Declaration of ██████████████

Pursuant to 28 U.S.C Section 1746, I, ██████████████, make the following declaration.

1.   I am over the age of 21 years and am a resident of Monroe County, Florida.

2.   I am under no legal disability that would prevent me from giving this declaration.

3.   I hold a Bachelor of Science degree in Mathematics and a Master of Science degree in Statistics.

4.   For thirty years, I have conducted statistical data analysis for companies in various industries, including aerospace, consumer packaged goods, disease detection and tracking, and fraud detection.

5.   From November 13th, 2020 through November 28th, 2020, I conducted in-depth statistical analysis of publicly available data on the 2020 U.S. Presidential Election. This data included vote counts for each county in the United States, U.S. Census data, and type of voting machine data provided by the U.S. Election Assistance Committee.

6.   The analysis yielded several "red flags" concerning the percentage of votes won by candidate Biden in counties using voting

machines provided by Dominion Voting Systems. These red flags occurred in several States in the country, including Michigan.

7. I began by using Chi-Squared Automatic Interaction Detection (CHAID), which treats the data in an agnostic way—that is, it imposes no parametric assumptions that could otherwise introduce bias. Here, I posed the following question: "Do any voting machine types appear to have unusual results?" The answer provided by the statistical technique/algorithm was that machines from Dominion Voting Systems (Dominion) produced abnormal results.

8. Subsequent graphical and statistical analysis shows the unusual pattern involving machines from Dominion occurs in at least 100 counties and multiple States, including Michigan.

9. For this statistical analysis I conducted multi-variable stepwise regression analysis using US Census data to develop a predictive model. The model predicts the percentage of votes candidate Biden "should" receive in any county based on the social, economic, ethnic, and demographic make-up of the county. Development of the model used the actual results from the 2020 US Election, as provided by Edison Research. This regression technique is a common tool used in

many industries, and I have successfully used this technique and US census data for many clients across many years.

10.   For any one county, the actual percentage of votes won by candidate Biden will not perfectly match the value predicted by the model.   However, a good model gives estimates that are too high (compared to actual results) approximately half the time, and too low approximately half the time.   My model underestimates candidate Biden's actual results in 45% of US counties, and overestimates Biden's actual performance in 55% of US counties. This is statistical evidence of a good and useful model.
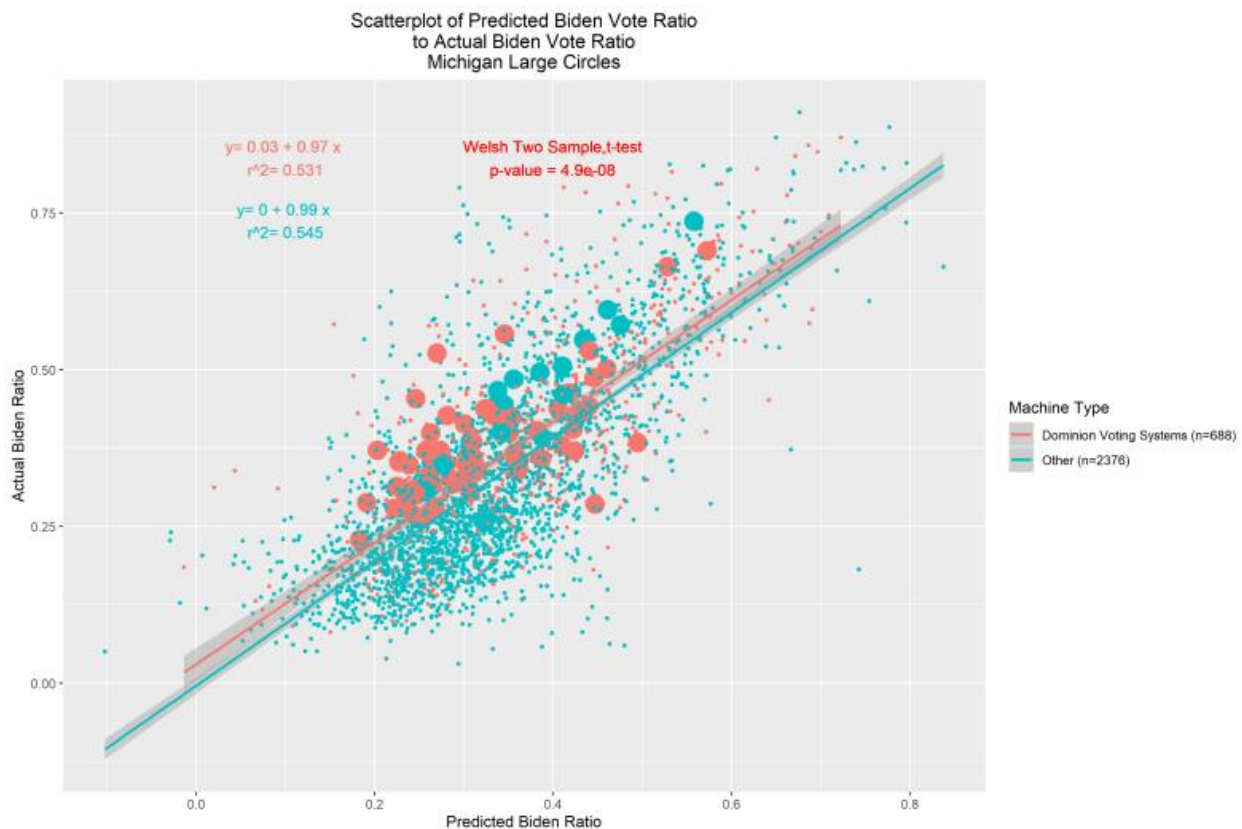
11.   The predictions from this model, based on US census data, allow us to examine if actual results from Dominion machines show an unusual pattern.   By comparing actual Biden results against our predictions, we can see whether the differences are "random" – or if they follow any unusual patterns.   Random chance variation will cause the actual results from any one county to be above or below our prediction. But the Dominion machines show variation of Biden over-performing too often for it to be considered random chance. In fact, the actual results from counties with Dominion machines follow a very predictable

mathematical pattern compared to our predicted values (see point 17 below). The unusual aspect of the actual results from counties with Dominion machines is not random. That is why we conclude some external, non-random force is in effect in conjunction with Dominion machines.

12.   The results from most, if not all counties using the Dominion machines is three to five point six percentage points higher in favor of candidate Biden than the results should be. This pattern is seen easily in graphical form when the results from "Dominion" counties are overlaid against results from "non-Dominion" counties.   The results from "Dominion" counties do not match the results from the rest of the counties in the United States. The results are certainly statistically significant, with a p-value of < 0.00004.   This translates into a statistical impossibility that something unusual involving Dominion machines is *not* occurring. This pattern appears in multiple States, including Michigan, and the margin of votes implied by the unusual activity would easily sway the election results.

13.   The following graph shows the pattern. The large red dots are counties in Michigan that use Dominion voting machines. Almost all

of them are above the blue prediction line, when in normal situations approximately half of them would be below the prediction line (as evidence by approximately half the counties in the U.S. (blue dots) that are below the blue centerline).   The p-value of statistical analysis regarding the centerline for the red dots (Michigan counties with Dominion machines) is 0.000000049, pointing to a statistical impossibility that this is a "random" statistical anomaly. Some external force caused this anomaly.

Scatterplot of Predicted Biden Vote Ratio
to Actual Biden Vote Ratio
Michigan Large Circles

$y = 0.03 + 0.97 x$
$r^2 = 0.531$

$y = 0 + 0.99 x$
$r^2 = 0.545$

Welsh Two Sample,t-test
p-value = 4.9e-08

Machine Type
Dominion Voting Systems (n=688)
Other (n=2376)

Actual Biden Ratio

Predicted Biden Ratio

14.   To confirm that Dominion machines were the source of the pattern/anomaly, I conducted further analysis using propensity scoring using U.S. census variables (Including ethnicities, income, professions, population density and other social/economic data) , which was used to place counties into paired groups. Such an analysis is important because one concern could be that counties with Dominion systems are systematically different from their counterparts, so abnormalities in the margin for Biden are driven by other characteristics unrelated to the election.

15.   After matching counties using propensity score analysis, the only difference between the groups was the presence of Dominion machines. This approach again showed a highly statistically significant difference between the two groups, with candidate Biden again averaging three percentage points higher in Dominion counties than in the associated paired county. The associated p-value is < 0.00005, against indicating a statistical impossibility that something unusual is not occurring involving Dominion machines.

16.   The results of the analysis and the pattern seen in the included graph strongly suggest a systemic, system-wide algorithm was

enacted by an outside agent, causing the results of Michigan's vote tallies to be inflated by somewhere between three and five point six percentage points.

17.   To estimate the percentage of votes impacted in Michigan, I developed a separate regression analysis equation for only counties using Dominion machines. Surprisingly (and this was another red flag) this equation is almost identical to our prediction equation, except for the y-intercept value.

The two equations are:

National Model: Actual Biden = 0 + 1x(Predicted Biden)

Dominion County Model: Actual Biden = 0.056 +1.02 (Predicted Biden)

These equations are almost identical, except the model for Dominion counties is 0.056 (5.6 percentage points) above our predicted results.   This means our original predictive model predicts *just as well* for Dominion counties as it does for non-Dominion counties – if you simply *add 5.6 percentage points to our prediction value when predicting Biden results in Dominion counties*.   For this reason, the best estimate of the impact of Dominion machines is 5.6 percentage points.

18.   If some external force influenced votes by some set percentage, this is exactly the pattern we would expect to see in the data. The actual results on those machines would follow my predictive model with actual results varying randomly above or below those predictions, except the actual results would all be adjusted up or down by whatever was the set percentage. This is exactly what I see in the data.

19.   I have updated my estimate of the number of votes impacted, and its associated confidence interval.   To estimate the number of votes impacted in Michigan I take the 5.6% value and calculate:

(0.056)x(Total Trump and Biden Presidential Votes in Michigan in Dominion Counties) =

(0.056)x(4,639,192)   =   259,794 votes impacted

A 95% confidence interval calculated on the 0.056 value yields an upper bound of 0.072, so a 95% confidence interval on estimate votes impacted in Michigan has an upper bound of:

(0.072)x(4,639,192) = 334,022 votes impacted

20.   The empirical specification exploits variation in counties with and without voting system vulnerabilities. My focus is on Dominion machines because it is the best proxy for vulnerabilities that have been

exploited (e.g., see the other cited affidavits that provide technical evidence that foreign adversaries accessed the unencrypted Edison network during the election and before). However, I could also expand the proxy to include counties with ES&S machines, which also have many of the same vulnerabilities. To the extent my proxy omits variation in other counties that also have vulnerabilities, I will underestimate the number of fraudulent votes for Biden. I opted for this approach for simplicity to focus exclusively on Dominion and highlight the unique role that these machines played in systematically swaying votes

21.   United States Attorney General Barr's comments are not germane to the analysis presented here on the broader case. My results show that there is an economically and statistically significant margin for Biden that would easily flip the election results in the battleground states, especially Michigan. This evidence does not explain how the manipulation of votes may have occurred—just that there is a meaningful difference between counties with and without Dominion machines even after accounting for many cross-sectional differences across these areas.

I declare under penalty of perjury that the forgoing is true and correct. Executed this December 3rd, 2020.