiritual center.

From the list of registered voters who the State records as having voted in the Contested Election, it is my opinion to a reasonable degree of scientific certainty that there were 196 registered voters who voted with a residential address located at 1 GEORGIA AVE Cave Springs, GA 30124, 2900 GEORGE BUSBEE PKWY NW Kennesaw, GA 30144, 3000 GEORGE BUSBEE PKWY NW Kennesaw, GA 30144, 2945 COBB PKWY NW Kennesaw, GA 30152, 3020 MANSELL RD Alpharetta, GA 30022, 3040 SCARLETT ST Brunswick, GA 31520, 5395 PEACHTREE INDUSTRIAL BLVD, Norcross, GA 30092, 200 LAWRENCEVILLE ST Norcross, GA 30071, 4648 LAWRENCEVILLE RD Loganville, GA 30052, 2235 MOUNT ZION PKWY Morrow, GA 30260, 1990 WILLOW TRAIL PKWY Norcross, GA 30093 or 5475 WADE GREEN RD Acworth, GA 30102. Each address listed above is, in fact, an address of a hotel or motel.

**Exhibit 19** displays each of the registered voters called out above that have been identified as residing at a commercial address that do not appear to be acceptable residential addresses used for voter registration purposes under the State's Election Code. Per the Code, a person must only register to vote in the county in which he or she lives. The addresses given above are generally not valid addresses where residents permanently live.

It is my opinion that votes in this category should not have been accepted, unless other evidence is provided to verify the validity of the votes.

*I completed this analysis after submitting my initial affidavits with the original petition in this matter.*

## C. Categories of Irregular Votes that Require Further Investigation and Risk Evaluation

### Category (9): Same-day Mail-in Ballot Application, Issuance, Return and Acceptance

From the State's database for the Contested Election, it is my opinion to a reasonable degree of scientific certainty that 217 individuals voted by absentee mail-in ballot who the State records as having applied for the absentee ballot by mail, been issued the absentee ballot by mail, and having returned the absentee ballot by mail—and whose ballot was accepted by the State—all on the same day. Votes in this category are questionable because it highly unlikely that such actions could take place in a single day. See **Exhibit 20** for the detailed list of voters in this population.

Each vote in this population should be investigated to understand how a person could have accomplished this feat. It is my opinion that votes in this category should be examined for error/invalidity and the specific risks further reviewed.

### Category (17): Underage Registrations

From the State's database for the Contested Election, it is my opinion to a reasonable degree of scientific certainty that there are 2,047 individuals whom the State's database identifies as having cast a ballot and whom the State's records indicate were registered to vote prior to their 17th birthday. See **Exhibit 21** for the detailed list of voters in this population.

Votes in this category are questionable because citizens are not eligible to register to vote in Georgia until they are at least 17 ½ years of age or older.<sup>7</sup> Registration for the voters in this category was invalid at the time of the initial registration. It is my opinion that votes in this category should be examined for error/invalidity and the specific risks further reviewed.

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<sup>7</sup> In the State of Georgia, 17 ½ year-olds might have registered to vote in this election before they turned 18. To avoid the possibility of a false positive, this analysis excluded all individuals who may have achieved 17 ½ years of age in the year of their registration. Only individuals who were, according to the State's records, certainly under the age of 17 at the time of their registration were included.

## **D. Categories of Irregular Votes that Require Further Scrutiny**

### Category (7): Excessively Early Application

Data shows at least 305,701 individuals voted in the Contested Election who, according to the State's 11/3/2020 Absentee Voting File, requested ballots more than 180 days prior to the Contested Election (5/6/2020), in excess of the maximum allowable number of days permitted under the State's Election Code. May 6, 2020 is 181 days prior to November 3, 2020. Only voter records with a ballot application date on or before this date were included in the results. See **Exhibit 22** for the detailed list of voters in this population.

As O.C.G.A. § 21-2-381(a) (1) (A) states, "Except as otherwise provided in Code Section 21-2-219, not more than 180 days prior to the date of the primary or election . . . in which the elector desires to vote, any absentee elector may make . . . an application for an official ballot . . ." The Code permits narrow exceptions to this rule, the applicability of which to this voter population cannot be determined from the data provided to the public by the Georgia Secretary of State (e.g., it does not contain a voter's UOCAVA status). Therefore, it is my opinion that the votes in this category require further scrutiny by State election officials to see if the voters indeed meet the narrow exceptions defined in O.C.G.A. 21-2-381(a)(1)(G).

### Category (18): Inconsistent Voter Birth Records

From the State's database for the Contested Election, it is my opinion to a reasonable degree of scientific certainty that there are 2,525 individuals whom the State's database identifies as having cast a ballot whose birth year was changed when comparing the voter's birth year in the 2020 Voter Registration File to the voter's birth year in the 2016 Voter Registration File. See **Exhibit 23** for the detailed list of voters in this population.

I called one of the voters in this list, and discovered that she voted in-person and showed her ID at the early voting location. Her birth year as shown in the 2016 Voter Registration File was confirmed to be correct as 1971. But her birth year as shown in the 2020 Voter Registration File was changed to 1941. With proper data controls in place, a voter's birth year should not change, unless there was valid proof that the original birth date in the voter registration records was recorded incorrectly. It is my opinion that votes in this category require further scrutiny, as the data reviewed is not specific enough to draw definitive conclusions about the voting population contained therein.

#### Category (19): Voters Over 105 Years of Age

From the State's database for the Contested Election, it is my opinion to a reasonable degree of scientific certainty that there were at least 134 individuals whom the State's database identifies as having cast a ballot whose recorded birthdate is on or before 1915. See **Exhibit 24** for the detailed list of voters in this population.

I researched the individuals in this list and discovered that there were 10 individuals who appeared to match up to an individual who was deceased prior to the election date; 1 individual who matched to a felon; and 30 individuals who could not be identified.<sup>8</sup> It is my opinion that votes in this category require further scrutiny, as the data reviewed is not specific enough to draw definitive conclusions about the voting population contained therein.

#### Category (20): Potential Deceased Voters

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<sup>8</sup> **Exhibit 24** shows only 132 votes in the population. The reason for the difference is because the research on the old voters was already done on an old version of the file (based on absentee records), and was retained, to keep the documentation of the research. In the exhibit, columns A through M are raw data from the Georgia Secretary of State. Columns N through T include my documentation and notes from my research. The additional two votes included in the vote total for this population came through when the analysis was updated to the latest version of the State's 2020 Absentee Early Voter File which added records as the votes tallied later came in.

From the Deceased Individuals File and Georgia's voter database for the Contested Election, it is my opinion to a reasonable degree of scientific certainty that there were as many as 10,315 individuals who cast ballots in the Contested Election that were accepted and counted but who were deceased prior to Election Day. 8,718 of these individuals are recorded as having perished prior to the date the State records accepting their ballot. See **Exhibit 25** for the detailed list of voters in this population.

These matches are for individuals who appear in the Deceased Individuals File whose first name, last name, and birth year match exactly to a record of a Georgia voter in the Voter History File. Note that the Deceased Individuals File obtained through the open records request contains death certificates only for individuals who died in calendar year 2020. In all likelihood, there would be significantly more matches if the population of deceased individuals was expanded to include persons who perished prior to calendar year 2020. It should also be noted that only the birth year is available for records of voters in the State's database. Because only a birth year is provided, there may be some false positives in the population—for example, due to the match of multiple people with a common name who were also born in the same year. The reliability of these matches could be improved, and a full analysis conducted (i.e., for all individuals who perished prior to calendar year 2020) only by the State of Georgia, which alone has access to the full birth date records of its voters and the death certificates for each county for all calendar years prior to 2020. The State of Georgia should be doing this analysis, and the deceased individuals should be removed from the voter rolls to prevent illegal votes from being cast.

It is my opinion that votes in this category require further scrutiny, as the data reviewed is not specific enough to draw definitive conclusions about the voting population contained therein.

However, manual research of dead people on the list using address confirmed that at least 780 dead people “voted” in the Contested Election.

Category (21): Potential Felon Voters

From the Felons File and the State’s voter database for the Contested Election, it is my opinion to a reasonable degree of scientific certainty that there could have been up to 2,560 individuals who cast ballots that were accepted and counted but who were incarcerated felons at the time of the Contested Election. 2,560 represents the number of individuals in the Felons File whose first name, last name, and birth year matched exactly to the State’s 2020 Voter History File. See **Exhibit 26** for the detailed list of voters in this population.

It should be noted that, similar to the analysis for deceased individuals, only the birth year is available in the State’s voter files. This analysis therefore may also contain false positives due to the imperfect nature of the match. The reliability of these matches could be improved, and a full analysis conducted only by the State of Georgia, which alone has access to the full birth date records of its voters. The State of Georgia should be doing this analysis, and felons should be removed from the voter rolls to prevent illegal votes from being cast.

It is my opinion that votes in this category require further scrutiny, as the data reviewed is not specific enough to draw definitive conclusions about the voting population contained therein.

Category (22): Incorrect Voter Identification

Data shows as least 4 individuals voted in the Contested Election whose names in the 11/3/2020 Absentee Early Voting File matched to the wrong person in the 2020 Voter Registration file, showing that a person could vote under another person’s registration. See **Exhibit 27** for the detailed list of voters in this population.

Due to the exact method used to identify matching names, there are likely more individuals whose vote was matched up to the wrong registration record, including the improper matching of similar names. These records show that Georgia's voter system allows a person to vote under another person's registration which brings to light more voter control issues.

It is my opinion that votes in this category require further scrutiny, as the data reviewed is not specific enough to draw definitive conclusions about the voting population contained therein.

**Table 1: Illegal Vote Totals, Presuming State of Georgia Election Data is Reliable**

<b>Category of Irregularity<sup>9</sup></b>	<b>Opinion</b>	<b>Total Votes</b>
<ul style="list-style-type: none"> <li>• PO Box as a Residential Address (1)</li> <li>• Vacant Mailing Addresses (2)</li> <li>• Suspicious Pre-2016 Registration (5)</li> <li>• Missing Registration (6)</li> <li>• Excessively Early Ballot Issuance (8)</li> <li>• Late Registration (10)</li> <li>• Ballot Acceptance Precedes Issuance (11)</li> <li>• Ballot Acceptance Precedes Earliest Mailing Date (12)</li> <li>• Ballots Issuance Precedes Ballot Application (13)</li> <li>• Ballot Application Precedes Registration (14)</li> <li>• Voted Outside Legal Window (15)</li> <li>• Ballot Acceptance Despite Ballot Application Rejection (16)</li> </ul>	Votes should not have been accepted in the State’s total vote count	97,382
<ul style="list-style-type: none"> <li>• Vacant Residential Addresses (3)</li> <li>• Non-permanent Residential Address (4)</li> </ul>	Votes should not have been accepted in the State’s total vote count, unless other evidence is provided to verify the validity of the votes	19,702
<ul style="list-style-type: none"> <li>• Same-day Mail-in Ballot Application, Issuance, Return and Acceptance (9)</li> <li>• Underage Registrations (17)</li> </ul>	Votes should be examined for error/invalidity and the specific risks further reviewed	2,264
<ul style="list-style-type: none"> <li>• Excessively Early Application (7)</li> <li>• Inconsistent Voter Birth Records (18)</li> <li>• Voters over 105 Years of Age (19)</li> <li>• Potential Deceased Voters (20)</li> <li>• Potential Felon Voters (21)</li> <li>• Incorrect Voter Identification (22)</li> </ul>	Votes require further scrutiny, as the data reviewed is not specific enough to draw definitive conclusions about the voters within those categories.	N/A

**Note:** Vote counts have been aggregated and summarized by Voter ID in each category to prevent counting the same voter twice.

**Section III – Absentee Ballot Rejection Rate Analysis**

Table 2 below shows the rejection rate of mail in ballots for the 2020 General Election and compares the rate of rejection to the past three elections.<sup>10</sup>

<sup>9</sup> Numbers in parentheses correspond to the Categories of Irregularities described above.

<sup>10</sup> This analysis is based on Georgia’s absentee early voting files from 2016, 2018, and 2020.

**Table 2: Mail-In Ballot Rejection rates by Election**

Row	Ballot Status	2016 General	2018 General	2020 Primary	2020 General
1	Not returned (NULL)	25,948	36,074	333,608	133,886
2	Cancelled	12,053	20,601	116,424	318,086
3	Spoiled	69	98	1,794	4,082
4	Rejected	6,059	7,889	11,772	4,471
5	Accepted	202,492	219,731	1,150,478	1,308,447
6	Total ballots (returned) (4+5)	208,551	227,620	1,162,250	1,312,918
7	Total ballots mailed (1+2+3+4+5)	246,621	284,393	1,614,076	1,768,972
8	Rejection rate (4 ÷ 6)	2.91%	3.47%	1.01%	0.34%

Note: The calculation in row 6 was changed to exclude spoiled ballots from the Total Ballots (returned) total in line 6.

As Table 2 shows, Georgia's rate of rejection for mail-in ballots averaged 2.91% and 3.47% respectively for the 2016 and 2018 general elections. Its rate of rejection for mail-in ballots in the 2020 primary election decreased to 1.01%. In stark contrast even to the 2020 primary, Georgia's rate of rejection for the 2020 general election rejection rate decreased even further to just 0.34%.

The 0.34% rejection rate represents an approximate 90% decrease in the rate of mail-in ballot rejections compared to the 2016 and 2018 general elections. The 0.34% rejection rate appears to be the lowest mail-in ballot rejection rate in the history of the State of Georgia while the number of mail-in ballots is at an historic high.

Excluding canceled ballots, the data tables show that the number of mail-in ballots cast in the State increased from just over 200,000 in the 2016 and 2018 elections to more than 1.3 million in the 2020 general election—an increase of well over 500%.

If Georgia's historical mail-in ballot rejection rate of 2.91-3.47% is applied to the current mail in ballot numbers, there would have been between 38,250 and 45,626 ballots rejected in the 2020 general election, rather than the number actually rejected.

Instead, just 4,471 ballots (0.34%) were rejected—33,779 to 41,155 fewer than what historical rates would have predicted, using the same methodologies as in previous elections.

The additional absentee ballots one would have expected to be rejected is significant as it easily exceeds the current margin of separation between Biden and Trump of 12,670 votes.

Statewide, Democrat Party candidate Joseph R. Biden won 65% of Georgia's mail-in absentee vote, compared to Republican Party candidate Donald J. Trump's 34%. In some of Georgia's largest counties like DeKalb and Fulton, Mr. Biden's margin over President Trump from absentee ballots is even larger—86% to 13% and 79% to 20%, respectively. Applied to the 2020 General Election, therefore, the application of the historical and anticipated rejection rate for improper or illegal ballots could have changed the outcome. Even using the 2020 Primary Election's lower rejection rate of 1.01%, one would have expected to see 13,319 ballots rejected, or 8,848 more than were actually rejected.

Upon extracting the Excel files from their zip folders, I note that they do not contain consistent or complete information showing the reasons why ballots may have been rejected. The inconsistent and incomplete data for ballot rejection reasons contained in these files is either due to a failure in Georgia's management to reliably collect that information, or the Secretary of State has never disaggregated this data clearly and made such additional data available to the public.

The Secretary of State published an article ([https://sos.ga.gov/index.php/elections/number\\_of\\_absentee\\_ballots\\_rejected\\_for\\_signature\\_issues\\_in\\_the\\_2020\\_election\\_increased\\_350\\_from\\_2018](https://sos.ga.gov/index.php/elections/number_of_absentee_ballots_rejected_for_signature_issues_in_the_2020_election_increased_350_from_2018)) contending that the rejection rate for signatures has increased since 2018; however, the Secretary of State's analysis does not consider all types of rejected ballots and their analysis did not provide detail describing how they arrived at the numbers quoted in their article.

There is no coherent rationale to establish why the rejection rate the 2020 general election of 0.34% is reasonable. Georgia's new ballot cure process and the public information campaign does

not explain the decrease. 0.34% is an extraordinarily low rejection rate. In the 2020 primary election, Georgia still saw a rejection rate of 1.01% which would likely have already included the assumptions for the change in law and better public information. Rather, it appears that many counties in the State did not perform the normal ballot checks that are critical to maintaining controls over election integrity in this election cycle.

There are thousands of votes that were counted throughout this report where it appears there were deficiencies in absentee ballot review controls. This analysis provides yet another metric which indicates that the review of absentee ballots was weak at best, and is a separate reason the results of the Contested Election are in doubt.

## **Conclusion**

Based on my independent analysis, it is my opinion that the number of illegal votes in the Contested Election was larger than the margin of victory, thereby casting into doubt the results. The total number of votes in either the “vote counts should be rejected” or the “vote counts should be rejected until further evidence is provided” categories exceed the margin of victory. The analysis concerning the decline in the rejection rate of absentee mail-in ballots is another independent metric that places the result of the Contested Election in doubt.