EXHIBITS

- Exhibit 1: Redacted affidavit
- Exhibit 2: William Briggs report
- Exhibit 3: Expert report of Matthew Braynard
- Exhibit 4: Redacted affidavit
- Exhibit 5: Chart
- Exhibit 6: Joe Oltmann affidavit
- Exhibit 7: Harri Hursti affidavit
- Exhibit 8: Statement by Ana Cardozo
- Exhibit 9: Declaration of Seth Keshel
- Exhibit 10: BMD Cannot Assure the Will of Voters, Legal Abstract
- Exhibit 11: Texas preliminary statement decertifying DVS equipment, 01-24-20
- Exhibit 12: Redacted declaration
- Exhibit 13: Redacted declaration
- Exhibit 14: Ronald Watkins declaration
- Exhibit 15: Letter from C. Maloney, Oct 2006 (Congress)
- Exhibit 16: Letters from Senators
- Exhibit 17: Russ Ramsland declaration
- Exhibit 18: Cybersecurity advisory
- Exhibit 19: Redacted declaration

DECLARATION OF [redacted]

I, [redacted], hereby state the following:

1. [redacted]

2. I am an adult of sound mine. All statements in this declaration are based on my personal knowledge and are true and correct.

3. I am making this statement voluntarily and on my own initiative. I have not been promised, nor do I expect to receive, anything in exchange for my testimony and giving this statement. I have no expectation of any profit or reward and understand that there are those who may seek to harm me for what I say in this statement. I have not participated in any political process in the United States, have not supported any candidate for office in the United States, am not legally permitted to vote in the United States, and have never attempted to vote in the United States.

4. I want to alert the public and let the world know the truth about the corruption, manipulation, and lies being committed by a conspiracy of people and companies intent upon betraying the honest people of the United States and their legally constituted institutions and fundamental rights as citizens. This conspiracy began more than a decade ago in Venezuela and has spread to countries all over the world. It is a conspiracy to wrongfully gain and keep power and wealth. It involves political leaders, powerful companies, and other persons whose purpose is to gain and keep power by changing the free will of the people and subverting the proper course of governing.

5. [redacted] Over the course of my career, I specialized in the marines [redacted]

6. Due to my training in special operations and my extensive military and academic formations, I was selected for the national security guard detail of the President of Venezuela. [redacted]

[redacted]

7. [redacted] Señor Cabello was a long-time confederate of President Chavez and instrumental in his gaining power. In 2002, Señor Cabello had very briefly taken over the duties of the presidency while Hugo Chavez was imprisoned. Within hours of Señor Cabello taking over the presidency, Hugo Chavez was released from prison and regained the office of President. On December 11, 2011, Cabello was installed as the Vice-President of the United Socialist Party – the party of President Chávez and became the second most powerful figure in the party after Hugo Chávez. Cabello was appointed president of the National Assembly in early 2012 and was re-elected to that post in January 2013. After Hugo Chávez's death, Cabello was next in line for the presidency of the country, but he remained president of the National Assembly and yielded to Nicolás Maduro holding the position of President of Venezuela.

8. [redacted] President Chavez was very precise and exacting in his instructions in the details about meetings he wanted, where the meeting was to occur, who was to attend, what was to be done. [redacted]

9. [redacted] I was witness to the creation and operation of a

sophisticated electronic voting system that permitted the leaders of the Venezuelan government to manipulate the tabulation of votes for national and local elections and select the winner of those elections in order to gain and maintain their power.

10. Importantly, I was a direct witness to the creation and operation of an electronic voting system in a conspiracy between a company known as Smartmatic and the leaders of conspiracy with the Venezuelan government. This conspiracy specifically involved President Hugo Chavez Frias, the person in charge of the National Electoral Council named Jorge Rodriguez, and principals, representatives, and personnel from Smartmatic which included [redacted]. The purpose of this conspiracy was to create and operate a voting system that could change the votes in elections from votes *against* persons running the Venezuelan government to votes *in their favor* in order to maintain control of the government.

11. In mid-February of 2009, there was a national referendum to change the Constitution of Venezuela to end term limits for elected officials, including the President of Venezuela. The referendum passed. This permitted Hugo Chavez to be re-elected an unlimited number of times.

12. After passage of the referendum, President Chavez instructed me to make arrangements for him to meet with Jorge Rodriguez, then President of the National Electoral Council, and three executives from Smartmatic. Among the three Smartmatic representatives were [redacted] President Chavez had multiple meetings with Rodriguez and the Smartmatic team at which I was present. In the first of four meetings, Jorge Rodriguez promoted the idea to create software that would manipulate elections. Chavez was very excited and made it clear that he would provide whatever Smartmatic needed. He wanted them immediately to create a voting system which would ensure that any time anything was going to be voted on the voting system would guarantee results that Chavez wanted. Chavez offered Smartmatic many inducements, including large sums of money, for Smartmatic to create or modify the voting system so that it would guarantee Chavez would win every election cycle. Smartmatic's team agreed to create such a system and did so.

13. I arranged and attended three more meetings between President Chavez and the representatives from Smartmatic at which details of the new

voting system were discussed and agreed upon. For each of these meetings, I communicated directly with [redacted] on details of where and when to meet, where the participants would be picked up and delivered to the meetings, and what was to be accomplished. At these meetings, the participants called their project the "Chavez revolution." From that point on, Chavez never lost any election. In fact, he was able to ensure wins for himself, his party, Congress persons and mayors from townships.

14. Smartmatic's electoral technology was called "Sistema de Gestión Electoral" (the "Electoral Management System"). Smartmatic was a pioneer in this area of computing systems. Their system provided for transmission of voting data over the internet to a computerized central tabulating center. The voting machines themselves had a digital display, fingerprint recognition feature to identify the voter, and printed out the voter's ballot. The voter's thumbprint was linked to a computerized record of that voter's identity. Smartmatic created and operated the entire system.

15. Chavez was most insistent that Smartmatic design the system in a way that the system could change the vote of each voter without being detected. He wanted the software itself to function in such a manner that if the voter were to place their thumb print or fingerprint on a scanner, then the thumbprint would be tied to a record of the voter's name and identity as having voted, but that voter would not tracked to the changed vote. He made it clear that the system would have to be setup to not leave any evidence of the changed vote for a specific voter and that there would be no evidence to show and nothing to contradict that the name or the fingerprint or thumb print was going with a changed vote. Smartmatic agreed to create such a system and produced the software and hardware that accomplished that result for President Chavez.

16. After the Smartmatic Electoral Management System was put in place, I closely observed several elections where the results were manipulated using Smartmatic software. One such election was in December 2006 when Chavez was running against Rosales. Chavez won with a landslide over Manuel Rosales - a margin of nearly 6 million votes for Chavez versus 3.7 million for Rosales.

17. On April 14, 2013, I witnessed another Venezuelan national election in which the Smartmatic Electoral Management System was used to manipulate and change the results for the person to succeed Hugo Chávez

as President. In that election, Nicolás Maduro ran against Capriles Radonsky. [redacted] Inside that location was a control room in which there were multiple digital display screens – TV screens – for results of voting in each state in Venezuela. The actual voting results were fed into that room and onto the displays over an internet feed, which was connected to a sophisticated computer system created by Smartmatic. People in that room were able to see in "real time" whether the vote that came through the electronic voting system was in their favor or against them. If one looked at any particular screen, they could determine that the vote from any specific area or as a national total was going against either candidate. Persons controlling the vote tabulation computer had the ability to change the reporting of votes by moving votes from one candidate to another by using the Smartmatic software.

18. By two o'clock in the afternoon on that election day Capriles Radonsky was ahead of Nicolás Maduro by two million votes. When Maduro and his supporters realized the size of Radonsky's lead they were worried that they were in a crisis mode and would lose the election. The Smartmatic machines used for voting in each state were connected to the internet and reported their information over the internet to the Caracas control center in real-time. So, the decision was made to reset the entire system. Maduro's and his supporters ordered the network controllers to take the internet itself offline in practically all parts in Venezuela and to change the results.

19. It took the voting system operators approximately two hours to make the adjustments in the vote from Radonsky to Maduro. Then, when they turned the internet back on and the on-line reporting was up and running again, they checked each screen state by state to be certain where they could see that each vote was changed in favor of Nicholas Maduro. At that moment the Smartmatic system changed votes that were for Capriles Radonsky to Maduro. By the time the system operators finish, they had achieved a convincing, but narrow victory of 200,000 votes for Maduro.

20. After Smartmatic created the voting system President Chavez wanted, he exported the software and system all over Latin America. It was sent to Bolivia, Nicaragua, Argentina, Ecuador, and Chile – countries that were in alliance with President Chavez. This was a group of leaders who wanted to be able to guarantee they maintained power in their countries. When Chavez died, Smartmatic was in a position of being the only

company that could guarantee results in Venezuelan elections for the party in power.

21. I want to point out that the software and fundamental design of the electronic electoral system and software of Dominion and other election tabulating companies relies upon software that is a descendant of the Smartmatic Electoral Management System. In short, the Smartmatic software is in the DNA of every vote tabulating company's software and system.

22. Dominion is one of three major companies that tabulates votes in the United States. Dominion uses the same methods and fundamentally same software design for the storage, transfer and computation of voter identification data and voting data. Dominion and Smartmatic did business together. The software, hardware and system have the same fundamental flaws which allow multiple opportunities to corrupt the data and mask the process in a way that the average person cannot detect any fraud or manipulation. The fact that the voting machine displays a voting result that the voter intends and then prints out a paper ballot which reflects that change does not matter. It is the software that counts the digitized vote and reports the results. The software itself is the one that changes the information electronically to the result that the operator of the software and vote counting system intends to produce that counts. That's how it is done. So the software, the software itself configures the vote and voting result -- changing the selection made by the voter. The software decides the result regardless of what the voter votes.

23. All of the computer controlled voting tabulation is done in a closed environment so that the voter and any observer cannot detect what is taking place unless there is a malfunction or other event which causes the observer to question the process. I saw first-hand that the manipulation and changing of votes can be done in real-time at the secret counting center which existed in Caracas, Venezuela. For me it was something very surprising and disturbing. I was in awe because I had never been present to actually see it occur and I saw it happen. So, I learned first-hand that it doesn't matter what the voter decides or what the paper ballot says. It's the software operator and the software that decides what counts – not the voter.

24. If one questions the reliability of my observations, they only have to read the words of [redacted] a time period in

which Smartmatic had possession of all the votes and the voting, the votes themselves and the voting information at their disposition in Venezuela. [redacted] he was assuring that the voting system implemented or used by Smartmatic was completely secure, that it could not be compromised, was not able to be altered.

25. But later, in 2017 when there were elections where Maduro was running and elections for legislators in Venezuela, [redacted] and Smartmatic broke their secrecy pact with the government of Venezuela. He made a public announcement through the media in which he stated that all the Smartmatic voting machines used during those elections were totally manipulated and they were manipulated by the electoral council of Venezuela back then. [redacted] stated that all of the votes for Nicholas Maduro and the other persons running for the legislature were manipulated and they actually had lost. So I think that's the greatest proof that the fraud can be carried out and will be denied by the software company that [redacted] admitted publicly that Smartmatic had created, used and still uses vote counting software that can be manipulated or altered.

26. I am alarmed because of what is occurring in plain sight during this 2020 election for President of the United States. The circumstances and events are eerily reminiscent of what happened with Smartmatic software electronically changing votes in the 2013 presidential election in Venezuela. What happened in the United States was that the vote counting was abruptly stopped in five states using Dominion software. At the time that vote counting was stopped, Donald Trump was significantly ahead in the votes. Then during the wee hours of the morning, when there was no voting occurring and the vote count reporting was off-line, something significantly changed. When the vote reporting resumed the very next morning there was a very pronounced change in voting in favor of the opposing candidate, Joe Biden.

27. [redacted] I have worked in gathering information, researching, and working with information technology. That's what I know how to do and the special knowledge that I have. Due to these recent election events, I contacted a number of reliable and intelligent ex-co-workers of mine that are still informants and work with the intelligence community. I asked for them to give me information that was up-to-date information in as far as how all these businesses are acting, what actions they are taking.

I declare under penalty of perjury that the foregoing is true and correct and that this Declaration was prepared in Dallas County, State of Texas, and executed on November 15, 2020.

[redacted]

An Analysis of Surveys Regarding Absentee Ballots Across Several States

William M. Briggs

November 23, 2020

1 Summary

Survey data was collected from individuals in several states, sampling those who the states listed as not returning absentee ballots. The data was provided by Matt Braynard.

The survey asked respondents whether they (a) had ever requested an absentee ballot, and, if so, (b) whether they had in fact returned this ballot. From this sample I produce predictions of the total numbers of: **Error #1**, those who were recorded as receiving absentee ballots *without* requesting them; and **Error #2**, those who returned absentee ballots but whose votes went missing (i.e. marked as unreturned).

The sizes of both errors were large in each state. The states were Georgia, Michigan, Wisconsin, and Arizona where ballots were across parties. Pennsylvania data was for Republicans only.

2 Analysis Description

Each analysis was carried out separately for each state. The analysis used (a) the number of absentee ballots recorded as unreturned, (b) the total responding to the survey, (c) the total of those saying they did not request a ballot, (d) the total of those saying they did request a ballot, and of these (e) the number saying they returned their ballots. I assume survery respondents are representative and the data is accurate.

From these data a simple parameter-free predictive model was used to calculate the probability of all possible outcomes. Pictures of these probabilities were derived, and the 95% prediction interval of the relevant numbers was calculated. The pictures appear in the Appendix at the end. They are summarized here with their 95% prediction intervals.

Error #1: being recorded as sent an absentee ballot without requesting one.

Error #2: sending back an absentee ballot and having it recorded as not returned.

State	Unreturned ballots	Error #1	Error #2
Georgia	138,029	16,938–22,771	31,559–38,866
Michigan	139,190	29,611–36,529	27,928–34,710
Pennsylvania*	165,412	32,414–37,444	26,954–31,643
Wisconsin	96,771	16,316–19,273	13,991–16,757
Arizona	518,560	208,333–229,937	78,714–94,975

*Number for Pennsylvania represent Republican ballots only.

Ballots that were not requested, and ballots returned and marked as not returned were classed as *troublesome*. The estimated average number of troublesome ballots for each state were then calculated using the table above and are presented next.

State	Unreturned ballots	Estimated average troublesome ballots	Percent
Georgia	138,029	53,489	39%
Michigan	139,190	62,517	45%
Pennsylvania*	165,412	61,780	37%
Wisconsin	96,771	29,594	31%
Arizona	518,560	303,305	58%

*Number for Pennsylvania represent Republican ballots only.

3 Conclusion

There are clearly a large number of troublesome ballots in each state investigated. Ballots marked as not returned that were never requested are clearly an error of some kind. The error is not small as a percent of the total recorded unreturned ballots.

Ballots sent back and unrecorded is a separate error. These represent votes that have gone missing, a serious mistake. The number of these missing ballots is also large in each state.

Survey respondents were not asked if they received an unrequested ballot whether they sent these ballots back. This is clearly a lively possibility, and represents a third possible source of error, including the potential of voting twice (once by absentee and once at the polls). No estimates or likelihood can be calculated for this potential error due to absence of data.

4 Declaration of William M. Briggs, PhD

1. My name is William M. Briggs. I am over 18 years of age and am competent to testify in this action. All of the facts stated herein are true and based on my personal knowledge.
2. I received a Ph.D of Statistics from Cornell University in 2004.
3. I am currently a statistical consultant. I make this declaration in my personal capacity.
4. I have analyzed data regarding responses to questions relating to mail ballot requests, returns and related issues.
5. I attest to a reasonable degree of professional certainty that the resulting analysis are accurate.

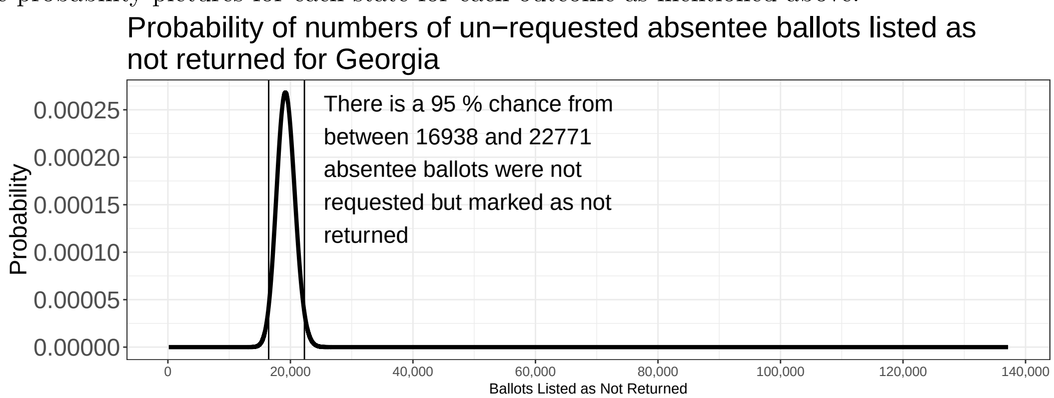
I declare under the penalty of perjury that the foregoing is true and correct.

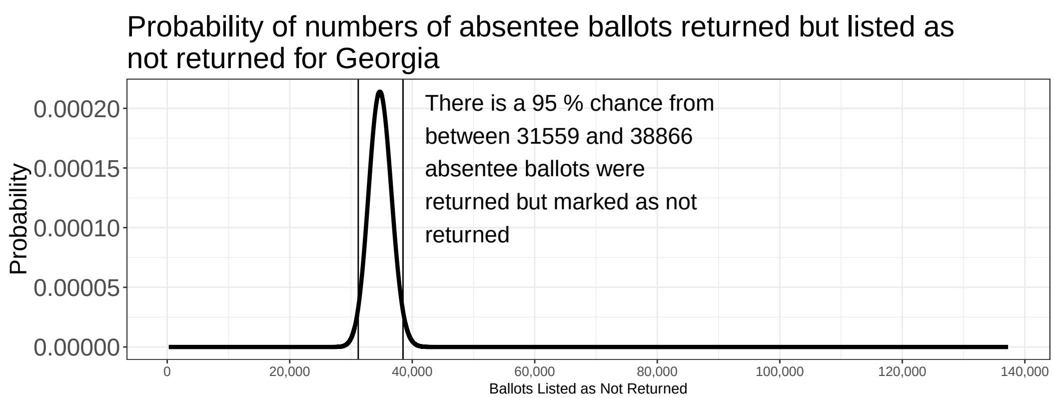
23 November 2020

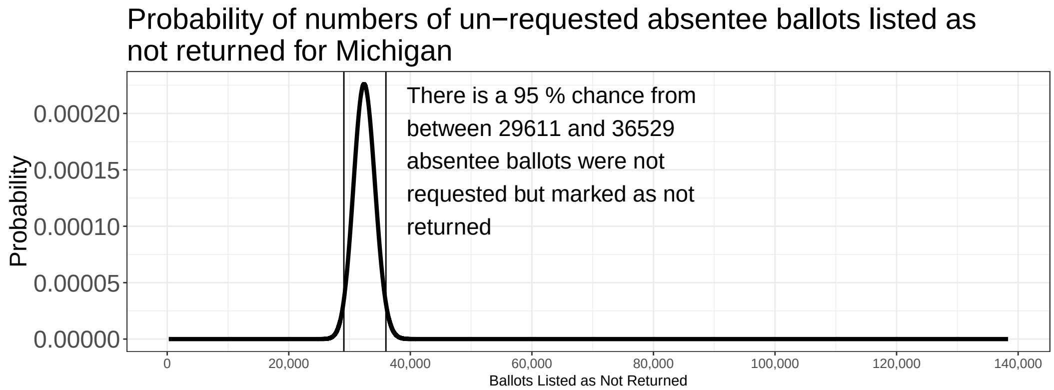
William M. Briggs

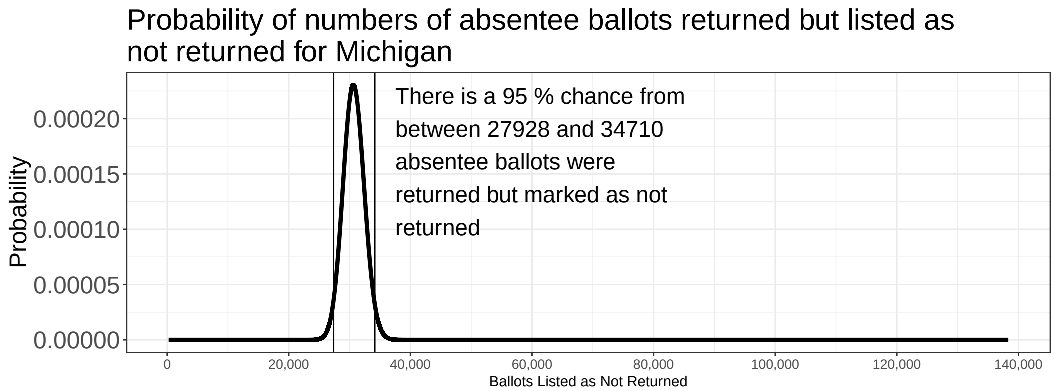
5 Appendix

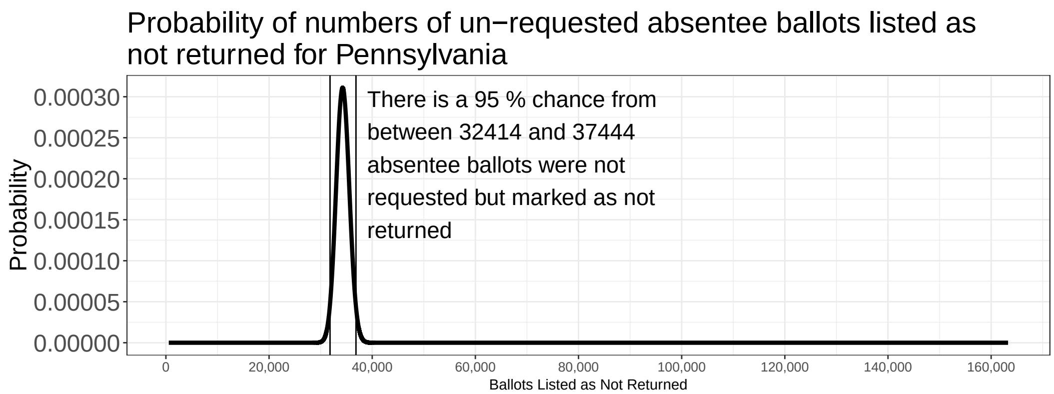
The probability pictures for each state for each outcome as mentioned above.

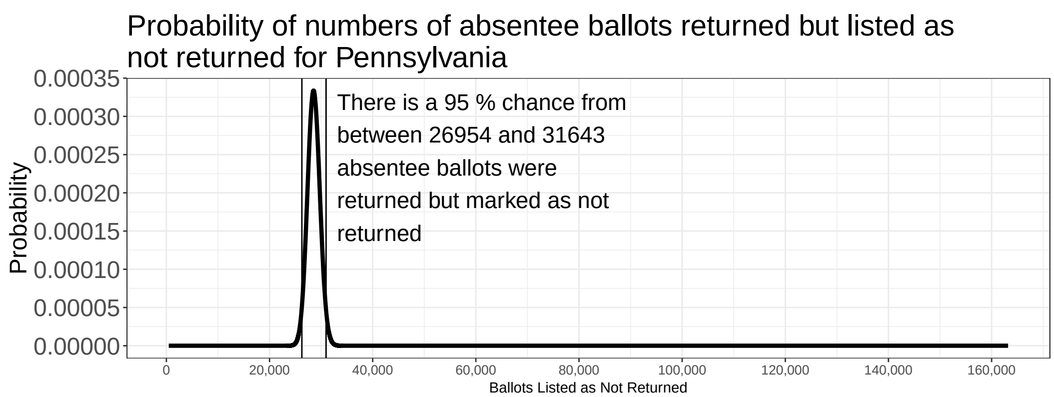




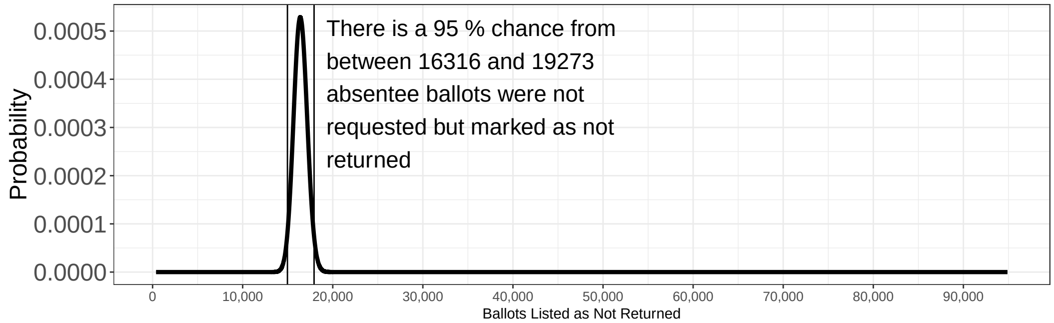

Probability of numbers of un−requested absentee ballots listed as not returned for Michigan
There is a 95 % chance from between 29611 and 36529 absentee ballots were not requested but marked as not returned
Probability
Ballots Listed as Not Returned


Probability of numbers of absentee ballots returned but listed as not returned for Michigan
There is a 95 % chance from between 27928 and 34710 absentee ballots were returned but marked as not returned
Probability
Ballots Listed as Not Returned

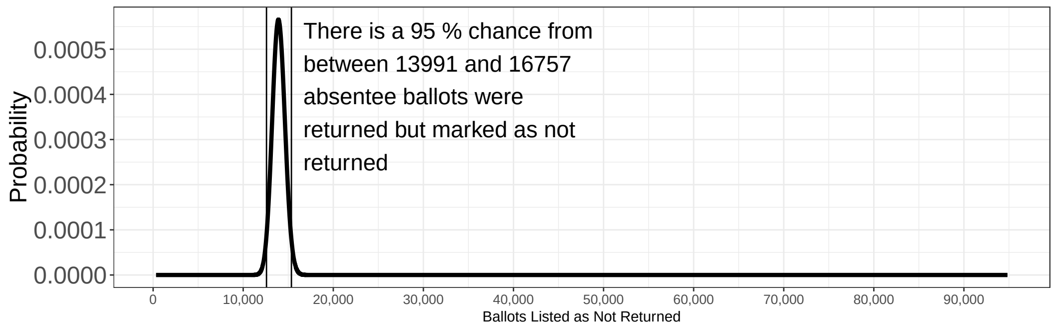

Probability of numbers of un−requested absentee ballots listed as not returned for Pennsylvania
There is a 95 % chance from between 32414 and 37444 absentee ballots were not requested but marked as not returned
Probability
Ballots Listed as Not Returned


Probability of numbers of absentee ballots returned but listed as not returned for Pennsylvania
There is a 95 % chance from between 26954 and 31643 absentee ballots were returned but marked as not returned
Probability
Ballots Listed as Not Returned

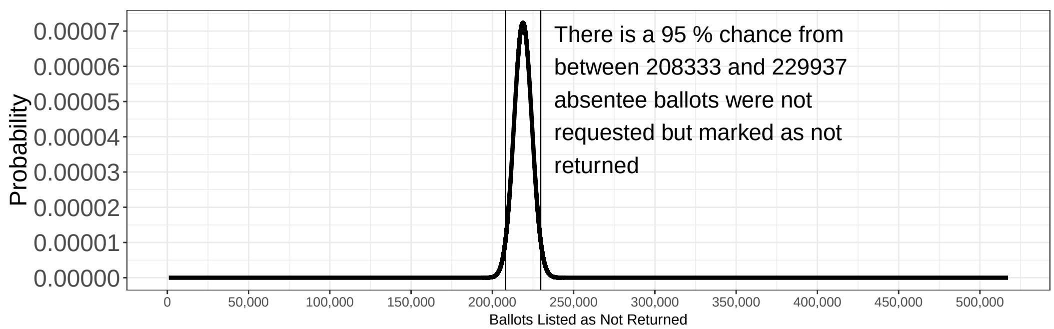
Probability of numbers of un−requested absentee ballots listed as not returned for Wisconsin



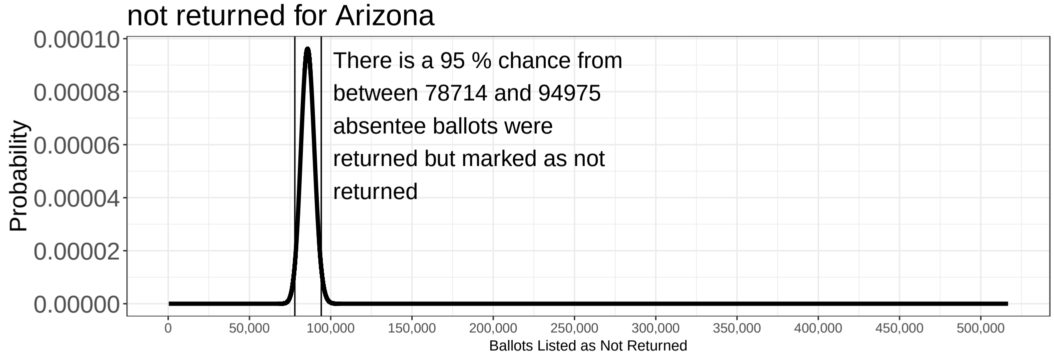
Probability of numbers of absentee ballots returned but listed as not returned for Wisconsin



Probability of numbers of un−requested absentee ballots listed as not returned for Arizona



Probability of numbers of absentee ballots returned but listed as not returned for Arizona



WI Unreturned Live Agent - Mass Markets

			11/15/2020	11/16/2020	11/17/2020
4,614	**Completes**		**-**	**3,483**	**1,131**
433	**Completed survey** - Q4=0**	1-Completed Survey	-	300	133
1,053	**VM Message Left**	2-Message Delivered VM	-	804	249
3,128	**Refused/Early Hang up/RC**	3-Refused	-	2,379	749
50,712	**No Answer**	4-No Answer	-	40,391	10,321
1,944	**Bad/Wrong Numbers/Langu**	5-Bad Number	-	1,289	655
100.00%	**List Penetration**				
57,271	**Data Loads**				

Q1 - May I please speak to <lead on screen>?		**Response**	**11/15/2020**	**11/16/2020**	**11/17/2020**
2,261	64.69%	A-Reached Target + B-What Is This About? / Uncertain	-	1,343	475
1,677	47.98%	X = Refused	-	1,202	475
0	0.00%				
3,495	**100.00%**	**Sum of All Responses**	**-**	**2,545**	**950**

Q2 - Did you request Absentee Ballot in state of WI?		**Response**	**11/15/2020**	**11/16/2020**	**11/17/2020**
1,699	62.39%	A-Yes [Go to Q3]	-	1,374	325

379	13.92%	B-No [Go to Q4]	-	240	139
32	1.18%	C-Yes (per Spouse/family Member) [Go to Q3]	-	16	16
4	0.15%	D-No (per Spouse/family Member) [Go to Q4]	-	-	4
44	1.62%	E-Unsure [Go to Close A]	-	25	19
4	0.15%	F-Not Available At The Moment [Go to Close A]	-	2	2
561	20.60%	X = Refused	-	405	156
2,723	**100.00%**	**Sum of All Responses**	**-**	**2,062**	**661**

Q3 - Did you mail your ballot back?		**Response**	**11/15/2020**	**11/16/2020**	**11/17/2020**
316	14.67%	A-Yes [Go to Q4]	-	238	78
1,286	59.70%	B-No [Go to Close A]	-	1,069	217
9	0.42%	C-Yes (per Spouse/family Member) [Go to Q4]	-	4	5
15	0.70%	D-No (per Spouse/family Member) [Go to Close A]	-	8	7
28	1.30%	E-Unsure / Refused [Go to Close A]	-	24	4
500	23.21%	X = Refused	-	314	186
			-		
2,154	**100.00%**	**Sum of All Responses**	**-**	**1,657**	**497**

Q4 - Can you please give us the best phone number to reach you at?		Response	11/15/2020	11/16/2020	11/17/2020
432	80.00%	A-Yes (Capture Number) [Go to Q5]	-	300	132
108	20.00%	B-Refused [Go to Q5]	-	77	31
0	0.00%				
0	0.00%				
540	**100.00%**	**Sum of All Responses**	**-**	**377**	**163**

Q5 - Can you provide us your email address?		Response	11/15/2020	11/16/2020	11/17/2020
50	11.55%	01-Yes [Go to Close B]	-	37	13
383	88.45%	02-No [Go to Close B]	-	263	120
0	0.00%				
433	**100.00%**	**Sum of All Responses**	**-**	**300**	**133**

William M. Briggs, PhD
Statistician to the Stars!
matt@wmbriggs.com
917-392-0691

1. Experience

(1) 2016: Author of *Uncertainty: The Soul of Modeling, Probability & Statistics*, a book which argues for a complete and fundamental change in the philosophy and practice of probability and statistics. Eliminate hypothesis testing and estimation, and move to verifiable predictions. This includes AI and machine learning. Call this The Great Reset, but a good one.

(2) 2004-2016 Adjunct Professor of Statistical Science, Cornell University, Ithaca, New York
I taught a yearly Masters course to people who (rightfully) hate statistics. Interests: philosophy of science & probability, epistemology, epidemiology (ask me about the all-too-common epidemiologist fallacy), Bayesian statistics, medicine, climatology & meteorology, goodness of forecasts, overconfidence in science; public understanding of science, limitations of science, scientism; scholastic metaphysics (as it relates to epistemology).

(3) 1998-present. Statistical consultant, Various companies
Most of my time is spent coaxing people out of their money to tell them they are too sure of themselves. All manner of analyses cheerfully undertaken. Example: Fraud analysis; I created the *Wall Street Journal's* College Rankings. I consultant regularly at Methodist and other hospitals, start-ups, start-downs, and with any instition willing to fork it over.

(4) 2003-2010. Research Scientist, New York Methodist Hospital, New York
Besides the usual, I sit/sat on the Institutional Review Committee to assess the statistics of proposed research. I was an Associate Editor for *Monthly Weather Review* (through 2011). Also a member of the American Meteorological Society's Probability and Statistics Committee (through 2011). At a hospital? Yes, sir; at a hospital. It rains there, too, you know.

(5) Fall 2007, Fall 2010 Visiting Professor of Statistics, Department of Mathematics, Central Michigan University, Mt. Pleasant, MI
Who doesn't love a visit from a statistician? Ask me about the difference between "a degree" and "an education."

(6) 2003-2007, Assistant Professor Statistics, Weill Medical College of Cornell University, New York, New York
Working here gave me a sincere appreciation of the influences of government money; grants galore.

(7) 2002-2003. Gotham Risk Management, New York
A start-up then, after Enron's shenanigans, a start-down. We set future weather derivative and weather insurance contract prices that incorporated information from medium- and long-range weather and climate forecasts.

(8) 1998-2002. DoubleClick, New York
Lead statistician. Lot of computer this and thats; enormous datasets.

(9) 1993-1998. Graduate student, Cornell University

Meteorology, applied climatology, and finally statistics. Was Vice Chair of the graduate student government; probably elected thanks to a miracle.

(10) 1992-1993. NATIONAL WEATHER SERVICE, SAULT STE. MARIE, MI
Forecast storms o' the day and launched enormous balloons in the name of Science. My proudest moment came when I was able to convince an ancient IBM-AT machine to talk to an *analog*, 110 baud, phone-coupled modem, all using BASIC!

(11) 1989-1992. UNDERGRADUATE STUDENT, CENTRAL MICHIGAN UNIVERSITY
Meteorology and mathematics. Started the local student meteorology group to chase tornadoes. Who knew Michigan had so few? Spent a summer at U Michigan playing with a (science-fiction-sounding) lidar.

(12) 1983-1989. UNITED STATES AIR FORCE
Cryptography and other secret stuff. Shot things; learned pinochle. I adopted and became proficient with a fascinating and versatile vocabulary. Irritate me for examples. TS/SCI, etc. security clearance (now inactive).

2. Education

(1) Ph.D., 2004, Cornell University. Statistics.
(2) M.S., 1995, Cornell University. Atmospheric Science.
(3) B.S., Summa Cum Laude, 1992, Central Michigan University. Meteorology and Math.

3. Publications

3.0.1. *Popular.*

(1) Op-eds in various newspapers; articles in *Stream*, *Crisis Magazine*, *The Remnant*, *Quadrant*, *Quirks*; blog with ~70,000 monthly readers. Various briefs submitted to government agencies, such as California Air Resources Board, Illinois Department of Natural Resources. Talks and holding-forths of all kinds.

3.0.2. *Books.*

(1) Richards, JW, WM Briggs, and D Axe, 2020. *UThe Price of Panic: How the Tyranny of Experts Turned a Pandemic into a Catastrophe.* Regnery. Professors Jay Richards, William Briggs, and Douglas Axe take a deep dive into the crucial questions on the minds of millions of Americans during one of the most jarring and unprecedented global events in a generation.
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No.___________

In the Supreme Court of Wisconsin

The Wisconsin Voters Alliance, Ronald H. Heuer, William Joseph Laurent, Richard Kucksdorf, James Fitzgerald, Kelly Ruh, William Berglund, John Jaconi, Donna Utschig, Jeff Wellhouse, Kurt Johnson, Thomas Reczek, Linda Sinkula, Atilla Thorbjorsson, Jeff Kleiman, Navin Jarugumilli, Jonathan Hunt, Suzanne Vlach, Jacob Blazkovec, Donald Utschig, Carol Aldinger, Jay Plaumann, Deborah Gorman, Robert R. Liebeck, Valerie M. Bruns Liebeck, Edward Hudak, Ron Cork, Charles Risch, Karl Lehrke, Arnet Holty and Joseph McGrath, PETITIONERS,

v.

Wisconsin Elections Commission, and its members Ann S. Jacobs, Mark L. Thomsen, Marge Bostelman, Julie M. Glancey, Dean Knudson, Robert F. Spindell, Jr., in their official capacities, Governor Tony Evers, in his official capacity, RESPONDENTS

On Petition For Original Action
Before this Court

EXPERT REPORT OF MATTHEW BRAYNARD

I. INTRODUCTION

I have been retained as an expert witness on behalf of Petitioners in the above captioned proceeding. I expect to testify on the following subject matters: (i) analysis of the database for the November 3, 2020 election for the selection of Presidential Electors in the State of Wisconsin ("State"); (ii) render opinions regarding whether individuals identified in the State's voter database actually voted; and (iii) render opinions regarding whether individuals identified in the State's voter database were actually qualified to vote on election day.

This is a statement of my relevant opinions and an outline of the factual basis for these opinions. The opinions and facts contained herein are based on the information made available to me in this case prior to preparation of this report, as well as my professional experience as an election data analyst.

I reserve the right to supplement or amend this statement on the basis of further information obtained prior to the time of trial or in order to clarify or correct the information contained herein.

II. DOCUMENTS REVIEWED

I reviewed the following documents in arriving at my opinions.

1. The voter records and election returns as maintained on the State's election database;

2. Records maintained by the National Change of Address Source which is maintained by the United States Postal Service and which is available for licensed users on the internet. I am a licensed member.

3. Records developed by the staff of my call centers and social media researchers; and

4. A national voter database maintained by L2 Political;

In addition, I discussed the facts of this matter with Petitioner's attorney Erick G. Kaardal and members of his legal team.

III. PROFESSIONAL QUALIFICATIONS

I have attached hereto as Exhibit 1 a true and correct copy of my resume. As detailed in the resume, I graduated from George Washington University in 2000 with a degree in business administration with a concentration in finance and management information systems. I have been working in the voter data and election administration field since 1996. I have worked building and deploying voter databases for the Republican National Committee, five Presidential campaigns, and no less than one-hundred different campaigns and election-related organizations in all fifty states and the U.S. Virgin Islands. I worked for eight years as a senior analyst at the nation's premier redistricting and election administration firm, Election Data Services, where I worked with states and municipalities on voter databases, delineation, and litigation support related to these matters. Also, while at Election Data Services, I worked under our contract with the US Census Bureau analyzing voting age population. Since 2004, I have worked for my own business, now known as External Affairs, Inc., providing statistical and data analysis for local, state, and federal candidates and policy organizations in the areas of voter targeting, polling/research, fundraising, branding, and online development and strategy. My firm has worked for over two-hundred candidates from president to town council and over a dozen DC-based policy/advocacy organizations.

With respect to publications I have authored in the last 10 years, I have not authored any publications in the last ten years.

IV. COMPENSATION

I have been retained as an expert witness for Petitioners. I am being compensated for a flat fee of $40,000.

V. PRIOR TESTIMONY

I have not provided testimony as an expert either at trial or in deposition in the last four years.

VI. STATEMENT OF OPINIONS

As set forth above, I have been engaged to provide expert opinions regarding analysis in the November 3, 2020 election of Presidential electors. Based on my review of the documents set forth above, my discussions with statisticians and analysts working with me and at my direction, my discussions with the attorneys representing the Petitioners, I have the following opinions:

1. It is my opinion, to a reasonable degree of scientific certainty, that in the State, the State's database for the November 3, 2020 election show 96,711 voters whom the state marks as having requested and been sent an absentee ballot did not return it. It is my opinion, to a reasonable degree of scientific certainty, that in my sample

of this universe, 18.12% of these absentee voters in the State did not request an absentee ballot.

2. From the State's database for the November 3, 2020 election and our call center results, it is my opinion to a reasonable degree of scientific certainty that 96,771 individuals whom the State's database identifies as having not returned an absentee ballot, that in my sample of this universe, 15.37% of those absentee voters did in fact mail back an absentee ballot to the clerk's office.

3. From the State's database for the November 3, 2020 election, the NCOA database, and our call center results, it is my opinion to a reasonable degree of scientific certainty that out of the 26,673 individuals had changed their address before the election, that in my sample of this universe, 1.11% of those individuals denied casting a ballot.

4. From the State's database for the November 3, 2020 election and the NCOA database and other state's voter databases, it is my opinion to a reasonable degree of scientific certainty, that at least 6,848 absentee or early voters were not residents of the State when they voted.

5. From the State's database for the November 3, 2020 election and my staff's review of social media for voters who applied for indefinitely confined absentee voting status, it is my opinion to a reasonable degree of scientific certainty, that of the 213,215 who claimed indefinitely confined absentee voter status in the State, that in my sample of this universe, 45.23% of those individuals were not indefinitely confined on Election Day.

6. From the State's database for the November 3, 2020 election and comparing that data to other states voting data and identifying individuals who cast early/absentee ballots in multiple states, it is my opinion to a reasonable degree of scientific certainty, that at least 234 individuals in the State voted in multiple states.

VII. BASIS AND REASONS SUPPORTING OPINIONS.

First, State maintains a database for the November 3, 2020 election which I obtained from L2 Political and which L2 Political obtained from the State's records on, among other things, voters who applied for an absentee or early voter status. I received this database from L2 Political in a table format with columns and rows which can be searched, sorted and filtered. Each row sets forth data on an individual voter. Each column contained information such as the name of the voter, the voter's address, whether the voter applied for an absentee ballot, whether the voter voted and whether the voter voted indefinitely confined status.

Second, we are able to obtain other data from other sources such as the National Change of Address Database maintained by the United States Postal Service and licensed by L2 Political. This database also in table format shows the name of an individual, the individual's new address, the individual's old address and the date that the change of address became effective.

Third, I conducted randomized surveys of data obtained from the State's database by having my staff or the call center's staff make phone calls to and ask questions of individuals identified on the State's database by certain categories such as absentee voters who did not return a ballot. Our staff, if they talked to any of these individuals, would then ask a series of questions beginning with a confirmation of the individual's name to ensure it matched the name of the voter identified in the State's database. The staff would then ask additional questions of the individuals and record the answers.

Fourth, I had this staff survey a random sample I obtained from the State's database on indefinitely confined voters. The staff conducted research on the internet and social media postings by these individuals. Staff would undertake to determine if the individual was the individual listed on the database meant the State's definition of indefinitely confined. Staff would then attempt to determine if the individuals had posted photos, images or other information demonstrating that the individuals were not indefinitely confined. For instance, if the individual's social media showed a photo on or near election day of the individual doing something inconsistent with indefinitely confined status such as riding a bike. Staff would then record the results as either "not indefinitely confined," "confirmed indefinitely confined," or "inconclusive."

Fifth, attached as Exhibits 2 is my written analysis of the data obtained.

Below are the opinions I rendered and the basis of the reasons for those opinions.

1. It is my opinion, to a reasonable degree of scientific certainty, that in the State, the State's database for the November 3, 2020 election show 96,711 voters whom the state marks as having requested and been sent an absentee ballot did not return it. It is my opinion, to a reasonable degree of scientific certainty, that in my sample of this universe, 18.12% of these absentee voters in the State did not request an absentee ballot.

I obtained this data from the State via L2 Political after the November 3, 2020, Election Day. This data identified 96,771 absentee voters who were sent an absentee ballot but who failed to return the absentee ballot.

I then had my staff make phone calls to a sample of this universe. When contacted, I had my staff confirm the individual's identity by name. Once the name was confirmed, I then had staff ask if the person requested an absentee ballot or not. Staff then recorded the number of persons who answered yes. My staff then recorded that of the 2,114 individuals who answered the question, 1,731 individuals answered yes to the question whether they requested an absentee ballot. My staff recorded that 383 individuals answered no to the question whether they requested an absentee ballot. Attached as Exhibit 2 is my written analysis containing information from the data above on absentee voters. Paragraph 2 of Exhibit 2 presents this information.

Next, I then had staff ask the individuals who answered yes, they requested an absentee ballot, whether the individual mailed back the absentee ballot or did not mail back the absentee ballot. Staff then recorded that of the 1,626 individuals who answered the question, 325 individuals answered yes, they mailed back the absentee ballot. Staff recorded 1301 individuals answered no, they did not mail back the absentee ballot. Paragraph 2 of Exhibit 2 presents this information.

Based on these results, 18.12% of our sample of these absentee voters in the State did not request an absentee ballot.

2. From the State's database for the November 3, 2020 election and our call center results, it is my opinion to a reasonable degree of scientific certainty that 96,771 individuals whom the State's database identifies as having not returned an absentee ballot, that in my sample of this universe, 15.37% of those absentee voters did in fact mail back an absentee ballot to the clerk's office.

This opinion includes the analysis set forth above. Among the 1,626 who told our call center that they did request an absentee ballot and answered the second question, 325 told our staff that they mailed the absentee ballot back, which is 15.37% of those whom the State identified as having not returned the absentee ballot the State sent them. Paragraph 2 of Exhibit 2 presents this information.

3. From the State's database for the November 3, 2020 election, the NCOA database, and our call center results, it is my opinion to a reasonable degree of scientific certainty that out of the 26,673 individuals had changed their address before the election, that in my sample of this universe, 1.11% of those individuals denied casting a ballot.

On Exhibit 2, in paragraph 4, I took the State's database of all absentee or early voters and matched those voters to the NCOA database for the day after election day.

This data identified 26,673 individuals whose address on the State's database did not match the address on the NCOA database on election day. Next, I had my staff call the persons identified and ask these individuals whether they had voted. My call center staff identified 1,607 individuals who confirmed that they had casted a ballot. My call center staff identified 18 individuals who denied casting a ballot. Our analysis shows that 1.11% of our sample of these individuals who changed address did not vote despite the State's data recorded that the individuals did vote.

4. From the State's database for the November 3, 2020 election and the NCOA data and other state's voter data, it is my opinion to a reasonable degree of scientific certainty, that at least 6,848 absentee or early voters were not residents of the State when they voted.

On Exhibit 2, in paragraph 1, I took the State's database of all absentee or early voters and matched those voters to the NCOA database for the day after Election Day. This data identified 6,207 individuals who had moved of the State prior to Election Day. Further, by comparing the other 49 states voter databases to the State's database, I identified 765 who registered to vote in a state other than the State subsequent to the date they registered to vote in the State. When merging these two lists and removing the duplicates, and accounting for moves that would not cause an individual to lose their residency and eligibility to vote under State law, these voters total 6,848.

5. From the State's database for the November 3, 2020 election and my staff's review of social media for voters who applied for indefinitely confined absentee voting status, it is my opinion to a reasonable degree of scientific certainty, that of the 213,215 who claimed indefinitely confined absentee voter status in the State, that in my sample of this universe, 45.23% of those individuals were not indefinitely confined on Election Day.

This opinion is taken from data developed on Exhibit 3. For this determination, I had my staff investigate using the internet and social media the individuals the State's data identified as claiming indefinitely confined status in their absentee ballot applications. The staff conducted research on the internet and social media postings by these individuals. Staff would undertake to determine if the individual was the individual listed on the database as indefinitely confined. Staff would then attempt to determine if the individuals had posted photos, images or other information demonstrating that the individuals were not indefinitely confined. For instance, if the individual's social media showed a photo on or near election day doing something inconsistent with indefinitely confined status such as riding a bike. Staff would then record the results as either "not indefinitely confined," "confirmed indefinitely confined," or "inconclusive."

These results showed that of the 213,215 who claimed indefinitely confined absentee voter status in the State, that in my sample of this universe, 45.23% of those individuals were not indefinitely confined on Election Day.

6. From the State's database for the November 3, 2020 election and comparing that data to other states voting data and identifying individuals who cast early/absentee ballots in multiple states, it is my opinion to a reasonable degree of scientific certainty, that at least 234 individuals in the State voted in multiple states.

On Exhibit 2, in paragraph 2, I had my staff compare the State's early and absentee voters to other states voting data and identified individuals who cast early/absentee ballots in multiple states. My staff located 234 individuals who voted in the State and in other states for the November 3, 2020 general election.

VIII. EXHIBITS TO BE USED AT TRIAL TO SUMMARIZE OR EXPLAIN OPINIONS

At the present time, I intend to rely on the documents produced set forth above as possible exhibits.

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SIGNATURE PAGE TO FOLLOW

Dated: 11/22/2020

Matthew Braynard

[redacted]

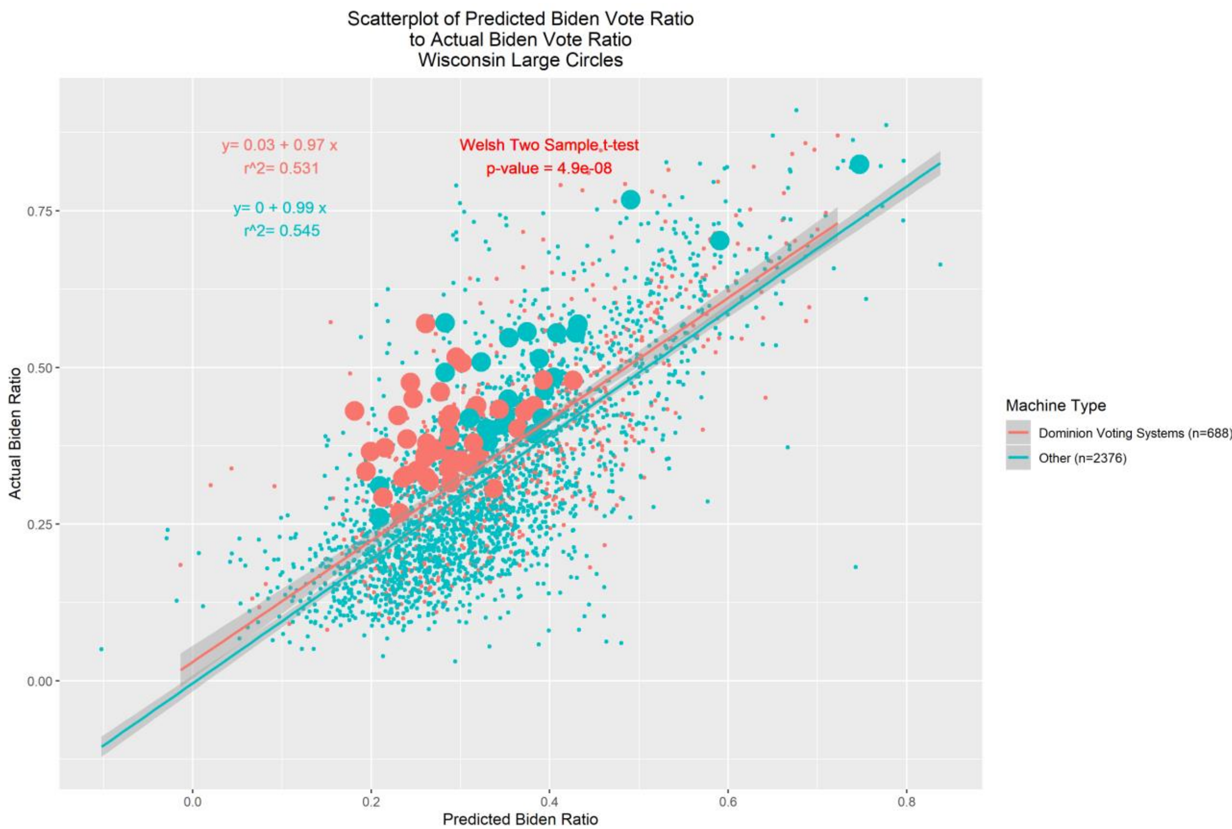
Pursuant to 28 U.S.C Section 1746, I, [redacted], make the following declaration.

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 Wisconsin.
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 Wisconsin.
9. 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 Wisconsin, and the margin of votes implied by the unusual activity would easily sway the election results.
10. The following graph shows the pattern. The large red dots are counties in Wisconsin 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 (Wisconsin 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



11. 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.

12. 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.

13. 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 Wisconsin's vote tallies to be inflated by somewhere between three and five point six percentage points. Statistical estimating yields that in Wisconsin, the best estimate of the number of impacted votes is 181,440. However, a 95% confidence interval calculation yields that as many as 236,520 votes may have been impacted.

I declare under penalty of perjury that the forgoing is true and correct. Executed this November 28th, 2020.

[redacted],

/s/

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
ADAMS COUNTY - 01	CITY OF ADAMS - 01201	ES&S DS200	ES&S AutoMARK
ADAMS COUNTY - 01	TOWN OF ADAMS - 01002	None	Vote Pad
ADAMS COUNTY - 01	TOWN OF BIG FLATS - 01004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ADAMS COUNTY - 01	TOWN OF COLBURN - 01006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ADAMS COUNTY - 01	TOWN OF DELL PRAIRIE - 01008	None	Vote Pad
ADAMS COUNTY - 01	TOWN OF EASTON - 01010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ADAMS COUNTY - 01	TOWN OF JACKSON - 01012	None	Vote Pad
ADAMS COUNTY - 01	TOWN OF LEOLA - 01014	None	Vote Pad
ADAMS COUNTY - 01	TOWN OF LINCOLN - 01016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ADAMS COUNTY - 01	TOWN OF MONROE - 01018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ADAMS COUNTY - 01	TOWN OF NEW CHESTER - 01020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ADAMS COUNTY - 01	TOWN OF NEW HAVEN - 01022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ADAMS COUNTY - 01	TOWN OF PRESTON - 01024	None	Vote Pad
ADAMS COUNTY - 01	TOWN OF QUINCY - 01026	None	Vote Pad
ADAMS COUNTY - 01	TOWN OF RICHFIELD - 01028	None	Vote Pad
ADAMS COUNTY - 01	TOWN OF ROME - 01030	ES&S DS200	ES&S AutoMARK
ADAMS COUNTY - 01	TOWN OF SPRINGVILLE - 01032	None	Vote Pad
ADAMS COUNTY - 01	TOWN OF STRONGS PRAIRIE - 01034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ADAMS COUNTY - 01	VILLAGE OF FRIENDSHIP - 01126	None	Vote Pad
ASHLAND COUNTY - 02	CITY OF ASHLAND - MAIN - 02201	ES&S M100	ES&S AutoMARK
ASHLAND COUNTY - 02	CITY OF MELLEN - 02251	None	ES&S AutoMARK
ASHLAND COUNTY - 02	TOWN OF AGENDA - 02002	None	ES&S AutoMARK
ASHLAND COUNTY - 02	TOWN OF ASHLAND - 02004	None	ES&S AutoMARK
ASHLAND COUNTY - 02	TOWN OF CHIPPEWA - 02006	None	ES&S AutoMARK
ASHLAND COUNTY - 02	TOWN OF GINGLES - 02008	None	ES&S AutoMARK
ASHLAND COUNTY - 02	TOWN OF GORDON - 02010	None	ES&S AutoMARK
ASHLAND COUNTY - 02	TOWN OF JACOBS - 02012	None	ES&S AutoMARK
ASHLAND COUNTY - 02	TOWN OF LA POINTE - 02014	None	ES&S AutoMARK
ASHLAND COUNTY - 02	TOWN OF MARENGO - 02016	None	ES&S AutoMARK
ASHLAND COUNTY - 02	TOWN OF MORSE - 02018	None	ES&S AutoMARK
ASHLAND COUNTY - 02	TOWN OF PEEKSVILLE - 02020	None	ES&S AutoMARK
ASHLAND COUNTY - 02	TOWN OF SANBORN - 02022	None	ES&S AutoMARK
ASHLAND COUNTY - 02	TOWN OF SHANAGOLDEN - 02024	None	ES&S AutoMARK
ASHLAND COUNTY - 02	TOWN OF WHITE RIVER - 02026	None	ES&S AutoMARK
ASHLAND COUNTY - 02	VILLAGE OF BUTTERNUT - 02106	None	ES&S AutoMARK
BARRON COUNTY - 03	CITY OF BARRON - 03206	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	CITY OF CHETEK - 03211	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	CITY OF CUMBERLAND - 03212	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	CITY OF RICE LAKE - 03276	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF ALMENA - 03002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF ARLAND - 03004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF BARRON - 03006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF BEAR LAKE - 03008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF CEDAR LAKE - 03010	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF CHETEK - 03012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
BARRON COUNTY - 03	TOWN OF CLINTON - 03014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF CRYSTAL LAKE - 03016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF CUMBERLAND - 03018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF DALLAS - 03020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF DOVRE - 03022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF DOYLE - 03024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF LAKELAND - 03026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF MAPLE GROVE - 03028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF MAPLE PLAIN - 03030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF OAK GROVE - 03032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF PRAIRIE FARM - 03034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF PRAIRIE LAKE - 03036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF RICE LAKE - 03038	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF SIOUX CREEK - 03040	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF STANFOLD - 03042	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF STANLEY - 03044	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF SUMNER - 03046	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF TURTLE LAKE - 03048	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	TOWN OF VANCE CREEK - 03050	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	VILLAGE OF ALMENA - 03101	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	VILLAGE OF CAMERON - 03111	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	VILLAGE OF DALLAS - 03116	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	VILLAGE OF HAUGEN - 03136	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	VILLAGE OF PRAIRIE FARM - 03171	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BARRON COUNTY - 03	VILLAGE OF TURTLE LAKE - MAIN - 03186	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BAYFIELD COUNTY - 04	CITY OF BAYFIELD - 04206	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	CITY OF WASHBURN - 04291	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF BARKSDALE - 04002	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF BARNES - 04004	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF BAYFIELD - 04006	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF BAYVIEW - 04008	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF BELL - 04010	None	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF CABLE - 04012	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF CLOVER - 04014	None	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF DELTA - 04016	None	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF DRUMMOND - 04018	None	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF EILEEN - 04020	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF GRAND VIEW - 04021	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF HUGHES - 04022	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF IRON RIVER - 04024	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF KELLY - 04026	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF KEYSTONE - 04028	None	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF LINCOLN - 04030	None	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF MASON - 04032	None	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF NAMAKAGON - 04034	None	ES&S AutoMARK

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
BAYFIELD COUNTY - 04	TOWN OF ORIENTA - 04036	None	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF OULU - 04038	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF PILSEN - 04040	None	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF PORT WING - 04042	None	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF RUSSELL - 04046	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF TRIPP - 04048	None	ES&S AutoMARK
BAYFIELD COUNTY - 04	TOWN OF WASHBURN - 04050	ES&S M100	ES&S AutoMARK
BAYFIELD COUNTY - 04	VILLAGE OF MASON - 04151	None	ES&S AutoMARK
BROWN COUNTY - 05	CITY OF DE PERE - 05216	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	CITY OF GREEN BAY - 05231	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	TOWN OF EATON - 05010	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	TOWN OF GLENMORE - 05012	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	TOWN OF GREEN BAY - 05014	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	TOWN OF HOLLAND - 05018	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	TOWN OF HUMBOLDT - 05022	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	TOWN OF LAWRENCE - 05024	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	TOWN OF LEDGEVIEW - 05025	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	TOWN OF MORRISON - 05026	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	TOWN OF NEW DENMARK - 05028	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	TOWN OF PITTSFIELD - 05030	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	TOWN OF ROCKLAND - 05034	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	TOWN OF SCOTT - 05036	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	TOWN OF WRIGHTSTOWN - 05040	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	VILLAGE OF ALLOUEZ - 05102	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	VILLAGE OF ASHWAUBENON - 05104	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	VILLAGE OF BELLEVUE - 05106	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	VILLAGE OF DENMARK - 05116	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	VILLAGE OF HOBART - 05126	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	VILLAGE OF HOWARD - MAIN - 05136	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	VILLAGE OF PULASKI - MAIN - 05171	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	VILLAGE OF SUAMICO - 05178	ES&S DS200	ES&S ExpressVote
BROWN COUNTY - 05	VILLAGE OF WRIGHTSTOWN - MAIN - 05191	ES&S DS200	ES&S ExpressVote
BUFFALO COUNTY - 06	CITY OF ALMA - 06201	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	CITY OF BUFFALO CITY - 06206	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	CITY OF FOUNTAIN CITY - 06226	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	CITY OF MONDOVI - 06251	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF ALMA - 06002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF BELVIDERE - 06004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF BUFFALO - 06006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF CANTON - 06008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF CROSS - 06010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF DOVER - 06012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF GILMANTON - 06014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF GLENCOE - 06016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF LINCOLN - 06018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
BUFFALO COUNTY - 06	TOWN OF MAXVILLE - 06020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF MILTON - 06022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF MODENA - 06024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF MONDOVI - 06026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF MONTANA - 06028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF NAPLES - 06030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF NELSON - 06032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	TOWN OF WAUMANDEE - 06034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	VILLAGE OF COCHRANE - 06111	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BUFFALO COUNTY - 06	VILLAGE OF NELSON - 06154	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF ANDERSON - 07002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF BLAINE - 07004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF DANIELS - 07006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF DEWEY - 07008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF GRANTSBURG - 07010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF JACKSON - 07012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF LA FOLLETTE - 07014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF LINCOLN - 07016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF MEENON - 07018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF OAKLAND - 07020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF ROOSEVELT - 07022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF RUSK - 07024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF SAND LAKE - 07026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF SCOTT - 07028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF SIREN - 07030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF SWISS - 07032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF TRADE LAKE - 07034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF UNION - 07036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF WEBB LAKE - 07038	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF WEST MARSHLAND - 07040	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	TOWN OF WOOD RIVER - 07042	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	VILLAGE OF GRANTSBURG - 07131	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	VILLAGE OF SIREN - 07181	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
BURNETT COUNTY - 07	VILLAGE OF WEBSTER - 07191	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CALUMET COUNTY - 08	CITY OF BRILLION - 08206	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	CITY OF CHILTON - 08211	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	CITY OF NEW HOLSTEIN - 08261	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	TOWN OF BRILLION - 08002	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	TOWN OF BROTHERTOWN - 08004	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	TOWN OF CHARLESTOWN - 08006	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	TOWN OF CHILTON - 08008	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	TOWN OF HARRISON - 08010	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	TOWN OF NEW HOLSTEIN - 08012	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	TOWN OF RANTOUL - 08014	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	TOWN OF STOCKBRIDGE - 08016	ES&S DS200	ES&S ExpressVote

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
CALUMET COUNTY - 08	TOWN OF WOODVILLE - 08018	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	VILLAGE OF HARRISON - MAIN - 08131	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	VILLAGE OF HILBERT - 08136	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	VILLAGE OF POTTER - 08160	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	VILLAGE OF SHERWOOD - 08179	ES&S DS200	ES&S ExpressVote
CALUMET COUNTY - 08	VILLAGE OF STOCKBRIDGE - 08181	ES&S DS200	ES&S ExpressVote
CHIPPEWA COUNTY - 09	CITY OF BLOOMER - 09206	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	CITY OF CHIPPEWA FALLS - 09211	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	CITY OF CORNELL - 09213	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	CITY OF STANLEY - MAIN - 09281	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF ANSON - 09002	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF ARTHUR - 09004	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF AUBURN - 09006	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF BIRCH CREEK - 09008	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF BLOOMER - 09010	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF CLEVELAND - 09012	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF COLBURN - 09014	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF COOKS VALLEY - 09016	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF DELMAR - 09018	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF EAGLE POINT - 09020	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF EDSON - 09022	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF ESTELLA - 09024	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF GOETZ - 09026	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF HALLIE - 09028	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF HOWARD - 09032	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF LAFAYETTE - 09034	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF LAKE HOLCOMBE - 09035	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF RUBY - 09036	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF SAMPSON - 09038	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF SIGEL - 09040	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF TILDEN - 09042	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF WHEATON - 09044	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	TOWN OF WOODMOHR - 09046	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	VILLAGE OF BOYD - 09106	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	VILLAGE OF CADOTT - 09111	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	VILLAGE OF LAKE HALLIE - 09128	ClearCount 2.0.1	ClearAccess 2.0.1
CHIPPEWA COUNTY - 09	VILLAGE OF NEW AUBURN - MAIN - 09161	ClearCount 2.0.1	ClearAccess 2.0.1
CLARK COUNTY - 10	CITY OF ABBOTSFORD - MAIN - 10201	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	CITY OF COLBY - MAIN - 10211	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	CITY OF GREENWOOD - 10231	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	CITY OF LOYAL - 10246	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	CITY OF NEILLSVILLE - 10261	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	CITY OF OWEN - 10265	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	CITY OF THORP - 10286	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF BEAVER - 10002	ES&S DS200	ES&S ExpressVote

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
CLARK COUNTY - 10	TOWN OF BUTLER - 10004	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF COLBY - 10006	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF DEWHURST - 10008	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF EATON - 10010	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF FOSTER - 10012	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF FREMONT - 10014	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF GRANT - 10016	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF GREEN GROVE - 10018	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF HENDREN - 10020	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF HEWETT - 10022	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF HIXON - 10024	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF HOARD - 10026	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF LEVIS - 10028	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF LONGWOOD - 10030	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF LOYAL - 10032	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF LYNN - 10034	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF MAYVILLE - 10036	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF MEAD - 10038	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF MENTOR - 10040	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF PINE VALLEY - 10042	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF RESEBURG - 10044	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF SEIF - 10046	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF SHERMAN - 10048	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF SHERWOOD - 10050	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF THORP - 10052	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF UNITY - 10054	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF WARNER - 10056	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF WASHBURN - 10058	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF WESTON - 10060	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF WITHEE - 10062	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF WORDEN - 10064	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	TOWN OF YORK - 10066	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	VILLAGE OF CURTISS - 10111	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	VILLAGE OF DORCHESTER - MAIN - 10116	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	VILLAGE OF GRANTON - 10131	ES&S DS200	ES&S ExpressVote
CLARK COUNTY - 10	VILLAGE OF WITHEE - 10191	ES&S DS200	ES&S ExpressVote
COLUMBIA COUNTY - 11	CITY OF COLUMBUS - MAIN - 11211	ES&S DS200	ES&S ExpressVote
COLUMBIA COUNTY - 11	CITY OF LODI - 11246	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	CITY OF PORTAGE - 11271	ES&S DS200	ES&S ExpressVote
COLUMBIA COUNTY - 11	CITY OF WISCONSIN DELLS - MAIN - 11291	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF ARLINGTON - 11002	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF CALEDONIA - 11004	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF COLUMBUS - 11006	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF COURTLAND - 11008	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF DEKORRA - 11010	ES&S DS200	ES&S AutoMARK

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
COLUMBIA COUNTY - 11	TOWN OF FORT WINNEBAGO - 11012	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF FOUNTAIN PRAIRIE - 11014	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF HAMPDEN - 11016	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF LEEDS - 11018	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF LEWISTON - 11020	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF LODI - 11022	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF LOWVILLE - 11024	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF MARCELLON - 11026	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF NEWPORT - 11028	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF OTSEGO - 11030	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF PACIFIC - 11032	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF RANDOLPH - 11034	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF SCOTT - 11036	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF SPRINGVALE - 11038	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF WEST POINT - 11040	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	TOWN OF WYOCENA - 11042	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	VILLAGE OF ARLINGTON - 11101	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	VILLAGE OF CAMBRIA - 11111	ES&S DS200	ES&S ExpressVote
COLUMBIA COUNTY - 11	VILLAGE OF DOYLESTOWN - 11116	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	VILLAGE OF FALL RIVER - 11126	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	VILLAGE OF FRIESLAND - 11127	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	VILLAGE OF PARDEEVILLE - 11171	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	VILLAGE OF POYNETTE - 11172	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	VILLAGE OF RIO - 11177	ES&S DS200	ES&S AutoMARK
COLUMBIA COUNTY - 11	VILLAGE OF WYOCENA - 11191	ES&S DS200	ES&S AutoMARK
CRAWFORD COUNTY - 12	CITY OF PRAIRIE DU CHIEN - 12271	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
CRAWFORD COUNTY - 12	TOWN OF BRIDGEPORT - 12002	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
CRAWFORD COUNTY - 12	TOWN OF CLAYTON - 12004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	TOWN OF EASTMAN - 12006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	TOWN OF FREEMAN - 12008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	TOWN OF HANEY - 12010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	TOWN OF MARIETTA - 12012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	TOWN OF PRAIRIE DU CHIEN - 12014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	TOWN OF SCOTT - 12016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	TOWN OF SENECA - 12018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	TOWN OF UTICA - 12020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	TOWN OF WAUZEKA - 12022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	VILLAGE OF BELL CENTER - 12106	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	VILLAGE OF DE SOTO -	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	VILLAGE OF EASTMAN - 12121	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	VILLAGE OF FERRYVILLE - 12126	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	VILLAGE OF GAYS MILLS - 12131	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	VILLAGE OF LYNXVILLE - 12146	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	VILLAGE OF MT. STERLING - 12151	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	VILLAGE OF SOLDIERS GROVE - 12181	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
CRAWFORD COUNTY - 12	VILLAGE OF STEUBEN - 12182	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
CRAWFORD COUNTY - 12	VILLAGE OF WAUZEKA - 12191	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DANE COUNTY - 13	CITY OF FITCHBURG - 13225	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	CITY OF MADISON - 13251	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	CITY OF MIDDLETON - 13255	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	CITY OF MONONA - 13258	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	CITY OF STOUGHTON - 13281	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	CITY OF SUN PRAIRIE - 13282	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	CITY OF VERONA - 13286	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF ALBION - 13002	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF BERRY - 13004	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF BLACK EARTH - 13006	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF BLOOMING GROVE - 13008	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF BLUE MOUNDS - 13010	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF BRISTOL - 13012	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF BURKE - 13014	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF CHRISTIANA - 13016	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF COTTAGE GROVE - 13018	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF CROSS PLAINS - 13020	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF DANE - 13022	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF DEERFIELD - 13024	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF DUNKIRK - 13026	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF DUNN - 13028	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF MADISON - 13032	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF MAZOMANIE - 13034	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF MEDINA - 13036	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF MIDDLETON - 13038	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF MONTROSE - 13040	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF OREGON - 13042	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF PERRY - 13044	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF PLEASANT SPRINGS - 13046	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF PRIMROSE - 13048	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF ROXBURY - 13050	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF RUTLAND - 13052	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF SPRINGDALE - 13054	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF SPRINGFIELD - 13056	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF SUN PRAIRIE - 13058	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF VERMONT - 13060	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF VERONA - 13062	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF VIENNA - 13064	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF WESTPORT - 13066	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF WINDSOR - 13068	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	TOWN OF YORK - 13070	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF BELLEVILLE - MAIN - 13106	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF BLACK EARTH - 13107	ES&S DS200	ES&S ExpressVote

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
DANE COUNTY - 13	VILLAGE OF BLUE MOUNDS - 13108	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF BROOKLYN - MAIN - 13109	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF CAMBRIDGE - MAIN - 13111	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF COTTAGE GROVE - 13112	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF CROSS PLAINS - 13113	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF DANE - 13116	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF DEERFIELD - 13117	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF DEFOREST - 13118	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF MAPLE BLUFF - 13151	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF MARSHALL - 13152	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF MAZOMANIE - 13153	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF MCFARLAND - 13154	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF MOUNT HOREB - 13157	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF OREGON - 13165	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF ROCKDALE - 13176	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF SHOREWOOD HILLS - 13181	ES&S DS200	ES&S ExpressVote
DANE COUNTY - 13	VILLAGE OF WAUNAKEE - 13191	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	CITY OF BEAVER DAM - 14206	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	CITY OF FOX LAKE - 14226	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	CITY OF HORICON - 14236	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	CITY OF JUNEAU - 14241	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	CITY OF MAYVILLE - 14251	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	CITY OF WAUPUN - MAIN - 14292	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF ASHIPPUN - 14002	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF BEAVER DAM - 14004	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF BURNETT - 14006	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF CALAMUS - 14008	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF CHESTER - 14010	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF CLYMAN - 14012	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF ELBA - 14014	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF EMMET - 14016	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF FOX LAKE - 14018	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF HERMAN - 14020	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF HUBBARD - 14022	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF HUSTISFORD - 14024	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF LEBANON - 14026	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF LEROY - 14028	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF LOMIRA - 14030	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF LOWELL - 14032	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF OAK GROVE - 14034	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF PORTLAND - 14036	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF RUBICON - 14038	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF SHIELDS - 14040	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF THERESA - 14042	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF TRENTON - 14044	ES&S DS200	ES&S ExpressVote

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
DODGE COUNTY - 14	TOWN OF WESTFORD - 14046	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	TOWN OF WILLIAMSTOWN - 14048	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	VILLAGE OF BROWNSVILLE - 14106	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	VILLAGE OF CLYMAN - 14111	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	VILLAGE OF HUSTISFORD - 14136	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	VILLAGE OF IRON RIDGE - 14141	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	VILLAGE OF KEKOSKEE - 14143	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	VILLAGE OF LOMIRA - 14146	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	VILLAGE OF LOWELL - 14147	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	VILLAGE OF NEOSHO - 14161	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	VILLAGE OF RANDOLPH - MAIN - 14176	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	VILLAGE OF REESEVILLE - 14177	ES&S DS200	ES&S ExpressVote
DODGE COUNTY - 14	VILLAGE OF THERESA - 14186	ES&S DS200	ES&S ExpressVote
DOOR COUNTY - 15	CITY OF STURGEON BAY - 15281	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	TOWN OF BAILEYS HARBOR - 15002	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	TOWN OF BRUSSELS - 15004	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	TOWN OF CLAY BANKS - 15006	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	TOWN OF EGG HARBOR - 15008	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	TOWN OF FORESTVILLE - 15010	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	TOWN OF GARDNER - 15012	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	TOWN OF GIBRALTAR - 15014	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	TOWN OF JACKSONPORT - 15016	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	TOWN OF LIBERTY GROVE - 15018	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	TOWN OF NASEWAUPEE - 15020	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	TOWN OF SEVASTOPOL - 15022	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	TOWN OF STURGEON BAY - 15024	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	TOWN OF UNION - 15026	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	TOWN OF WASHINGTON - 15028	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	VILLAGE OF EGG HARBOR - 15118	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	VILLAGE OF EPHRAIM - 15121	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	VILLAGE OF FORESTVILLE - 15127	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOOR COUNTY - 15	VILLAGE OF SISTER BAY - 15181	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
DOUGLAS COUNTY - 16 as of 8/2018	CITY OF SUPERIOR - 16281	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF AMNICON - 16002	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF BENNETT - 16004	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF BRULE - 16006	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF CLOVERLAND - 16008	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF DAIRYLAND - 16010	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF GORDON - 16012	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF HAWTHORNE - 16014	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF HIGHLAND - 16016	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF LAKESIDE - 16018	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF MAPLE - 16020	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF OAKLAND - 16022	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF PARKLAND - 16024	ES&S DS200	ES&S ExpressVote

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
DOUGLAS COUNTY - 16	TOWN OF SOLON SPRINGS - 16026	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF SUMMIT - 16028	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF SUPERIOR - 16030	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	TOWN OF WASCOTT - 16032	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	VILLAGE OF LAKE NEBAGAMON - 16146	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	VILLAGE OF OLIVER - 16165	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	VILLAGE OF POPLAR - 16171	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	VILLAGE OF SOLON SPRINGS - 16181	ES&S DS200	ES&S ExpressVote
DOUGLAS COUNTY - 16	VILLAGE OF SUPERIOR - 16182	ES&S DS200	ES&S ExpressVote
DUNN COUNTY - 17	CITY OF MENOMONIE - 17251	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF COLFAX - 17002	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF DUNN - 17004	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF EAU GALLE - 17006	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF ELK MOUND - 17008	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF GRANT - 17010	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF HAY RIVER - 17012	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF LUCAS - 17014	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF MENOMONIE - 17016	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF NEW HAVEN - 17018	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF OTTER CREEK - 17020	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF PERU - 17022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF RED CEDAR - 17024	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF ROCK CREEK - 17026	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF SAND CREEK - 17028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF SHERIDAN - 17030	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF SHERMAN - 17032	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF SPRING BROOK - 17034	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF STANTON - 17036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF TAINTER - 17038	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF TIFFANY - 17040	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF WESTON - 17042	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	TOWN OF WILSON - 17044	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	VILLAGE OF BOYCEVILLE - 17106	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	VILLAGE OF COLFAX - 17111	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	VILLAGE OF DOWNING - 17116	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	VILLAGE OF ELK MOUND - 17121	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	VILLAGE OF KNAPP - 17141	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	VILLAGE OF RIDGELAND - 17176	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
DUNN COUNTY - 17	VILLAGE OF WHEELER - 17191	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
EAU CLAIRE COUNTY - 18	CITY OF ALTOONA - 18201	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	CITY OF AUGUSTA - 18202	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	CITY OF EAU CLAIRE - MAIN - 18221	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	TOWN OF BRIDGE CREEK - 18002	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	TOWN OF BRUNSWICK - 18004	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	TOWN OF CLEAR CREEK - 18006	ES&S DS200	ES&S ExpressVote

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
EAU CLAIRE COUNTY - 18	TOWN OF DRAMMEN - 18008	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	TOWN OF FAIRCHILD - 18010	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	TOWN OF LINCOLN - 18012	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	TOWN OF LUDINGTON - 18014	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	TOWN OF OTTER CREEK - 18016	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	TOWN OF PLEASANT VALLEY - 18018	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	TOWN OF SEYMOUR - 18020	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	TOWN OF UNION - 18022	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	TOWN OF WASHINGTON - 18024	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	TOWN OF WILSON - 18026	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	VILLAGE OF FAIRCHILD - 18126	ES&S DS200	ES&S ExpressVote
EAU CLAIRE COUNTY - 18	VILLAGE OF FALL CREEK - 18127	ES&S DS200	ES&S ExpressVote
FLORENCE COUNTY - 19	TOWN OF AURORA - 19002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FLORENCE COUNTY - 19	TOWN OF COMMONWEALTH - 19004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FLORENCE COUNTY - 19	TOWN OF FENCE - 19006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FLORENCE COUNTY - 19	TOWN OF FERN - 19008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FLORENCE COUNTY - 19	TOWN OF FLORENCE - 19010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FLORENCE COUNTY - 19	TOWN OF HOMESTEAD - 19012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FLORENCE COUNTY - 19	TOWN OF LONG LAKE - 19014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FLORENCE COUNTY - 19	TOWN OF TIPLER - 19016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOND DU LAC COUNTY - 20	CITY OF FOND DU LAC - 20226	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	CITY OF RIPON - 20276	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	CITY OF WAUPUN - 14292	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF ALTO - 20002	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF ASHFORD - 20004	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF AUBURN - 20006	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF BYRON - 20008	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF CALUMET - 20010	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF EDEN - 20012	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF ELDORADO - 20014	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF EMPIRE - 20016	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF FOND DU LAC - 20018	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF FOREST - 20020	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF FRIENDSHIP - 20022	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF LAMARTINE - 20024	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF MARSHFIELD - 20026	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF METOMEN - 20028	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF OAKFIELD - 20030	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF OSCEOLA - 20032	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF RIPON - 20034	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF ROSENDALE - 20036	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF SPRINGVALE - 20038	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF TAYCHEEDAH - 20040	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	TOWN OF WAUPUN - 20042	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	VILLAGE OF BRANDON - 20106	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
FOND DU LAC COUNTY - 20	VILLAGE OF CAMPBELLSPORT - 20111	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	VILLAGE OF EDEN - 20121	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	VILLAGE OF FAIRWATER - 20126	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	VILLAGE OF MOUNT CALVARY - 20151	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	VILLAGE OF NORTH FOND DU LAC - 20161	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	VILLAGE OF OAKFIELD - 20165	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	VILLAGE OF ROSENDALE - 20176	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOND DU LAC COUNTY - 20	VILLAGE OF ST. CLOUD - 20181	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
FOREST COUNTY - 21	CITY OF CRANDON - 21211	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOREST COUNTY - 21	TOWN OF ALVIN - 21002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOREST COUNTY - 21	TOWN OF ARGONNE - 21004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOREST COUNTY - 21	TOWN OF ARMSTRONG CREEK - 21006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOREST COUNTY - 21	TOWN OF BLACKWELL - 21008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOREST COUNTY - 21	TOWN OF CASWELL - 21010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOREST COUNTY - 21	TOWN OF CRANDON - 21012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOREST COUNTY - 21	TOWN OF FREEDOM - 21014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOREST COUNTY - 21	TOWN OF HILES - 21016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOREST COUNTY - 21	TOWN OF LAONA - 21018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOREST COUNTY - 21	TOWN OF LINCOLN - 21020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOREST COUNTY - 21	TOWN OF NASHVILLE - 21022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOREST COUNTY - 21	TOWN OF POPPLE RIVER - 21024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOREST COUNTY - 21	TOWN OF ROSS - 21026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
FOREST COUNTY - 21	TOWN OF WABENO - 21028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	CITY OF BOSCOBEL - 22206	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	CITY OF CUBA CITY - MAIN - 22211	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	CITY OF FENNIMORE - 22226	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	CITY OF LANCASTER - 22246	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	CITY OF PLATTEVILLE - 22271	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	TOWN OF BEETOWN - 22002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF BLOOMINGTON - 22004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF BOSCOBEL - 22006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF CASSVILLE - 22008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF CASTLE ROCK - 22010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF CLIFTON - 22012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF ELLENBORO - 22014	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	TOWN OF FENNIMORE - 22016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF GLEN HAVEN - 22018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF HARRISON - 22020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF HAZEL GREEN - 22022	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	TOWN OF HICKORY GROVE - 22024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF JAMESTOWN - 22026	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	TOWN OF LIBERTY - 22028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF LIMA - 22030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF LITTLE GRANT - 22032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF MARION - 22034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
GRANT COUNTY - 22	TOWN OF MILLVILLE - 22036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF MOUNT HOPE - 22038	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF MOUNT IDA - 22040	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF MUSCODA - 22042	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF NORTH LANCASTER - 22044	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF PARIS - 22046	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF PATCH GROVE - 22048	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF PLATTEVILLE - 22050	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	TOWN OF POTOSI - 22052	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	TOWN OF SMELSER - 22054	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	TOWN OF SOUTH LANCASTER - 22056	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	TOWN OF WATERLOO - 22058	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF WATTERSTOWN - 22060	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF WINGVILLE - 22062	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF WOODMAN - 22064	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	TOWN OF WYALUSING - 22066	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	VILLAGE OF BAGLEY - 22106	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	VILLAGE OF BLOOMINGTON - 22107	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	VILLAGE OF BLUE RIVER - 22108	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	VILLAGE OF CASSVILLE - 22111	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	VILLAGE OF DICKEYVILLE - 22116	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	VILLAGE OF HAZEL GREEN - MAIN - 22136	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	VILLAGE OF LIVINGSTON - MAIN - 22147	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	VILLAGE OF MONTFORT - MAIN - 22151	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	VILLAGE OF MOUNT HOPE - 22152	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	VILLAGE OF MUSCODA - MAIN - 22153	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GRANT COUNTY - 22	VILLAGE OF PATCH GROVE - 22171	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	VILLAGE OF POTOSI - 22172	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	VILLAGE OF TENNYSON - 22186	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GRANT COUNTY - 22	VILLAGE OF WOODMAN - 22191	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN COUNTY - 23	CITY OF BRODHEAD - MAIN - 23206	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	CITY OF MONROE - 23251	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF ADAMS - 23002	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF ALBANY - 23004	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF BROOKLYN - 23006	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF CADIZ - 23008	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF CLARNO - 23010	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF DECATUR - 23012	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF EXETER - 23014	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF JEFFERSON - 23016	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF JORDAN - 23018	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF MONROE - 23020	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF MOUNT PLEASANT - 23022	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF NEW GLARUS - 23024	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF SPRING GROVE - 23026	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
GREEN COUNTY - 23	TOWN OF SYLVESTER - 23028	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF WASHINGTON - 23030	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	TOWN OF YORK - 23032	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	VILLAGE OF ALBANY - 23101	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	VILLAGE OF BROWNTOWN - 23110	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	VILLAGE OF MONTICELLO - 23151	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN COUNTY - 23	VILLAGE OF NEW GLARUS - 23161	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
GREEN LAKE COUNTY - 24	CITY OF BERLIN - MAIN - 24206	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	CITY OF GREEN LAKE - 24231	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	CITY OF MARKESAN - 24251	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	CITY OF PRINCETON - 24271	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	TOWN OF BERLIN - 24002	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	TOWN OF BROOKLYN - 24004	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	TOWN OF GREEN LAKE - 24006	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	TOWN OF KINGSTON - 24008	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	TOWN OF MACKFORD - 24010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	TOWN OF MANCHESTER - 24012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	TOWN OF MARQUETTE - 24014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	TOWN OF PRINCETON - 24016	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	TOWN OF SENECA - 24020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	TOWN OF ST. MARIE - 24018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	VILLAGE OF KINGSTON - 24141	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
GREEN LAKE COUNTY - 24	VILLAGE OF MARQUETTE - 24154	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	CITY OF DODGEVILLE - 25216	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	CITY OF MINERAL POINT - 25251	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	TOWN OF ARENA - 25002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	TOWN OF BRIGHAM - 25004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	TOWN OF CLYDE - 25006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	TOWN OF DODGEVILLE - 25008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	TOWN OF EDEN - 25010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	TOWN OF HIGHLAND - 25012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	TOWN OF LINDEN - 25014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	TOWN OF MIFFLIN - 25016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	TOWN OF MINERAL POINT - 25018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	TOWN OF MOSCOW - 25020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	TOWN OF PULASKI - 25022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	TOWN OF RIDGEWAY - 25024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	TOWN OF WALDWICK - 25026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	TOWN OF WYOMING - 25028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	VILLAGE OF ARENA - 25101	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	VILLAGE OF AVOCA - 25102	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	VILLAGE OF BARNEVELD - 25106	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	VILLAGE OF COBB - 25111	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	VILLAGE OF HIGHLAND - 25136	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	VILLAGE OF HOLLANDALE - 25137	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
IOWA COUNTY - 25	VILLAGE OF LINDEN - 25146	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	VILLAGE OF REWEY - 25176	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IOWA COUNTY - 25	VILLAGE OF RIDGEWAY - 25177	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IRON COUNTY - 26	CITY OF HURLEY - 26236	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IRON COUNTY - 26	CITY OF MONTREAL - 26251	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IRON COUNTY - 26	TOWN OF ANDERSON - 26002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IRON COUNTY - 26	TOWN OF CAREY - 26004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IRON COUNTY - 26	TOWN OF GURNEY - 26006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IRON COUNTY - 26	TOWN OF KIMBALL - 26008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IRON COUNTY - 26	TOWN OF KNIGHT - 26010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IRON COUNTY - 26	TOWN OF MERCER - 26012	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IRON COUNTY - 26	TOWN OF OMA - 26014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IRON COUNTY - 26	TOWN OF PENCE - 26016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IRON COUNTY - 26	TOWN OF SAXON - 26018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
IRON COUNTY - 26	TOWN OF SHERMAN - 26020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	CITY OF BLACK RIVER FALLS - 27206	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF ADAMS - 27002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF ALBION - 27004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF ALMA - 27006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF BEAR BLUFF - 27008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF BROCKWAY - 27010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF CITY POINT - 27012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF CLEVELAND - 27014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF CURRAN - 27016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF FRANKLIN - 27018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF GARDEN VALLEY - 27020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF GARFIELD - 27022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF HIXTON - 27024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF IRVING - 27026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF KNAPP - 27028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF KOMENSKY - 27030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF MANCHESTER - 27032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF MELROSE - 27034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF MILLSTON - 27036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF NORTH BEND - 27038	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF NORTHFIELD - 27040	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	TOWN OF SPRINGFIELD - 27042	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	VILLAGE OF ALMA CENTER - 27101	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	VILLAGE OF HIXTON - 27136	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	VILLAGE OF MELROSE - 27151	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	VILLAGE OF MERRILLAN - 27152	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JACKSON COUNTY - 27	VILLAGE OF TAYLOR - 27186	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JEFFERSON COUNTY - 28	CITY OF FORT ATKINSON - 28226	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	CITY OF JEFFERSON - 28241	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	CITY OF LAKE MILLS - 28246	ES&S DS200	ES&S ExpressVote

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
JEFFERSON COUNTY - 28	CITY OF WATERLOO - 28290	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	CITY OF WATERTOWN - MAIN - 28291	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF AZTALAN - 28002	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF COLD SPRING - 28004	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF CONCORD - 28006	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF FARMINGTON - 28008	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF HEBRON - 28010	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF IXONIA - 28012	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF JEFFERSON - 28014	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF KOSHKONONG - 28016	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF LAKE MILLS - 28018	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF MILFORD - 28020	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF OAKLAND - 28022	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF PALMYRA - 28024	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF SULLIVAN - 28026	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF SUMNER - 28028	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF WATERLOO - 28030	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	TOWN OF WATERTOWN - 28032	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	VILLAGE OF JOHNSON CREEK - 28141	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	VILLAGE OF PALMYRA - 28171	ES&S DS200	ES&S ExpressVote
JEFFERSON COUNTY - 28	VILLAGE OF SULLIVAN - 28181	ES&S DS200	ES&S ExpressVote
JUNEAU COUNTY - 29	CITY OF ELROY - 29221	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	CITY OF MAUSTON - 29251	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	CITY OF NEW LISBON - 29261	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF ARMENIA - 29002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF CLEARFIELD - 29004	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
JUNEAU COUNTY - 29	TOWN OF CUTLER - 29006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF FINLEY - 29008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF FOUNTAIN - 29010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF GERMANTOWN - 29012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF KILDARE - 29014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF KINGSTON - 29016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF LEMONWEIR - 29018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF LINDINA - 29020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF LISBON - 29022	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
JUNEAU COUNTY - 29	TOWN OF LYNDON - 29024	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
JUNEAU COUNTY - 29	TOWN OF MARION - 29026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF NECEDAH - 29028	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
JUNEAU COUNTY - 29	TOWN OF ORANGE - 29030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF PLYMOUTH - 29032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF SEVEN MILE CREEK - 29034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF SUMMIT - 29036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	TOWN OF WONEWOC - 29038	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	VILLAGE OF CAMP DOUGLAS - 29111	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	VILLAGE OF HUSTLER - 29136	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
JUNEAU COUNTY - 29	VILLAGE OF LYNDON STATION - 29146	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	VILLAGE OF NECEDAH - 29161	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
JUNEAU COUNTY - 29	VILLAGE OF UNION CENTER - 29186	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
JUNEAU COUNTY - 29	VILLAGE OF WONEWOC - 29191	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
KENOSHA COUNTY - 30	CITY OF KENOSHA - 30241	ES&S DS200	ES&S ExpressVote
KENOSHA COUNTY - 30	TOWN OF BRIGHTON - 30002	ES&S DS200	ES&S ExpressVote
KENOSHA COUNTY - 30	TOWN OF PARIS - 30006	ES&S DS200	ES&S ExpressVote
KENOSHA COUNTY - 30	TOWN OF RANDALL - 30010	ES&S DS200	ES&S ExpressVote
KENOSHA COUNTY - 30	TOWN OF SALEM - 30012	ES&S DS200	ES&S ExpressVote
KENOSHA COUNTY - 30	TOWN OF SOMERS - 30014	ES&S DS200	ES&S ExpressVote
KENOSHA COUNTY - 30	TOWN OF WHEATLAND - 30016	ES&S DS200	ES&S ExpressVote
KENOSHA COUNTY - 30	VILLAGE OF BRISTOL - 30104	ES&S DS200	ES&S ExpressVote
KENOSHA COUNTY - 30	VILLAGE OF PADDOCK LAKE - 30171	ES&S DS200	ES&S ExpressVote
KENOSHA COUNTY - 30	VILLAGE OF PLEASANT PRAIRIE - 30174	ES&S DS200	ES&S ExpressVote
KENOSHA COUNTY - 30	VILLAGE OF SILVER LAKE - 30181	ES&S DS200	ES&S ExpressVote
KENOSHA COUNTY - 30	VILLAGE OF SOMERS - 30182	ES&S DS200	ES&S ExpressVote
KENOSHA COUNTY - 30	VILLAGE OF TWIN LAKES - 30186	ES&S DS200	ES&S ExpressVote
KEWAUNEE COUNTY - 31	CITY OF ALGOMA - 31201	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
KEWAUNEE COUNTY - 31	CITY OF KEWAUNEE - 31241	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
KEWAUNEE COUNTY - 31	TOWN OF AHNAPEE - 31002	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
KEWAUNEE COUNTY - 31	TOWN OF CARLTON - 31004	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
KEWAUNEE COUNTY - 31	TOWN OF CASCO - 31006	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
KEWAUNEE COUNTY - 31	TOWN OF FRANKLIN - 31008	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
KEWAUNEE COUNTY - 31	TOWN OF LINCOLN - 31010	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
KEWAUNEE COUNTY - 31	TOWN OF LUXEMBURG - 31012	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
KEWAUNEE COUNTY - 31	TOWN OF MONTPELIER - 31014	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
KEWAUNEE COUNTY - 31	TOWN OF PIERCE - 31016	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
KEWAUNEE COUNTY - 31	TOWN OF RED RIVER - 31018	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
KEWAUNEE COUNTY - 31	TOWN OF WEST KEWAUNEE - 31020	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
KEWAUNEE COUNTY - 31	VILLAGE OF CASCO - 31111	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
KEWAUNEE COUNTY - 31	VILLAGE OF LUXEMBURG - 31146	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LA CROSSE COUNTY - 32	CITY OF LA CROSSE - 32246	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	CITY OF ONALASKA - 32265	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	TOWN OF BANGOR - 32002	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	TOWN OF BARRE - 32004	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	TOWN OF BURNS - 32006	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	TOWN OF CAMPBELL - 32008	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	TOWN OF FARMINGTON - 32010	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	TOWN OF GREENFIELD - 32012	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	TOWN OF HAMILTON - 32014	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	TOWN OF HOLLAND - 32016	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	TOWN OF MEDARY - 32018	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	TOWN OF ONALASKA - 32020	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	TOWN OF SHELBY - 32022	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	TOWN OF WASHINGTON - 32024	ES&S DS200	ES&S AutoMARK

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
LA CROSSE COUNTY - 32	VILLAGE OF BANGOR - 32106	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	VILLAGE OF HOLMEN - 32136	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	VILLAGE OF ROCKLAND - 32176	ES&S DS200	ES&S AutoMARK
LA CROSSE COUNTY - 32	VILLAGE OF WEST SALEM - 32191	ES&S DS200	ES&S AutoMARK
LAFAYETTE COUNTY - 33	CITY OF DARLINGTON - 33216	ES&S DS200	ES&S AutoMARK
LAFAYETTE COUNTY - 33	CITY OF SHULLSBURG - 33281	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF ARGYLE - 33002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF BELMONT - 33004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF BENTON - 33006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF BLANCHARD - 33008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF DARLINGTON - 33010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF ELK GROVE - 33012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF FAYETTE - 33014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF GRATIOT - 33016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF KENDALL - 33018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF LAMONT - 33020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF MONTICELLO - 33022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF NEW DIGGINGS - 33024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF SEYMOUR - 33026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF SHULLSBURG - 33028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF WAYNE - 33030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF WHITE OAK SPRINGS - 33032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF WILLOW SPRINGS - 33034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	TOWN OF WIOTA - 33036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	VILLAGE OF ARGYLE - 33101	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	VILLAGE OF BELMONT - 33106	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	VILLAGE OF BENTON - 33107	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	VILLAGE OF BLANCHARDVILLE - MAIN - 33108	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	VILLAGE OF GRATIOT - 33131	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LAFAYETTE COUNTY - 33	VILLAGE OF SOUTH WAYNE - 33181	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	CITY OF ANTIGO - 34201	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF ACKLEY - 34002	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF AINSWORTH - 34004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF ANTIGO - 34006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF ELCHO - 34008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF EVERGREEN - 34010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF LANGLADE - 34012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF NEVA - 34014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF NORWOOD - 34016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF PARRISH - 34018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF PECK - 34020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF POLAR - 34022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF PRICE - 34024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF ROLLING - 34026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF SUMMIT - 34028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
LANGLADE COUNTY - 34	TOWN OF UPHAM - 34030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF VILAS - 34032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	TOWN OF WOLF RIVER - 34034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LANGLADE COUNTY - 34	VILLAGE OF WHITE LAKE - 34191	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LINCOLN COUNTY - 35	CITY OF MERRILL - 35251	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
LINCOLN COUNTY - 35	CITY OF TOMAHAWK - 35286	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF BIRCH - 35002	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF BRADLEY - 35004	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF CORNING - 35006	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF HARDING - 35008	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF HARRISON - 35010	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF KING - 35012	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF MERRILL - 35014	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF PINE RIVER - 35016	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF ROCK FALLS - 35018	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF RUSSELL - 35020	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF SCHLEY - 35022	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF SCOTT - 35024	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF SKANAWAN - 35026	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF SOMO - 35028	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF TOMAHAWK - 35030	ES&S DS200	ES&S AutoMARK
LINCOLN COUNTY - 35	TOWN OF WILSON - 35032	ES&S DS200	ES&S AutoMARK
MANITOWOC COUNTY - 36	CITY OF KIEL - MAIN - 36241	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	CITY OF MANITOWOC - 36251	ES&S DS200	ES&S ExpressVote
MANITOWOC COUNTY - 36	CITY OF TWO RIVERS - 36286	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF CATO - 36002	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF CENTERVILLE - 36004	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF COOPERSTOWN - 36006	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF EATON - 36008	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF FRANKLIN - 36010	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF GIBSON - 36012	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF KOSSUTH - 36014	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF LIBERTY - 36016	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF MANITOWOC - 36018	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF MANITOWOC RAPIDS - 36020	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF MAPLE GROVE - 36022	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF MEEME - 36024	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF MISHICOT - 36026	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF NEWTON - 36028	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF ROCKLAND - 36030	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF SCHLESWIG - 36032	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF TWO CREEKS - 36034	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	TOWN OF TWO RIVERS - 36036	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	VILLAGE OF CLEVELAND - 36112	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	VILLAGE OF FRANCIS CREEK - 36126	ES&S M100	ES&S AutoMARK

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
MANITOWOC COUNTY - 36	VILLAGE OF KELLNERSVILLE - 36132	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	VILLAGE OF MARIBEL - 36147	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	VILLAGE OF MISHICOT - 36151	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	VILLAGE OF REEDSVILLE - 36176	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	VILLAGE OF ST. NAZIANZ - 36181	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	VILLAGE OF VALDERS - 36186	ES&S M100	ES&S AutoMARK
MANITOWOC COUNTY - 36	VILLAGE OF WHITELAW - 36191	ES&S M100	ES&S AutoMARK
MARATHON COUNTY - 37	CITY OF MOSINEE - 37251	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	CITY OF SCHOFIELD - 37281	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	CITY OF WAUSAU - 37291	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF BERGEN - 37002	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF BERLIN - 37004	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF BERN - 37006	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF BEVENT - 37008	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF BRIGHTON - 37010	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF CASSEL - 37012	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF CLEVELAND - 37014	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF DAY - 37016	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF EASTON - 37018	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF EAU PLEINE - 37020	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF ELDERON - 37022	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF EMMET - 37024	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF FRANKFORT - 37026	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF FRANZEN - 37028	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF GREEN VALLEY - 37030	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF GUENTHER - 37032	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF HALSEY - 37034	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF HAMBURG - 37036	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF HARRISON - 37038	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF HEWITT - 37040	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF HOLTON - 37042	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF HULL - 37044	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF JOHNSON - 37046	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF KNOWLTON - 37048	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF MAINE - 37052	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF MARATHON - 37054	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF MCMILLAN - 37056	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF MOSINEE - 37058	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF NORRIE - 37060	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF PLOVER - 37062	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF REID - 37064	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF RIB FALLS - 37066	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF RIB MOUNTAIN - 37068	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF RIETBROCK - 37070	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF RINGLE - 37072	ES&S DS200	ES&S AutoMARK

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
MARATHON COUNTY - 37	TOWN OF SPENCER - 37074	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF STETTIN - 37076	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF TEXAS - 37078	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF WAUSAU - 37080	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF WESTON - 37082	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	TOWN OF WIEN - 37084	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	VILLAGE OF ATHENS - 37102	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	VILLAGE OF BROKAW - 37106	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	VILLAGE OF EDGAR - 37121	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	VILLAGE OF ELDERON - 37122	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	VILLAGE OF FENWOOD - 37126	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	VILLAGE OF HATLEY - 37136	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	VILLAGE OF KRONENWETTER - 37145	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	VILLAGE OF MARATHON CITY - 37151	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	VILLAGE OF ROTHSCHILD - 37176	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	VILLAGE OF SPENCER - 37181	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	VILLAGE OF STRATFORD - 37182	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	VILLAGE OF UNITY - MAIN - 37186	ES&S DS200	ES&S AutoMARK
MARATHON COUNTY - 37	VILLAGE OF WESTON - 37192	ES&S DS200	ES&S AutoMARK
MARINETTE COUNTY - 38	CITY OF MARINETTE - 38251	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	CITY OF NIAGARA - 38261	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	CITY OF PESHTIGO - 38271	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF AMBERG - 38002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF ATHELSTANE - 38004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF BEAVER - 38006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF BEECHER - 38008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF DUNBAR - 38010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF GOODMAN - 38012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF GROVER - 38014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF LAKE - 38016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF MIDDLE INLET - 38018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF NIAGARA - 38020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF PEMBINE - 38022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF PESHTIGO - 38024	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF PORTERFIELD - 38026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF POUND - 38028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF SILVER CLIFF - 38030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF STEPHENSON - 38032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF WAGNER - 38034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	TOWN OF WAUSAUKEE - 38036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	VILLAGE OF COLEMAN - 38111	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	VILLAGE OF CRIVITZ - 38121	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	VILLAGE OF POUND - 38171	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARINETTE COUNTY - 38	VILLAGE OF WAUSAUKEE - 38191	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	CITY OF MONTELLO - 39251	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
MARQUETTE COUNTY - 39	TOWN OF BUFFALO - 39002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	TOWN OF CRYSTAL LAKE - 39004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	TOWN OF DOUGLAS - 39006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	TOWN OF HARRIS - 39008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	TOWN OF MECAN - 39010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	TOWN OF MONTELLO - 39012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	TOWN OF MOUNDVILLE - 39014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	TOWN OF NESHKORO - 39016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	TOWN OF NEWTON - 39018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	TOWN OF OXFORD - 39020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	TOWN OF PACKWAUKEE - 39022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	TOWN OF SHIELDS - 39024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	TOWN OF SPRINGFIELD - 39026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	TOWN OF WESTFIELD - 39028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	VILLAGE OF ENDEAVOR - 39121	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	VILLAGE OF NESHKORO - 39161	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	VILLAGE OF OXFORD - 39165	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MARQUETTE COUNTY - 39	VILLAGE OF WESTFIELD - 39191	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MENOMINEE COUNTY - 40	TOWN OF MENOMINEE - 40001	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	CITY OF CUDAHY - 41211	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	CITY OF FRANKLIN - 41226	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	CITY OF GLENDALE - 41231	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	CITY OF GREENFIELD - 41236	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	CITY OF MILWAUKEE - MAIN - 41251	ES&S DS200/ES&S DS850	ES&S AutoMARK/ES&S ExpressVote
MILWAUKEE COUNTY - 41	CITY OF OAK CREEK - 41265	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	CITY OF SOUTH MILWAUKEE - 41282	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	CITY OF ST. FRANCIS - 41281	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	CITY OF WAUWATOSA - 41291	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	CITY OF WEST ALLIS - 41292	ES&S DS200	ES&S AutoMARK/ES&S ExpressVote
MILWAUKEE COUNTY - 41	VILLAGE OF BAYSIDE - MAIN - 41106	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	VILLAGE OF BROWN DEER - 41107	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	VILLAGE OF FOX POINT - 41126	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	VILLAGE OF GREENDALE - 41131	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	VILLAGE OF HALES CORNERS - 41136	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	VILLAGE OF RIVER HILLS - 41176	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	VILLAGE OF SHOREWOOD - 41181	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	VILLAGE OF WEST MILWAUKEE - 41191	ES&S DS200	ES&S AutoMARK
MILWAUKEE COUNTY - 41	VILLAGE OF WHITEFISH BAY - 41192	ES&S DS200	ES&S AutoMARK
MONROE COUNTY - 42	CITY OF SPARTA - 42281	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	CITY OF TOMAH - 42286	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF ADRIAN - 42002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF ANGELO - 42004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF BYRON - 42006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF CLIFTON - 42008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF GLENDALE - 42010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
MONROE COUNTY - 42	TOWN OF GRANT - 42012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF GREENFIELD - 42014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF JEFFERSON - 42016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF LA GRANGE - 42020	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF LAFAYETTE - 42018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF LEON - 42022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF LINCOLN - 42024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF LITTLE FALLS - 42026	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF NEW LYME - 42028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF OAKDALE - 42030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF PORTLAND - 42032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF RIDGEVILLE - 42034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF SCOTT - 42036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF SHELDON - 42038	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF SPARTA - 42040	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF TOMAH - 42042	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF WELLINGTON - 42044	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF WELLS - 42046	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	TOWN OF WILTON - 42048	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	VILLAGE OF CASHTON - 42111	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	VILLAGE OF KENDALL - 42141	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	VILLAGE OF MELVINA - 42151	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	VILLAGE OF NORWALK - 42161	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	VILLAGE OF OAKDALE - 42165	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	VILLAGE OF WARRENS - 42185	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	VILLAGE OF WILTON - 42191	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
MONROE COUNTY - 42	VILLAGE OF WYEVILLE - 42192	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
OCONTO COUNTY - 43	CITY OF GILLETT - 43231	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	CITY OF OCONTO - 43265	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	CITY OF OCONTO FALLS - 43266	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF ABRAMS - 43002	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF BAGLEY - 43006	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF BRAZEAU - 43008	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF BREED - 43010	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF CHASE - 43012	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF DOTY - 43014	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF GILLETT - 43016	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF HOW - 43018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
OCONTO COUNTY - 43	TOWN OF LAKEWOOD - 43019	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF LENA - 43020	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF LITTLE RIVER - 43022	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF LITTLE SUAMICO - 43024	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF MAPLE VALLEY - 43026	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF MORGAN - 43028	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF MOUNTAIN - 43029	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
OCONTO COUNTY - 43	TOWN OF OCONTO - 43030	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF OCONTO FALLS - 43032	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF PENSAUKEE - 43034	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF RIVERVIEW - 43036	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF SPRUCE - 43038	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF STILES - 43040	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF TOWNSEND - 43042	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	TOWN OF UNDERHILL - 43044	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
OCONTO COUNTY - 43	VILLAGE OF LENA - 43146	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OCONTO COUNTY - 43	VILLAGE OF SURING - 43181	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
ONEIDA COUNTY - 44	CITY OF RHINELANDER - 44276	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF CASSIAN - 44002	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF CRESCENT - 44004	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF ENTERPRISE - 44006	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
ONEIDA COUNTY - 44	TOWN OF HAZELHURST - 44008	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF LAKE TOMAHAWK - 44010	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF LITTLE RICE - 44012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF LYNNE - 44014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF MINOCQUA - 44016	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF MONICO - 44018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF NEWBOLD - 44020	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF NOKOMIS - 44022	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF PELICAN - 44024	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF PIEHL - 44026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF PINE LAKE - 44028	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF SCHOEPKE - 44030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF STELLA - 44032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF SUGAR CAMP - 44034	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF THREE LAKES - 44036	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF WOODBORO - 44038	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ONEIDA COUNTY - 44	TOWN OF WOODRUFF - 44040	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
OUTAGAMIE COUNTY - 45	CITY OF APPLETON - MAIN - 45201	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	CITY OF KAUKAUNA - MAIN - 45241	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	CITY OF SEYMOUR - 45281	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF BLACK CREEK - 45002	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF BOVINA - 45004	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF BUCHANAN - 45006	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF CENTER - 45008	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF CICERO - 45010	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF DALE - 45012	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF DEER CREEK - 45014	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF ELLINGTON - 45016	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF FREEDOM - 45018	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF GRAND CHUTE - 45020	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF GREENVILLE - 45022	ES&S DS200	ES&S ExpressVote

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
OUTAGAMIE COUNTY - 45	TOWN OF HORTONIA - 45024	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF KAUKAUNA - 45026	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF LIBERTY - 45028	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF MAINE - 45030	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF MAPLE CREEK - 45032	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF ONEIDA - 45034	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF OSBORN - 45036	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF SEYMOUR - 45038	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	TOWN OF VANDENBROEK - 45040	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	VILLAGE OF BEAR CREEK - 45106	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	VILLAGE OF BLACK CREEK - 45107	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	VILLAGE OF COMBINED LOCKS - 45111	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	VILLAGE OF HORTONVILLE - 45136	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	VILLAGE OF KIMBERLY - 45141	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	VILLAGE OF LITTLE CHUTE - 45146	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	VILLAGE OF NICHOLS - 45155	ES&S DS200	ES&S ExpressVote
OUTAGAMIE COUNTY - 45	VILLAGE OF SHIOCTON - 45181	ES&S DS200	ES&S ExpressVote
OZAUKEE COUNTY - 46	CITY OF CEDARBURG - 46211	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	CITY OF MEQUON - 46255	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	CITY OF PORT WASHINGTON - 46271	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	TOWN OF BELGIUM - 46002	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	TOWN OF CEDARBURG - 46004	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	TOWN OF FREDONIA - 46006	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	TOWN OF GRAFTON - 46008	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	TOWN OF PORT WASHINGTON - 46012	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	TOWN OF SAUKVILLE - 46014	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	VILLAGE OF BAYSIDE - 41106	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	VILLAGE OF BELGIUM - 46106	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	VILLAGE OF FREDONIA - 46126	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	VILLAGE OF GRAFTON - 46131	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	VILLAGE OF NEWBURG - 67161	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	VILLAGE OF SAUKVILLE - 46181	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
OZAUKEE COUNTY - 46	VILLAGE OF THIENSVILLE - 46186	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PEPIN COUNTY - 47	CITY OF DURAND - 47216	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PEPIN COUNTY - 47	TOWN OF ALBANY - 47002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PEPIN COUNTY - 47	TOWN OF DURAND - 47004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PEPIN COUNTY - 47	TOWN OF FRANKFORT - 47006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PEPIN COUNTY - 47	TOWN OF LIMA - 47008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PEPIN COUNTY - 47	TOWN OF PEPIN - 47010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PEPIN COUNTY - 47	TOWN OF STOCKHOLM - 47012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PEPIN COUNTY - 47	TOWN OF WATERVILLE - 47014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PEPIN COUNTY - 47	TOWN OF WAUBEEK - 47016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PEPIN COUNTY - 47	VILLAGE OF PEPIN - 47171	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PEPIN COUNTY - 47	VILLAGE OF STOCKHOLM - 47181	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	CITY OF PRESCOTT - 48271	ES&S DS200	ES&S ExpressVote

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
PIERCE COUNTY - 48	CITY OF RIVER FALLS - MAIN - 48276	ES&S DS200	ES&S ExpressVote
PIERCE COUNTY - 48	TOWN OF CLIFTON - 48002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	TOWN OF DIAMOND BLUFF - 48004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	TOWN OF EL PASO - 48008	ES&S DS200	ES&S ExpressVote
PIERCE COUNTY - 48	TOWN OF ELLSWORTH - 48006	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	TOWN OF GILMAN - 48010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	TOWN OF HARTLAND - 48012	ES&S DS200	ES&S ExpressVote
PIERCE COUNTY - 48	TOWN OF ISABELLE - 48014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	TOWN OF MAIDEN ROCK - 48016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	TOWN OF MARTELL - 48018	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	TOWN OF OAK GROVE - 48020	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	TOWN OF RIVER FALLS - 48022	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	TOWN OF ROCK ELM - 48024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	TOWN OF SALEM - 48026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	TOWN OF SPRING LAKE - 48028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	TOWN OF TRENTON - 48030	ES&S DS200	ES&S ExpressVote
PIERCE COUNTY - 48	TOWN OF TRIMBELLE - 48032	ES&S DS200	ES&S ExpressVote
PIERCE COUNTY - 48	TOWN OF UNION - 48034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	VILLAGE OF BAY CITY - 48106	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	VILLAGE OF ELLSWORTH - 48121	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	VILLAGE OF ELMWOOD - 48122	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	VILLAGE OF MAIDEN ROCK - 48151	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	VILLAGE OF PLUM CITY - 48171	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PIERCE COUNTY - 48	VILLAGE OF SPRING VALLEY - MAIN - 48181	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	CITY OF AMERY - 49201	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	CITY OF ST. CROIX FALLS - 49281	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF ALDEN - 49002	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF APPLE RIVER - 49004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF BALSAM LAKE - 49006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF BEAVER - 49008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF BLACK BROOK - 49010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF BONE LAKE - 49012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF CLAM FALLS - 49014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF CLAYTON - 49016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF CLEAR LAKE - 49018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF EUREKA - 49020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF FARMINGTON - 49022	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF GARFIELD - 49024	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF GEORGETOWN - 49026	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF JOHNSTOWN - 49028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF LAKETOWN - 49030	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF LINCOLN - 49032	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF LORAIN - 49034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF LUCK - 49036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF MCKINLEY - 49038	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
POLK COUNTY - 49	TOWN OF MILLTOWN - 49040	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF OSCEOLA - 49042	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF ST. CROIX FALLS - 49044	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF STERLING - 49046	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	TOWN OF WEST SWEDEN - 49048	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	VILLAGE OF BALSAM LAKE - 49106	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	VILLAGE OF CENTURIA - 49111	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	VILLAGE OF CLAYTON - 49112	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	VILLAGE OF CLEAR LAKE - 49113	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	VILLAGE OF DRESSER - 49116	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	VILLAGE OF FREDERIC - 49126	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	VILLAGE OF LUCK - 49146	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	VILLAGE OF MILLTOWN - 49151	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
POLK COUNTY - 49	VILLAGE OF OSCEOLA - 49165	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
PORTAGE COUNTY - 50	CITY OF STEVENS POINT - 50281	ES&S DS200	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF ALBAN - 50002	ES&S DS200	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF ALMOND - 50004	ES&S DS200	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF AMHERST - 50006	ES&S DS200	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF BELMONT - 50008	None	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF BUENA VISTA - 50010	ES&S M100	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF CARSON - 50012	ES&S DS200	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF DEWEY - 50014	ES&S DS200	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF EAU PLEINE - 50016	None	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF GRANT - 50018	ES&S DS200	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF HULL - 50020	ES&S DS200	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF LANARK - 50022	ES&S DS200	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF LINWOOD - 50024	None	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF NEW HOPE - 50026	None	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF PINE GROVE - 50028	None	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF PLOVER - 50030	ES&S DS200	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF SHARON - 50032	ES&S DS200	ES&S AutoMARK
PORTAGE COUNTY - 50	TOWN OF STOCKTON - 50034	ES&S DS200	ES&S AutoMARK
PORTAGE COUNTY - 50	VILLAGE OF ALMOND - 50101	None	ES&S AutoMARK
PORTAGE COUNTY - 50	VILLAGE OF AMHERST - 50102	None	ES&S AutoMARK
PORTAGE COUNTY - 50	VILLAGE OF AMHERST JUNCTION - 50103	None	ES&S AutoMARK
PORTAGE COUNTY - 50	VILLAGE OF JUNCTION CITY - 50141	None	ES&S AutoMARK
PORTAGE COUNTY - 50	VILLAGE OF NELSONVILLE - 50161	None	ES&S AutoMARK
PORTAGE COUNTY - 50	VILLAGE OF PARK RIDGE - 50171	None	ES&S AutoMARK
PORTAGE COUNTY - 50	VILLAGE OF PLOVER - 50173	ES&S DS200	ES&S AutoMARK
PORTAGE COUNTY - 50	VILLAGE OF ROSHOLT - 50176	ES&S M100	ES&S AutoMARK
PORTAGE COUNTY - 50	VILLAGE OF WHITING - 50191	ES&S M100	ES&S AutoMARK
PRICE COUNTY - 51	CITY OF PARK FALLS - 51271	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	CITY OF PHILLIPS - 51272	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF CATAWBA - 51002	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF EISENSTEIN - 51004	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
PRICE COUNTY - 51	TOWN OF ELK - 51006	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF EMERY - 51008	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF FIFIELD - 51010	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF FLAMBEAU - 51012	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF GEORGETOWN - 51014	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF HACKETT - 51016	None	Sequoia Voting - AVC Edge
PRICE COUNTY - 51	TOWN OF HARMONY - 51018	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF HILL - 51020	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF KENNAN - 51022	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF KNOX - 51024	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF LAKE - 51026	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF OGEMA - 51028	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF PRENTICE - 51030	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF SPIRIT - 51032	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	TOWN OF WORCESTER - 51034	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	VILLAGE OF CATAWBA - 51111	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	VILLAGE OF KENNAN - 51141	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
PRICE COUNTY - 51	VILLAGE OF PRENTICE - 51171	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	CITY OF BURLINGTON - MAIN - 52206	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	CITY OF RACINE - 52276	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	TOWN OF BURLINGTON - 52002	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	TOWN OF DOVER - 52006	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	TOWN OF NORWAY - 52010	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	TOWN OF RAYMOND - 52012	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	TOWN OF WATERFORD - 52016	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	TOWN OF YORKVILLE - 52018	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	VILLAGE OF CALEDONIA - 52104	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	VILLAGE OF ELMWOOD PARK - 52121	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	VILLAGE OF MOUNT PLEASANT - 52151	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	VILLAGE OF NORTH BAY - 52161	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	VILLAGE OF ROCHESTER - 52176	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	VILLAGE OF STURTEVANT - 52181	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	VILLAGE OF UNION GROVE - 52186	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	VILLAGE OF WATERFORD - 52191	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	VILLAGE OF WIND POINT - 52192	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RACINE COUNTY - 52	VILLAGE OF YORKVILLE - 52194	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RICHLAND COUNTY - 53	CITY OF RICHLAND CENTER - 53276	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF AKAN - 53002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF BLOOM - 53004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF BUENA VISTA - 53006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF DAYTON - 53008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF EAGLE - 53010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF FOREST - 53012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF HENRIETTA - 53014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF ITHACA - 53016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
RICHLAND COUNTY - 53	TOWN OF MARSHALL - 53018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF ORION - 53020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF RICHLAND - 53022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF RICHWOOD - 53024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF ROCKBRIDGE - 53026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF SYLVAN - 53028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF WESTFORD - 53030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	TOWN OF WILLOW - 53032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	VILLAGE OF BOAZ - 53106	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	VILLAGE OF CAZENOVIA - MAIN - 53111	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	VILLAGE OF LONE ROCK - 53146	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	VILLAGE OF VIOLA - MAIN - 53186	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RICHLAND COUNTY - 53	VILLAGE OF YUBA - 53196	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
ROCK COUNTY - 54	CITY OF BELOIT - 54206	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	CITY OF EDGERTON - MAIN - 54221	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	CITY OF EVANSVILLE - 54222	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	CITY OF JANESVILLE - 54241	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	CITY OF MILTON - 54257	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF AVON - 54002	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF BELOIT - 54004	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF BRADFORD - 54006	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF CENTER - 54008	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF CLINTON - 54010	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF FULTON - 54012	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF HARMONY - 54014	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF JANESVILLE - 54016	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF JOHNSTOWN - 54018	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF LA PRAIRIE - 54020	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF LIMA - 54022	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF MAGNOLIA - 54024	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF MILTON - 54026	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF NEWARK - 54028	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF PLYMOUTH - 54030	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF PORTER - 54032	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF ROCK - 54034	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF SPRING VALLEY - 54036	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF TURTLE - 54038	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	TOWN OF UNION - 54040	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	VILLAGE OF CLINTON - 54111	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	VILLAGE OF FOOTVILLE - 54126	ES&S DS200	ES&S ExpressVote
ROCK COUNTY - 54	VILLAGE OF ORFORDVILLE - 54165	ES&S DS200	ES&S ExpressVote
RUSK COUNTY - 55	CITY OF LADYSMITH - 55246	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
RUSK COUNTY - 55	TOWN OF ATLANTA - 55002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF BIG BEND - 55004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF BIG FALLS - 55006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
RUSK COUNTY - 55	TOWN OF CEDAR RAPIDS - 55008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF DEWEY - 55010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF FLAMBEAU - 55012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF GRANT - 55014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF GROW - 55016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF HAWKINS - 55018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF HUBBARD - 55020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF LAWRENCE - 55022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF MARSHALL - 55024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF MURRY - 55026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF RICHLAND - 55028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF RUSK - 55030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF SOUTH FORK - 55032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF STRICKLAND - 55034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF STUBBS - 55036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF THORNAPPLE - 55038	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF TRUE - 55040	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF WASHINGTON - 55042	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF WILKINSON - 55044	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF WILLARD - 55046	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	TOWN OF WILSON - 55048	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	VILLAGE OF BRUCE - 55106	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	VILLAGE OF CONRATH - 55111	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	VILLAGE OF GLEN FLORA - 55131	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	VILLAGE OF HAWKINS - 55136	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	VILLAGE OF INGRAM - 55141	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	VILLAGE OF SHELDON - 55181	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	VILLAGE OF TONY - 55186	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
RUSK COUNTY - 55	VILLAGE OF WEYERHAEUSER - 55191	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAUK COUNTY - 57	CITY OF BARABOO - 57206	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	CITY OF REEDSBURG - 57276	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF BARABOO - 57002	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF BEAR CREEK - 57004	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF DELLONA - 57006	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF DELTON - 57008	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF EXCELSIOR - 57010	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF FAIRFIELD - 57012	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF FRANKLIN - 57014	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF FREEDOM - 57016	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF GREENFIELD - 57018	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF HONEY CREEK - 57020	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF IRONTON - 57022	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF LA VALLE - 57024	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF MERRIMAC - 57026	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF PRAIRIE DU SAC - 57028	ES&S DS200	ES&S ExpressVote

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
SAUK COUNTY - 57	TOWN OF REEDSBURG - 57030	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF SPRING GREEN - 57032	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF SUMPTER - 57034	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF TROY - 57036	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF WASHINGTON - 57038	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF WESTFIELD - 57040	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF WINFIELD - 57042	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	TOWN OF WOODLAND - 57044	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	VILLAGE OF IRONTON - 57141	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	VILLAGE OF LAKE DELTON - 57146	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	VILLAGE OF LAVALLE - 57147	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	VILLAGE OF LIME RIDGE - 57148	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	VILLAGE OF LOGANVILLE - 57149	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	VILLAGE OF MERRIMAC - 57151	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	VILLAGE OF NORTH FREEDOM - 57161	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	VILLAGE OF PLAIN - 57171	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	VILLAGE OF PRAIRIE DU SAC - 57172	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	VILLAGE OF ROCK SPRINGS - 57176	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	VILLAGE OF SAUK CITY - 57181	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	VILLAGE OF SPRING GREEN - 57182	ES&S DS200	ES&S ExpressVote
SAUK COUNTY - 57	VILLAGE OF WEST BARABOO - 57191	ES&S DS200	ES&S ExpressVote
SAWYER COUNTY - 58	CITY OF HAYWARD - 58236	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	TOWN OF BASS LAKE - 58002	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
SAWYER COUNTY - 58	TOWN OF COUDERAY - 58004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	TOWN OF DRAPER - 58006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	TOWN OF EDGEWATER - 58008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	TOWN OF HAYWARD - 58010	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	TOWN OF HUNTER - 58012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	TOWN OF LENROOT - 58014	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
SAWYER COUNTY - 58	TOWN OF MEADOWBROOK - 58016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	TOWN OF METEOR - 58018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	TOWN OF OJIBWA - 58020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	TOWN OF RADISSON - 58022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	TOWN OF ROUND LAKE - 58024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	TOWN OF SAND LAKE - 58026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	TOWN OF SPIDER LAKE - 58028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	TOWN OF WEIRGOR - 58030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	TOWN OF WINTER - 58032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	VILLAGE OF COUDERAY - 58111	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	VILLAGE OF EXELAND - 58121	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	VILLAGE OF RADISSON - 58176	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SAWYER COUNTY - 58	VILLAGE OF WINTER - 58190	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	CITY OF SHAWANO - 59281	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF ALMON - 59002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF ANGELICA - 59004	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
SHAWANO COUNTY - 59	TOWN OF ANIWA - 59006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF BARTELME - 59008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF BELLE PLAINE - 59010	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF BIRNAMWOOD - 59012	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF FAIRBANKS - 59014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF GERMANIA - 59016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF GRANT - 59018	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF GREEN VALLEY - 59020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF HARTLAND - 59022	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF HERMAN - 59024	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF HUTCHINS - 59026	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF LESSOR - 59028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF MAPLE GROVE - 59030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF MORRIS - 59032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF NAVARINO - 59034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF PELLA - 59036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF RED SPRINGS - 59038	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF RICHMOND - 59040	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF SENECA - 59042	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF WASHINGTON - 59044	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF WAUKECHON - 59046	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF WESCOTT - 59048	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	TOWN OF WITTENBERG - 59050	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	VILLAGE OF ANIWA - 59101	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	VILLAGE OF BIRNAMWOOD - MAIN - 59106	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	VILLAGE OF BONDUEL - 59107	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	VILLAGE OF BOWLER - 59108	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	VILLAGE OF CECIL - 59111	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	VILLAGE OF ELAND - 59121	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	VILLAGE OF GRESHAM - 59131	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	VILLAGE OF MATTOON - 59151	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	VILLAGE OF TIGERTON - 59186	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHAWANO COUNTY - 59	VILLAGE OF WITTENBERG - 59191	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
SHEBOYGAN COUNTY - 60	CITY OF PLYMOUTH - 60271	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	CITY OF SHEBOYGAN - 60281	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	CITY OF SHEBOYGAN FALLS - 60282	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	TOWN OF GREENBUSH - 60002	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	TOWN OF HERMAN - 60004	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	TOWN OF HOLLAND - 60006	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	TOWN OF LIMA - 60008	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	TOWN OF LYNDON - 60010	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	TOWN OF MITCHELL - 60012	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	TOWN OF MOSEL - 60014	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	TOWN OF PLYMOUTH - 60016	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	TOWN OF RHINE - 60018	ClearCount 2.0.1	ClearAccess 2.0.1

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
SHEBOYGAN COUNTY - 60	TOWN OF RUSSELL - 60020	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	TOWN OF SCOTT - 60022	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	TOWN OF SHEBOYGAN - 60024	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	TOWN OF SHEBOYGAN FALLS - 60026	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	TOWN OF SHERMAN - 60028	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	TOWN OF WILSON - 60030	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	VILLAGE OF ADELL - 60101	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	VILLAGE OF CASCADE - 60111	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	VILLAGE OF CEDAR GROVE - 60112	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	VILLAGE OF ELKHART LAKE - 60121	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	VILLAGE OF GLENBEULAH - 60131	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	VILLAGE OF HOWARDS GROVE - 60135	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	VILLAGE OF KOHLER - 60141	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	VILLAGE OF OOSTBURG - 60165	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	VILLAGE OF RANDOM LAKE - 60176	ClearCount 2.0.1	ClearAccess 2.0.1
SHEBOYGAN COUNTY - 60	VILLAGE OF WALDO - 60191	ClearCount 2.0.1	ClearAccess 2.0.1
ST. CROIX COUNTY - 56	CITY OF GLENWOOD CITY - 56231	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	CITY OF HUDSON - 56236	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	CITY OF NEW RICHMOND - 56261	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF BALDWIN - 56002	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF CADY - 56004	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF CYLON - 56006	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF EAU GALLE - 56008	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF EMERALD - 56010	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF ERIN PRAIRIE - 56012	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF FOREST - 56014	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF GLENWOOD - 56016	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF HAMMOND - 56018	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF HUDSON - 56020	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF KINNICKINNIC - 56022	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF PLEASANT VALLEY - 56024	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF RICHMOND - 56026	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF RUSH RIVER - 56028	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF SOMERSET - 56032	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF SPRINGFIELD - 56034	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF ST. JOSEPH - 56030	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF STANTON - 56036	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF STAR PRAIRIE - 56038	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF TROY - 56040	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	TOWN OF WARREN - 56042	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	VILLAGE OF BALDWIN - 56106	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	VILLAGE OF DEER PARK - 56116	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	VILLAGE OF HAMMOND - 56136	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	VILLAGE OF NORTH HUDSON - 56161	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	VILLAGE OF ROBERTS - 56176	ES&S DS200	ES&S ExpressVote

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
ST. CROIX COUNTY - 56	VILLAGE OF SOMERSET - 56181	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	VILLAGE OF STAR PRAIRIE - 56182	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	VILLAGE OF WILSON - 56191	ES&S DS200	ES&S ExpressVote
ST. CROIX COUNTY - 56	VILLAGE OF WOODVILLE - 56192	ES&S DS200	ES&S ExpressVote
TAYLOR COUNTY - 61	CITY OF MEDFORD - 61251	ES&S M100	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF AURORA - 61002	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF BROWNING - 61004	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF CHELSEA - 61006	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF CLEVELAND - 61008	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF DEER CREEK - 61010	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF FORD - 61012	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF GOODRICH - 61014	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF GREENWOOD - 61016	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF GROVER - 61018	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF HAMMEL - 61020	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF HOLWAY - 61022	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF JUMP RIVER - 61024	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF LITTLE BLACK - 61026	ES&S M100	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF MAPLEHURST - 61028	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF MCKINLEY - 61030	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF MEDFORD - 61032	ES&S M100	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF MOLITOR - 61034	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF PERSHING - 61036	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF RIB LAKE - 61038	ES&S M100	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF ROOSEVELT - 61040	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF TAFT - 61042	None	ES&S iVotronic
TAYLOR COUNTY - 61	TOWN OF WESTBORO - 61044	ES&S M100	ES&S iVotronic
TAYLOR COUNTY - 61	VILLAGE OF GILMAN - 61131	None	ES&S iVotronic
TAYLOR COUNTY - 61	VILLAGE OF LUBLIN - 61146	None	ES&S iVotronic
TAYLOR COUNTY - 61	VILLAGE OF RIB LAKE - 61176	ES&S M100	ES&S iVotronic
TAYLOR COUNTY - 61	VILLAGE OF STETSONVILLE - 61181	None	ES&S iVotronic
TREMPEALEAU COUNTY - 62	CITY OF ARCADIA - 62201	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
TREMPEALEAU COUNTY - 62	CITY OF BLAIR - 62206	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	CITY OF GALESVILLE - 62231	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	CITY OF INDEPENDENCE - 62241	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	CITY OF OSSEO - 62265	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	CITY OF WHITEHALL - 62291	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	TOWN OF ALBION - 62002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	TOWN OF ARCADIA - 62004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	TOWN OF BURNSIDE - 62006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	TOWN OF CALEDONIA - 62008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	TOWN OF CHIMNEY ROCK - 62010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	TOWN OF DODGE - 62012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	TOWN OF ETTRICK - 62014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	TOWN OF GALE - 62016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
TREMPEALEAU COUNTY - 62	TOWN OF HALE - 62018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	TOWN OF LINCOLN - 62020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	TOWN OF PIGEON - 62022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	TOWN OF PRESTON - 62024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	TOWN OF SUMNER - 62026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	TOWN OF TREMPEALEAU - 62028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	TOWN OF UNITY - 62030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	VILLAGE OF ELEVA - 62121	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	VILLAGE OF ETTRICK - 62122	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	VILLAGE OF PIGEON FALLS - 62173	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	VILLAGE OF STRUM - 62181	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
TREMPEALEAU COUNTY - 62	VILLAGE OF TREMPEALEAU - 62186	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	CITY OF HILLSBORO - 63236	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	CITY OF VIROQUA - 63286	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	CITY OF WESTBY - 63291	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF BERGEN - 63002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF CHRISTIANA - 63004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF CLINTON - 63006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF COON - 63008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF FOREST - 63010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF FRANKLIN - 63012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF GENOA - 63014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF GREENWOOD - 63016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF HAMBURG - 63018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF HARMONY - 63020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF HILLSBORO - 63022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF JEFFERSON - 63024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF KICKAPOO - 63026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF LIBERTY - 63028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF STARK - 63030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF STERLING - 63032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF UNION - 63034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF VIROQUA - 63036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF WEBSTER - 63038	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF WHEATLAND - 63040	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	TOWN OF WHITESTOWN - 63042	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	VILLAGE OF CHASEBURG - 63111	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	VILLAGE OF COON VALLEY - 63112	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	VILLAGE OF DE SOTO - MAIN - 63116	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	VILLAGE OF GENOA - 63131	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	VILLAGE OF LA FARGE - 63146	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	VILLAGE OF ONTARIO - 63165	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	VILLAGE OF READSTOWN - 63176	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VERNON COUNTY - 63	VILLAGE OF STODDARD - 63181	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
VILAS COUNTY - 64	CITY OF EAGLE RIVER - 64221	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
VILAS COUNTY - 64	TOWN OF ARBOR VITAE - 64002	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
VILAS COUNTY - 64	TOWN OF BOULDER JUNCTION - 64004	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
VILAS COUNTY - 64	TOWN OF CLOVERLAND - 64006	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
VILAS COUNTY - 64	TOWN OF CONOVER - 64008	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
VILAS COUNTY - 64	TOWN OF LAC DU FLAMBEAU - 64010	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
VILAS COUNTY - 64	TOWN OF LAND O-LAKES - 64012	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
VILAS COUNTY - 64	TOWN OF LINCOLN - 64014	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
VILAS COUNTY - 64	TOWN OF MANITOWISH WATERS - 64016	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
VILAS COUNTY - 64	TOWN OF PHELPS - 64018	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
VILAS COUNTY - 64	TOWN OF PLUM LAKE - 64020	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
VILAS COUNTY - 64	TOWN OF PRESQUE ISLE - 64022	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
VILAS COUNTY - 64	TOWN OF ST. GERMAIN - 64024	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
VILAS COUNTY - 64	TOWN OF WASHINGTON - 64026	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
VILAS COUNTY - 64	TOWN OF WINCHESTER - 64028	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	CITY OF DELAVAN - 65216	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	CITY OF ELKHORN - 65221	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	CITY OF LAKE GENEVA - 65246	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	CITY OF WHITEWATER - MAIN - 65291	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF BLOOMFIELD - 65002	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF DARIEN - 65004	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF DELAVAN - 65006	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF EAST TROY - 65008	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF GENEVA - 65010	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF LA GRANGE - 65014	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF LAFAYETTE - 65012	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF LINN - 65016	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF LYONS - 65018	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF RICHMOND - 65020	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF SHARON - 65022	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF SPRING PRAIRIE - 65024	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF SUGAR CREEK - 65026	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF TROY - 65028	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF WALWORTH - 65030	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	TOWN OF WHITEWATER - 65032	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	VILLAGE OF BLOOMFIELD - 65115	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	VILLAGE OF DARIEN - 65116	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	VILLAGE OF EAST TROY - 65121	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	VILLAGE OF FONTANA - 65126	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	VILLAGE OF GENOA CITY - MAIN - 65131	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	VILLAGE OF SHARON - 65181	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	VILLAGE OF WALWORTH - 65191	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WALWORTH COUNTY - 65	VILLAGE OF WILLIAMS BAY - 65192	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHBURN COUNTY - 66	CITY OF SHELL LAKE - 66282	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	CITY OF SPOONER - 66281	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF BARRONETT - 66002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
WASHBURN COUNTY - 66	TOWN OF BASHAW - 66004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF BASS LAKE - 66006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF BEAVER BROOK - 66008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF BIRCHWOOD - 66010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF BROOKLYN - 66012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF CASEY - 66014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF CHICOG - 66016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF CRYSTAL - 66018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF EVERGREEN - 66020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF FROG CREEK - 66022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF GULL LAKE - 66024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF LONG LAKE - 66026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF MADGE - 66028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF MINONG - 66030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF SARONA - 66032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF SPOONER - 66034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF SPRINGBROOK - 66036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF STINNETT - 66038	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF STONE LAKE - 66040	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	TOWN OF TREGO - 66042	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	VILLAGE OF BIRCHWOOD - 66106	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHBURN COUNTY - 66	VILLAGE OF MINONG - 66151	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WASHINGTON COUNTY - 67	CITY OF HARTFORD - MAIN - 67236	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	CITY OF WEST BEND - 67291	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	TOWN OF ADDISON - 67002	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	TOWN OF BARTON - 67004	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	TOWN OF ERIN - 67006	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	TOWN OF FARMINGTON - 67008	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	TOWN OF GERMANTOWN - 67010	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	TOWN OF HARTFORD - 67012	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	TOWN OF JACKSON - 67014	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	TOWN OF KEWASKUM - 67016	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	TOWN OF POLK - 67018	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	TOWN OF TRENTON - 67022	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	TOWN OF WAYNE - 67024	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	TOWN OF WEST BEND - 67026	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	VILLAGE OF GERMANTOWN - 67131	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	VILLAGE OF JACKSON - 67141	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	VILLAGE OF KEWASKUM - MAIN - 67142	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	VILLAGE OF NEWBURG - MAIN - 67161	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	VILLAGE OF RICHFIELD - 67166	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WASHINGTON COUNTY - 67	VILLAGE OF SLINGER - 67181	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WAUKESHA COUNTY - 68	CITY OF BROOKFIELD - 68206	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	CITY OF DELAFIELD - 68216	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	CITY OF MUSKEGO - 68251	ES&S DS200	ES&S ExpressVote

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
WAUKESHA COUNTY - 68	CITY OF NEW BERLIN - 68261	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	CITY OF OCONOMOWOC - 68265	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	CITY OF PEWAUKEE - 68270	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	CITY OF WAUKESHA - 68291	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	TOWN OF BROOKFIELD - 68002	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	TOWN OF DELAFIELD - 68004	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	TOWN OF EAGLE - 68006	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	TOWN OF GENESEE - 68008	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	TOWN OF LISBON - 68010	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	TOWN OF MERTON - 68014	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	TOWN OF MUKWONAGO - 68016	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	TOWN OF OCONOMOWOC - 68022	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	TOWN OF OTTAWA - 68024	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	TOWN OF VERNON - 68030	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	TOWN OF WAUKESHA - 68032	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF BIG BEND - 68106	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF BUTLER - 68107	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF CHENEQUA - 68111	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF DOUSMAN - 68116	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF EAGLE - 68121	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF ELM GROVE - 68122	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF HARTLAND - 68136	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF LAC LA BELLE - MAIN - 68146	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF LANNON - 68147	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF MENOMONEE FALLS - 68151	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF MERTON - 68152	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF MUKWONAGO - MAIN - 68153	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF NASHOTAH - 68158	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF NORTH PRAIRIE - 68161	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF OCONOMOWOC LAKE - 68166	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF PEWAUKEE - 68171	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF SUMMIT - 68172	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF SUSSEX - 68181	ES&S DS200	ES&S ExpressVote
WAUKESHA COUNTY - 68	VILLAGE OF WALES - 68191	ES&S DS200	ES&S ExpressVote
WAUPACA COUNTY - 69	CITY OF CLINTONVILLE - 69211	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WAUPACA COUNTY - 69	CITY OF MANAWA - 69251	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	CITY OF MARION - MAIN - 69252	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	CITY OF NEW LONDON - MAIN - 69261	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WAUPACA COUNTY - 69	CITY OF WAUPACA - 69291	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	CITY OF WEYAUWEGA - 69292	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF BEAR CREEK - 69002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF CALEDONIA - 69004	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WAUPACA COUNTY - 69	TOWN OF DAYTON - 69006	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF DUPONT - 69008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF FARMINGTON - 69010	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
WAUPACA COUNTY - 69	TOWN OF FREMONT - 69012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF HARRISON - 69014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF HELVETIA - 69016	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF IOLA - 69018	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF LARRABEE - 69020	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF LEBANON - 69022	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF LIND - 69024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF LITTLE WOLF - 69026	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WAUPACA COUNTY - 69	TOWN OF MATTESON - 69028	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF MUKWA - 69030	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF ROYALTON - 69032	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF SAINT LAWRENCE - 69034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF SCANDINAVIA - 69036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF UNION - 69038	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF WAUPACA - 69040	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF WEYAUWEGA - 69042	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	TOWN OF WYOMING - 69044	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	VILLAGE OF BIG FALLS - 69106	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	VILLAGE OF EMBARRASS - 69121	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	VILLAGE OF FREMONT - 69126	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	VILLAGE OF IOLA - 69141	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	VILLAGE OF OGDENSBURG - 69165	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUPACA COUNTY - 69	VILLAGE OF SCANDINAVIA - 69181	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	CITY OF WAUTOMA - 70291	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF AURORA - 70002	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF BLOOMFIELD - 70004	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF COLOMA - 70006	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF DAKOTA - 70008	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF DEERFIELD - 70010	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF HANCOCK - 70012	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF LEON - 70014	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF MARION - 70016	Sequoia Voting - Optech Insight	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF MOUNT MORRIS - 70018	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF OASIS - 70020	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF PLAINFIELD - 70022	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF POY SIPPI - 70024	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF RICHFORD - 70026	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF ROSE - 70028	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF SAXEVILLE - 70030	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF SPRINGWATER - 70032	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF WARREN - 70034	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	TOWN OF WAUTOMA - 70036	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	VILLAGE OF COLOMA - 70111	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	VILLAGE OF HANCOCK - 70136	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	VILLAGE OF LOHRVILLE - 70146	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
WAUSHARA COUNTY - 70	VILLAGE OF PLAINFIELD - 70171	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	VILLAGE OF REDGRANITE - 70176	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WAUSHARA COUNTY - 70	VILLAGE OF WILD ROSE - 70191	None	Sequoia Voting - AVC Edge with VeriVote Printer DRE system
WINNEBAGO COUNTY - 71	CITY OF MENASHA - MAIN - 71251	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	CITY OF NEENAH - 71261	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	CITY OF OMRO - 71265	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	CITY OF OSHKOSH - 71266	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF ALGOMA - 71002	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF BLACK WOLF - 71004	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF CLAYTON - 71006	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF MENASHA - 71008	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF NEENAH - 71010	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF NEKIMI - 71012	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF NEPEUSKUN - 71014	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF OMRO - 71016	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF OSHKOSH - 71018	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF POYGAN - 71020	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF RUSHFORD - 71022	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF UTICA - 71024	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF VINLAND - 71026	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF WINCHESTER - 71028	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF WINNECONNE - 71030	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	TOWN OF WOLF RIVER - 71032	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	VILLAGE OF FOX CROSSING - 71121	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WINNEBAGO COUNTY - 71	VILLAGE OF WINNECONNE - 71191	Dominion Voting - ImageCast Evolution (ICE)	Dominion Voting - ImageCast Evolution (ICE)
WOOD COUNTY - 72	CITY OF MARSHFIELD - MAIN - 72251	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	CITY OF NEKOOSA - 72261	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	CITY OF PITTSVILLE - 72271	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	CITY OF WISCONSIN RAPIDS - 72291	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF ARPIN - 72002	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF AUBURNDALE - 72004	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF CAMERON - 72006	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF CARY - 72008	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF CRANMOOR - 72010	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF DEXTER - 72012	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF GRAND RAPIDS - 72014	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF HANSEN - 72016	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF HILES - 72018	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF LINCOLN - 72020	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF MARSHFIELD - 72022	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF MILLADORE - 72024	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF PORT EDWARDS - 72026	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF REMINGTON - 72028	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF RICHFIELD - 72030	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF ROCK - 72032	ES&S DS200	ES&S AutoMARK

County	Municipality	Optical/Digital Scan Tabulator (Vendor/Dealer-Model)	Accessible Voting Equipment Vendor/Dealer-Model
WOOD COUNTY - 72	TOWN OF RUDOLPH - 72034	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF SARATOGA - 72036	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF SENECA - 72038	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF SHERRY - 72040	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF SIGEL - 72042	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	TOWN OF WOOD - 72044	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	VILLAGE OF ARPIN - 72100	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	VILLAGE OF AUBURNDALE - 72101	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	VILLAGE OF BIRON - 72106	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	VILLAGE OF HEWITT - 72122	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	VILLAGE OF MILLADORE - MAIN - 72151	None	ES&S AutoMARK
WOOD COUNTY - 72	VILLAGE OF PORT EDWARDS - 72171	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	VILLAGE OF RUDOLPH - 72178	ES&S DS200	ES&S AutoMARK
WOOD COUNTY - 72	VILLAGE OF VESPER - 72186	ES&S DS200	ES&S AutoMARK

STATE OF COLORADO)
County of Douglas))ss.

COMES NOW, Affiant Joseph T. Oltmann, being first duly sworn, under oath, and states under penalty of perjury that the following information is true and accurate within his personal knowledge and belief:

My name Joseph Oltmann. I am over eighteen years of age. I am not suffering under any mental disability and am competent to give this worn affidavit. I am able to read and write and to give this affidavit voluntarily and on my own free will and accord. No one has used any threats, force, pressure, or intimidation to male me sign this affidavit. I make this affidavit in support of the truth.

I am the CEO of a tech company based just outside of Denver, Colorado. I am also the founder of an organization called FEC United. [Fecunited.com] The goal of this organization is to restore constitutional integrity to our community and empower those in our community to stand up to state and national leadership that intends to suppress the rights of individuals holistically.

Through this organization "FEC" I became a target of journalists who began to slander both me and my organization. I became the topic of Antifa and extremists through my involvement in a movement to resist the narrative that police are bad and our society represented the rhetoric shared by these extremists. As a result of these attacks, I started researching Antifa, BLM, Inc. and their connection to violence and unrest inside of our communities. As a result, I set out to infiltrate Antifa meetings and de-mask those Antifa members who are journalists in the mainstream media in Colorado specifically.

On or about the week of September 27, 2020, I was able to attend an Antifa meeting which appeared to be between Antifa members in Colorado Springs and in Denver Colorado. I cannot verify the connection between the two or the leadership as they were disorganized. Discussions of Our Revolution and Antifa were discussed. Rhetoric of "eliminating fascists" and frustration as to the dwindling of support to rally in the street was evident.

Then I honed in among other conversations key actors in the organization who work for local and state news publications. One such person of interest was Heidi Beedle, identified leader of Our Revolution in El Paso County (Southern Colorado) and Antifa leader of the same area.

Heidi's name is actually Sean Beedle. She is a journalist at Colorado Springs Independent, Colorado Springs Business Journal and a freelance writer for several online publications. Others to remain unnamed in this were present.

The conversation went like this:

Someone identified as "Eric" began to speak. Someone asked who Eric was, and someone else replied "he is the Dominion guy" [paraphrased].

Eric then began to speak after being told to continue, but was interrupted and asked by someone, "What are we going to do if Trump wins this fucking election?"

Eric responded, "Don't worry about the election. Trump is not going to win. I made fucking sure of that.. Hahaha"

Someone responded, "Fucking right."

Eric continued with fortifying the groups and recruiting. I would describe his tone as eccentric and boisterous. I wrote down his name and started to do some research into him.

At the time, I thought that they were so disconnected with reality that they think they can "make sure Trump is not elected."

I started with a simple google search: Keywords: "Eric," "Dominion," "Denver Colorado." The fifth result in organic search returned:

Dominion Voting Systems | Employee Profiles, Emails, Mutual ...

www.leadcandy.io › company › Dominion-Voting-Syst...

Find people working at **Dominion** Voting Systems. LeadCandy provides Full ... **Denver**, **Colorado**. VIEW FULL PROFILE ... FULL PROFILE. **Eric** Coomer's photo ...

Above that were results for Eric Schussler- Old Dominion University and Eric E Johnson, Attorney - Sherman & Howard. The first two on organic search however was as follows:

Dominion - Colorado Secretary of State

www.sos.state.co.us › elections › files › projectPlans
PDF

Sep 9, 2016 — our most recent pilots in the City and County of Denver and Mesa County. ... 1 Democracy Suite is a registered trademark of Dominion Voting Systems. ... Eric Coomer graduated from the University of California, Berkeley in ...

And

Eric Coomer's email & phone | Dominion Voting Systems's ...

rocketreach.co › eric-coomer-email_7112825

Location, **Denver**, **Colorado**, United States. Work, Director, Market Strategy @ **Dominion** Voting Systems Member, Board of Directors @ Friends of Levitt Pavilion ...

I began doing research on Eric Coomer and discovered that Colorado Secretary of state link the following about Dr. Eric Coomer on page 26:

"Eric Coomer graduated from the University of California, Berkeley in 1997 with a Ph.D. in Nuclear Physics. After working in IT consulting for several years, Eric entered the elections industry in 2005 with Sequoia Voting Systems as Chief Software Architect. After three years with the company, Eric took over all development operations as Vice President of Engineering. When Sequoia was acquired by Dominion Voting Systems in 2010, Eric joined the DVS team as Vice President of US Engineering overseeing development in the Denver, Colorado office.

Recently, Eric has taken over as the Director of Product Strategy driving the creation of next generation products through close collaboration with customers, combined with a deep understanding of technology and the needs of Elections departments throughout the United States and abroad. Eric has been an active participant in the development of the IEEE common data format for Elections systems, as well as the working group for developing standards for Risk-Limiting Audits for elections results. When not designing new products, Eric supports large and small scale customers during Election season."

I did some cursory research on Eric, but my conclusion was that he was either a part of the government or not relevant to the conversation. In other words, this was not a target I would identify as being influential in Antifa. My conclusion was based on his credentials of having a PhD in Nuclear Physics. Did not add up for someone with that intelligence. I set it aside and concentrated my focus on the activist journalist who were actually Antifa members.

On October 15, 2020 I spoke at an FEC meeting in Bandimere Speedway. It was a rally around the unconstitutional actions of Jefferson County, Colorado government leadership to hurt Bandimere Speedway. I spoke and before the event started they escorted a suspected Antifa Journalist Erik Maulbetsch [Colorado Recorder] off the premises. In that meeting I talked about outing activist journalists who were Antifa and holding them accountable in our community for attacking organizations like FEC United that serve the community.

These activist journalists frequently slander people of faith, conservatives and call them names that defame them in the community. I had enough and warned that we would call them out by name. Maulbetsch wrote and article reflecting this as he was listening in online and decided to omit details about the meeting, causing the entire journalistic community to wonder if they were on the list. It had a positive effect contrary to their intentions.

On Friday November 6th, I received a forwarded a article about Georgia irregularities on the election day. I normally do not read many of these articles because I am inundated with information both from FEC, and my company. I started reading it and noticed Eric Coomer was the spokesperson for a company called Dominion Voting Systems. I immediately stopped and started to go back through my notes to find the info on Eric Coomer. I then started research Dominion Voting Systems. The information became rather scary as everywhere I looked I found Eric's name. Some listing him as VP of Security and others calling him Director of Strategy and Security. I began my search for everything Eric Coomer, Dr. Eric Coomer and any information related to legal filings, RFPs, states using Dominion, Colorado uses and even areas in Colorado that do not use Dominion.

I then turned my attention to Eric Coomer's Facebook profile and page while I gathered information on correlating email addresses, profiles, screen names, etc. Searching Twitter, Reddit, Facebook, 4Chan, etc etc.

I was able to get screenshots of Eric Coomer's Facebook posts going back to 2016. What I discovered was disturbing. Anti-Trump rhetoric, posts referring to: Fuck USA, Fuck the Police, A.C.A.B., posts that were anti Conservative, and even posts being happy someone died. Then the bigger shocker. He reposted the Antifa "Manifesto" letter to Donald Trump. I knew that I had the right guy and someone that was clearly mentally unstable and radical. I started digging into the code irregularities and tying all of the pieces together with the irregularities and the Dominion uses in the disputed states. The correlation was astonishing. I then found the information related to justifying voting machines being online and his justification that they had "hardware and IP address protection". This statement by itself is FALSE.

I then attempted to reach out to all sources to bring this information to light. Calling major news stations and attempting to connect with the DOJ.

I took the information to the listeners of an organization that I also own called Conservative Daily. We have a podcast that we do on weekdays. I felt I had enough information and was confident that the Eric on the conference call was the same Eric Coomer that worked for Dominion. I was also confident that given the Facebook and other information I was able to collect that Eric Coomer was interfering with the election and as he admits in one of his posts that people at his company think and feel the same way he does. I began to research his patents, who owns them, the pattern of states they acquired as clients.

I began to research the connection to Diane Feinstein, her husband, campaign manager, Clinton Foundation and became worried that the finger of radicals had taken away the voice of the American people in deciding the election. I used ARIMA analysis to show me trends on data and probability models to prove that they were in fact using code and technology to ghost votes, switch votes or even remove probable ballots completely. Code is random unless it is not. Since we are a data company and understand artificial intelligence and use of neural networks, we understand the capabilities of creating chaos in outcome based on weighted density of probable voters.

These statements are true and accurate to the best of my knowledge.

Joseph Oltmann

STATE OF COLORADO
COUNTY OF Douglas

Personally appeared before me, LYNN KIEFFER, a Notary Public in and for the aforesaid State and County, JOSEPH T OLTMANN, the within named bargainer, with whom I am personally acquainted and who, after being duly sworn, acknowledged that she executed the foregoing Agreement for the purposes contained therein.

JOSEPH T OLTMANN

Sworn to and subscribed before me this 13th day of November, 2020.

My Commission Expires:

07-24-2021

NOTARY PUBLIC

LYNN KIEFFER
Notary Public
State of Colorado
Notary ID # 20174030910
My Commission Expires 07-24-2021

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

DONNA CURLING, ET AL.,	)	
	)	
Plaintiffs,	)	
	)	**CIVIL ACTION**
vs.	)	
	)	**FILE NO. 1:17-cv-2989-AT**
BRAD RAFFENSPERGER, ET AL.,	)	
	)	
	)	
Defendants.	)	

DECLARATION OF HARRI HURSTI

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

1. My name is Harri Hursti. I am over the age of 21 and competent to give this testimony. The facts stated in this declaration are based on my personal knowledge, unless stated otherwise.

2. My background and qualifications in voting system cybersecurity are set forth in my December 16, 2019 declaration. (Doc. 680-1, pages 37 *et seq*). I stand by everything in that declaration and in my August 21, 2020 declaration. (Doc. 800-2).

3. I am also an expert in ballot scanning because of extensive background in digital imaging prior by work researching election systems. In addition, in 2005 I started an open source project for scanning and auditing paper ballots from images. As a result, I am familiar with different scanner types, how scanner settings and image processing features change the images, and how file format choices affect the quality and accuracy of the ballots.

4. I am engaged as an expert in this case by Coalition for Good Governance.

5. In developing this declaration and opinion, I visited Atlanta to observe certain operations of the June 9, 2020 statewide primary, and the August 11 runoff. During the June 9 election, I was an authorized poll watcher in some locations and was a public observer in others. On August 11, I was authorized as an expert inspecting and observing under the Coalition for Good Governance's Rule 34 Inspection request in certain polling places and the Fulton County Election Preparation Center. As I will explain below in this declaration, my extensive experience in the area of voting system security and my observations of these elections lead to additional conclusions beyond those in my December 16, 2019 declaration. Specifically:

a) the scanner and tabulation software settings being employed to determine which votes to count on hand marked paper ballots are likely causing clearly intentioned votes not to be counted;

b) the voting system is being operated in Fulton County in a manner that escalates the security risk to an extreme level; and

c) voters are not reviewing their BMD printed ballots, which causes BMD generated results to be un-auditable due to the untrustworthy audit trail.

Polling Place Observations

6. Election observation on Peachtree Christian Church. The ballot marking devices were installed so that 4 out of 8 touchscreen devices were clearly visible from the pollbook check in desk. Voter's selections could be effortlessly seen from over 50 ft away.

7. Over period of about 45 minutes, I only observed one voter who appeared to be studying the ballot after picking it up from the printer before casting it in the scanner. When voters do not fully verify their ballot prior to casting, the ballots cannot be considered a reliable auditable record.

8. The scanner would reject some ballots and then accept them after they were rotated to a different orientation. I noted that the scanner would vary in the amount of time that it took to accept or reject a ballot. The delay varied between 3

and 5 seconds from the moment the scanner takes the ballot until the scanner either accepts the ballot or rejects it. This kind of behavior is normal on general purpose operating systems multitasking between multiple applications, but a voting system component should be running only a single application without outside dependencies causing variable execution times.

9. Further research is necessary to determine the cause of the unexpected scanning delays. A system that is dedicated to performing one task repeatedly should not have unexplained variation in processing time. As security researcher, we are always suspicious about any unexpected variable delays, as those are common telltale signs of many issues, including a possibility of unauthorized code being executed. So, in my opinion changes of behaviors between supposedly identical machines performing identical tasks should always be investigated.

When ballots are the same and are produced by a ballot marking device, there should be no time difference whatsoever in processing the bar codes. Variations in time can be the result of many things - one of them is that the scanner encounters an error reading the bar code and needs to utilize error correcting algorithms to recover from that error. Further investigation is necessary to determine the root cause of these delays, the potential impact of the error correcting algorithms if those are found to be the cause, and whether the delay has any impact upon the vote.

10. Election observation in Central Park Recreation Center. The Poll place manager told me that no Dominion trained technician had reported on location to help them that morning.

11. The ballot marking devices were originally installed in a way that voter privacy was not protected, as anyone could observe across the room how people are voting on about 2/3 devices.

12. The ballot scanner took between 4 and 6 seconds to accept the ballot. I observed only one ballot being rejected.

13. Generally, voters did not inspect the ballots after taking it from the printer and casting it into the scanner.

14. Election observation in Fanplex location. Samantha Whitley and Harrison Thweatt were poll watchers at the Fanplex polling location. They contacted me at approximately 9:10am about problems they were observing with the operation of the BMDs and Poll Pads and asked me to come to help them

understand the anomalies they were observing. I arrived at FanPlex at approximately 9:30am.

15. I observed that the ballot scanner located by a glass wall whereby standing outside of the building observe the scanning, would take between 6 and 7 seconds to either accept or reject the ballot.

16. For reasons unknown, on multiple machines, while voters were attempting to vote, the ballot marking devices sometimes printed "test" ballots. I was not able to take a picture of the ballot from the designated observation area, but I overheard the poll worker by the scanner explaining the issue to a voter which was sent back to the Ballot-Marking Device to pick up another ballot from the printer tray. Test ballots are intended to be used to test the system but without being counted by the system during an election. The ballot scanner in election settings rejects test ballots, as the scanners at FanPlex did. This caused confusion as the voters needed to return to the ballot-marking device to retrieve the actual ballot. Some voters returned the test ballot into the printer tray, potentially confusing the next voter. Had voters been reviewing the ballots at all before taking them to the scanner, they would have noticed the "Test Ballot" text on the ballot. I observed no voter really questioning a poll worker why a "Test" ballot was printed in the first place.

17. Obviously, during the election day, the ballot marking device should not be processing or printing any ballot other than the one the voter is voting. While the cause of the improper printing of ballots should be examined, the fact that this was happening at all is likely indicative of a wrong configuration given to the BMD, which in my professional opinion raises another question: Why didn't the device print only test ballots? And how can the device change its behavior in the middle of the election day? Is the incorrect configuration originating from the Electronic Pollbook System? What are the implications for the reliability of the printed ballot and the QR code being counted?

18. Election observation Park Tavern. The scanner acceptance delay did not vary as it had in previous locations and was consistently about 5 seconds from the moment the scanner takes the ballot, to the moment the scanner either accepts the ballot or rejects it. The variation between scanners at different locations is concerning because these are identical physical devices and should not behave differently while performing the identical task of scanning a ballot.

19. The vast majority of voters at Park Tavern did not inspect the ballots after taking them from the printer and before casting them in the scanner.

Fulton Tabulation Center Operation-Election Night, August 11, 2020

20. In Fulton County Election Preparation Center ("EPC") on election night I reviewed certain operations as authorized by Rule 34 inspection.

21. I was permitted to view the operations of the upload of the memory devices coming in from the precincts to the Dominion Election Management System ("EMS") server. The agreement with Fulton County was that I could review only for a limited period of time; therefore, I did not review the entire evening's process. Also, Dominion employees asked me to move away from the monitors containing the information and messages from the upload process and error messages, limiting my ability to give a more detailed report with documentation and photographs of the screens. However, my vantage point was more than adequate to observe that system problems were recurring and the Dominion technicians operating the system were struggling with the upload process.

22. It is my understanding the same EMS equipment and software had been used in Fulton County's June 9, 2020 primary election.

23. It is my understanding that the Dominion technician ("Dominic") charged with operating the EMS server for Fulton County had been performing

these duties at Fulton County for several months, including during the June 9 primary.

24. During my August 11 visit, and a follow-up visit on August 17, I observed that the EMS server was operated almost exclusively by Dominion personnel, with little interaction with EPC management, even when problems were encountered. In my conversations with Derrick Gilstrap and other Fulton County Elections Department EPC personnel, they professed to have limited knowledge of or control over the EMS server and its operations.

25. Outsourcing the operation of the voting system components directly to the voting system vendors' personnel is highly unusual in my experience and of grave concern from a security and conflict of interest perspective. Voting system vendors' personnel have a conflict of interest because they are not inclined to report on, or address, defects in the voting systems. The dangers this poses is aggravated by the absence of any trained County personnel to oversee and supervise the process.

26. In my professional opinion, the role played by Dominion personnel in Fulton County, and other counties with similar arrangements, should be considered an elevated risk factor when evaluating the security risks of Georgia's voting system.

27. Based on my observations on August 11 and August 17, Dell computers running the EMS that is used to process Fulton county votes appeared not to have been hardened.

28. In essence, hardening is the process of securing a system by reducing its surface of vulnerability, which is larger when a system performs more functions; in principle it is to the reduce the general purpose system into a single-function system which is more secure than a multipurpose one. Reducing available ways of attack typically includes changing default passwords, the removal of unnecessary software, unnecessary usernames or logins, grant accounts and programs with the minimum level of privileges needed for the tasks and create separate accounts for privileged operations as needed, and the disabling or removal of unnecessary services.

29. Computers performing any sensitive and mission critical tasks such as elections should unquestionably be hardened. Voting system are designated by the Department of Homeland Security as part of the critical infrastructure and certainly fall into the category of devices which should be hardened as the most fundamental security measure. In my experience, it is unusual, and I find it unacceptable for an EMS server not to have been hardened prior to installation.

30. The Operating System version in the Dominion Election Management computer, which is positioned into the rack and by usage pattern appears to be the main computer, is Windows 10 Pro 10.0.14393. This version is also known as the Anniversary Update version 1607 and it was released August 2, 2016. Exhibit A is a true and correct copy of a photograph that I took of this computer.

31. When a voting system is certified by the EAC, the Operating System is specifically defined, as Windows 10 Pro was for the Dominion 5.5-A system. Unlike consumer computers, voting systems do not and should not receive automatic “upgrades” to newer versions of the Operating System. without undergoing tests for conflicts with the new operating system software.

32. That computer and other computers used in Georgia’s system for vote processing appear to have home/small business companion software packages included. Exhibits B and C are true and correct copies of photographs that I took of the computer located in the rack and the computer located closest to the rack on the table to the right. The Start Menu shows a large number of game and entertainment software icons. As stated before, one of the first procedures of hardening is removal of all unwanted software, and removal of those game icons and the associated games and installers alongside with all other software which is not absolutely needed in the computer for election processing purposes would be

one of the first and most basic steps in the hardening process. In my professional opinion, independent inquiry should be promptly made of all 159 counties to determine if the Dominion systems statewide share this major deficiency.

33. Furthermore, when I asked the Dominion employee Dominic assigned to the Fulton County election server operation about the origin of the Windows operating system, he answered that he believed that "it has been provided by the State."

34. Since Georgia's Dominion system is new, it is a reasonable assumption that all machines in the Fulton County election network had the same version of Windows installed. However, not only the two computers displayed different entertainment software icons, but additionally one of the machines in Fulton's group of election servers had an icon of computer game called "*Homescapes"* which is made by Playrix Holding Ltd., founded by Dmitry and Igor Bukham in Vologda, Russia. Attached as Exhibit C is a true and correct copy of a photograph that I took of the Fulton voting system computer" Client 02". The icon for Homescapes is shown by the arrow on Exhibit C.

35. The *Homescapes* game was released in August 2017, one year after Fulton County's operating system release. If the *Homescapes* game came with the operating system it would be unusual, because at the time of the release of

Homescapes, Microsoft had already released 3 major Microsoft Windows 10 update releases after build 14393 and before the release of that game. This calls into question whether all Georgia Dominion system computers have the same operating system version, or how the game has come to be having a presence in Fulton's Dominion voting system.

36. Although this Dominion voting system is new to Georgia, the Windows 10 operating system of at least the 'main' computer in the rack has not been updated for 4 years and carries a wide range of well-known and publicly disclosed vulnerabilities. At the time of this writing, The National Vulnerability Database maintained by National Institute of Standards and Technology lists 3,177 vulnerabilities mentioning "Windows 10 Pro" and 203 vulnerabilities are specifically mentioning "Windows 10 Pro 1607" which is the specific version number of the build 14393 that Dominion uses.

37. Even without internet connectivity, unhardened computers are at risk when those are used to process removable media. It was clear that when Compact Flash storage media containing the ballot images, audit logs and results from the precinct scanners were connected to the server, the media was automounted by the operating system. When the operating system is automounting a storage media, the operating system starts automatically to interact with the device. The zero-day

vulnerabilities exploiting this process has been recurringly discovered from all operating systems, including Windows. Presence of automount calls also into question presence of another setting which is always disabled in hardening process. It is autorun, which automatically executes some content on the removable media. While this is convenient for consumers, it poses extreme security risk.

38. Based on my experience and mental impression observing the Dominion technician's activities, Fulton County's EMS server management seems to be an *ad hoc* operation with no formalized process. This was especially clear on the manual processing of the memory cards storage devices coming in from the precincts on election night and the repeated access of the operating system to directly access filesystem, format USB devices, etc. This kind of operation in naturally prone to human errors. I observed personnel calling on the floor asking if all vote carrying compact flash cards had been delivered from the early voting machines for processing, followed by later finding additional cards which had been overlooked in apparent human error. Later, I heard again one technician calling on the floor asking if all vote carrying compact flashes had been delivered. This clearly demonstrates lack of inventory management which should be in place to ensure, among other things, that no rogue storage devices would be inserted into the computer. In response, 3 more compact flash cards were hand-delivered. Less

than 5 minutes later, I heard one of the county workers say that additional card was found and was delivered for processing. All these devices were trusted by printed label only and no comparison to an inventory list of any kind was performed.

39. In addition, operations were repeatedly performed directly on the operating system. Election software has no visibility into the operations performed directly on the operating system, and therefore those are not included in election system event logging. Those activities can only be partially reconstructed from operating system logs – and as these activities included copying election data files, election software log may create false impression that the software is accessing the same file over a period of time, while in reality the file could had been replaced with another file with the same name by activities commanded to the operating system. Therefore, any attempt to audit the election system operated in this manner must include through analysis of all operating system logs, which complicates the auditing process. Unless the system is configured properly to collect file system auditing data is not complete. As the system appears not to be hardened, it is unlikely that the operating system has been configured to collect auditing data.

40. A human error when operating live election system from the operating system can result in a catastrophic event destroying election data or even rendering the system unusable. Human error is likely given the time pressure involved and,

at least in Fulton County, no formal check lists or operating procedures were followed to mitigate the human error risk. The best practice is to automate trivial tasks to reduce risk of human error, increase the quality assurance of overall operations and provide auditability and transparency by logging.

41. Uploading of memory cards had already started before I arrived at EPC. While one person was operating the upload process, the two other Dominion employees were troubleshooting issues which seemed to be related to ballot images uploads. I repeatedly observed error messages appearing on the screen of the EMS server. I was not able to get picture of the errors on August 11th, I believe the error was the same or similar that errors recurring August 17th as shown on Exhibit D and discussed later in this declaration. Dominion employees were troubleshooting the issue with 'trial-and-error' approach. As part of this effort they accessed "Computer Management" application of Windows 10 and experimented with trouble shooting the user account management feature. This demonstrates that they had complete access to the computer. This means there are no meaningful access separation and privileges and roles controls protecting the county's primary election servers. This also greatly amplifies the risk of catastrophic human error and malicious program execution.

42. I overheard the Dominion technician's conversation that they had issues with file system structure and "need 5 files out of EMS server and paste. Delete everything out of there and put it there." To communicate the gravity of the situation to each other they added "Troubleshooting in the live environment". These conversations increased the mental image that they were not familiar the issue they were troubleshooting.

43. After about 45 minutes of trying to solve the issue by instructions received over the phone, the two Dominion employees' (who had been troubleshooting) behavior changed. The Dominion staff member walked behind the server rack and made manual manipulations which could not be observed from my vantage point. After that they moved with their personal laptops to a table physically farther away from the election system and stopped trying different ways to work around the issue in front of the server, and no longer talked continuously with their remote help over phone.

44. In the follow-up-calls I overheard them ask people on the other end of the call to check different things, and they only went to a computer and appeared to test something and subsequently take a picture of the computer screen with a mobile phone and apparently send it to a remote location.

45. Based on my extensive experience, this all created a strong mental impression that the troubleshooting effort was being done remotely over remote access to key parts of the system. Additionally, new wireless access point with a hidden SSID access point name appeared in the active Wi-Fi stations list that I was monitoring, but it may have been co-incidental. Hidden SSIDs are used to obscure presence of wireless networking from casual observers, although they do not provide any real additional security.

46. If in fact remote access was arranged and granted to the server, this has gravely serious implications for the security of the new Dominion system. Remote access, regardless how it is protected and organized is always a security risk, but furthermore it is transfer of control out of the physical perimeters and deny any ability to observe the activities.

47. I also observed USB drives marked with the Centon DataStick Pro Logo with no visible inventory control numbering system being taken repeatedly from the EMS server rack to the Fulton managers' offices and back. The Dominion employee told me that the USB drives were being taken to the Election Night Reporting Computer in another office. This action was repeated several times during the time of my observation. Carrying generic unmarked and therefore unidentifiable media out-of-view and back is a security risk – especially when the

exact same type of devices was piled on the desk near the computer. During the election night, the Dominion employees reached to storage box and introduced more unmarked storage devices into the ongoing election process. I saw no effort made to maintain a memory card inventory control document or chain of custody accounting for memory cards from the precincts.

48. I also visited the EPC on August 17. During that visit, the staff working on uploading ballots for adjudication experienced an error which appeared similar to the one on election night. This error was repeated with multitude of ballots and at the time we left the location, the error appeared to be ignored, rather that resolved. (EXHIBIT D - the error message and partial explanation of the error being read by the operator.).

49. The security risks outlined above – operating system risks, the failure to harden the computers, performing operations directly on the operating systems, lax control of memory cards, lack of procedures, and potential remote access, are extreme and destroy the credibility of the tabulations and output of the reports coming from a voting system.

50. Such a risk could be overcome if the election were conducted using hand marked paper ballots, with proper chain of custody controls. For elections conducted with hand marked paper ballots, any malware or human error involved

in the server security deficiencies or malfunctions could be overcome with a robust audit of the hand marked paper ballots and in case of irregularities detected, remedied by a recount. However, given that BMD ballots are computer marked, and the ballots therefore unauditable for determining the result, no recovery from system security lapses is possible for providing any confidence in the reported outcomes.

Ballot Scanning and Tabulation of Vote Marks

51. I have been asked to evaluate the performance and reliability of Georgia's Dominion precinct and central count scanners in the counting of votes on hand marked paper ballots.

52. On or about June 10th, Jeanne Dufort and Marilyn Marks called me to seek my perspective on what Ms. Dufort said she observed while serving as a Vote Review Panel member in Morgan County. Ms. Dufort told me that she observed votes that were not counted as votes nor flagged by the Dominion adjudication software.

53. Because of the ongoing questions this raised related to the reliability of the Dominion system tabulation of hand marked ballots, I was asked by Coalition Plaintiffs to conduct technical analysis of the scanner and tabulation accuracy. That analysis is still in its early stages.

54. Before addressing the particulars of my findings and research into the accuracy of Dominion's scanning and tabulation, I will address the basic process by which an image on a voted hand marked paper ballot is processed by scanner and tabulation software generally. It is important to understand that the Dominion scanners are Canon off the shelf scanners and their embedded software were designed for different applications than ballot scanning which is best conducted with scanners specifically designed for detecting hand markings on paper ballots.

55. Contrary of public belief, the scanner is not taking a picture of the paper. The scanner is illuminating the paper with a number of narrow spectrum color lights, typically 3, and then using software to produce an approximation what the human eye would be likely to see if there would had been a single white wide-spectrum light source. This process takes place in partially within the scanner and embedded software in the (commercial off the shelf) scanner and partially in the driver software in the host computer. It is guided by number of settings and configurations, some of which are stored in the scanner and some in the driver software. The scanner sensors gather more information than will be saved into the resulting file and another set of settings and configurations are used to drive that part of the process. The scanners also produce anomalies which are automatically removed from the images by the software. All these activities are performed

outside of the Dominion election software, which is relying on the end product of this process as the input.

56. I began reviewing Dominion user manuals in the public domain to further investigate the Dominion process.

57. On August 14, I received 2 sample Fulton County August 11 ballots of high-speed scanned ballot from Rhonda Martin, who stated that she obtained them from Fulton County during Coalition Plaintiff's discovery. The image characteristics matched the file details I had seen on the screen in EPC. The image is TIFF format, about 1700 by 2200 pixels with 1-bit color depth (= strictly black or white pixels only) with 200 by 200 dots per square inch ("dpi") resolution resulting in files that are typically about 64 or 73 kilo bytes in size for August 11 ballots. With this resolution, the outer dimension of the oval voting target is about 30 by 25 pixels. The oval itself (that is, the oval line that encircles the voting target) is about 2 pixels wide. The target area is about 450 pixels; the area of the target a tight bounding box would be 750 pixels and the oval line encircling the target is 165 pixels. In these images, the oval itself represented about 22% value in the bounding box around the vote target oval.

58. Important image processing decisions are done in scanner software and before election software threshold values are applied to the image. These

scanner settings are discussed in an excerpt Dominion's manual for ICC operations My understanding is that the excerpt of the Manual was received from Marilyn Marks who stated that she obtained it from a Georgia election official in response to an Open Records request. Attached as Exhibit E is page 9 of the manual. Box number 2 on Exhibit E shows that the settings used are not neutral factory default settings.

59. Each pixel of the voters' marks on a hand marked paper ballot will be either in color or gray when the scanner originally measures the markings. The scanner settings affect how image processing turns each pixel from color or gray to either black or white in the image the voting software will later process. This processing step is responsible for major image manipulation and information reduction before the election software threshold values are calculated. This process has a high risk of having an impact upon how a voter mark is interpreted by the tabulation software when the information reduction erases markings from the scanned image before the election software processes it.

60. In my professional opinion, any decision by Georgia's election officials about adopting or changing election software threshold values is premature before the scanner settings are thoroughly tested, optimized and locked.

61. The impact of the scanner settings is minimal for markings made with a black felt pen but can be great for markings made with any color ballpoint pens. To illustrate this, I have used standard color scanning settings and applied then standard conversion from a scanned ballot vote target with widely used free and open source image processing software "GNU Image Manipulation Program version 2.10.18" EXHIBIT G shows the color image being converted with the software's default settings from color image to Black-and-White only. The red color does not meet the internal conversion algorithm criteria for black, therefore it gets erased to white instead.

62. Dominion manual for ICC operations clearly show that the scanner settings are changed from neutral factory default settings. EXHIBIT H shows how these settings applied different ways alter how a blue marking is converted into Black-and-White only image.

63. The optimal scanner settings are different for each model of scanner and each type of paper used to print ballots. Furthermore, because scanners are inherently different, the manufacturers use hidden settings and algorithms to cause neutral factory settings to produce similar baseline results across different makes and models. This is well-studied topic; academic and image processing studies published as early as 1979 discuss the brittleness of black-or-white images in

conversion. Subsequently, significance for ballot counting has been discussed in academic USENIX conference peer-reviewed papers.

64. On the August 17th at Fulton County Election Preparation Center Professor Richard DeMillo and I participated in a scan test of August 11 test ballots using a Fulton County owned Dominion precinct scanner. Two different ballot styles were tested, one with 4 races and one with 5 races. Attached as Exhibits I and J show a sample ballots with test marks.

65. A batch of 50 test ballots had been marked by Rhonda Martin with varying types of marks and varying types of writing instruments that a voter might use at home to mark an absentee ballot. Professor DeMillo and I participated in marking a handful of ballots.

66. Everything said here concerning the August 17 test is based on a very preliminary analysis. The scanner took about 6 seconds to reject the ballots, and one ballot was only acceptable "headfirst" while another ballot only "tail first." Ballot scanners are designed to read ballots "headfirst" or "tail first," and front side and backside and therefore there should not be ballots which are accepted only in one orientation. I observed the ballots to make sure that both ballots had been cleanly separated from the stub and I could not identify any defects of any kind on the ballots.

67. There was a 15 second cycle from the time the precinct scanner accepted a ballot to the time it was ready for the next ballot. Therefore, the maximum theoretical capacity with the simple 5 race ballot is about 4 ballots per minute if the next ballot is ready to be fed into the scanner as soon as the scanner was ready to take it. In a real-world voting environment, it takes considerably longer because voters move away from the scanner, the next voter must move in and subsequently figure where to insert the ballot. The Dominion precinct scanner that I observed was considerably slower than the ballot scanners I have tested over the last 15 years. This was done with a simple ballot, and we did not test how increase of the number of races or vote targets on the ballot would affect the scanning speed and performance.

68. Though my analysis is preliminary, this test reveals that a significant percentage of filled ovals that would to a human clearly show voter's intent failed to register as a vote on the precinct count scanner.

69. The necessary testing effort has barely begun at the time of this writing, as only limited access to equipment has been made available. I have not had access to the high-volume mail ballot scanner that is expected to process millions of mail ballots in Georgia's upcoming elections. However, initial results suggest that significant revisions must be made in the scanning settings to avoid a

widespread failure to count certain valid votes that are not marked as filled in ovals. Without testing, it is impossible to know, if setting changes alone are sufficient to cure the issue.

Scanned Ballot Tabulation Software Threshold Settings

70. Georgia is employing a Dominion tabulation software tool called "Dual Threshold Technology" for "marginal marks." (See Exhibit M) The intent of the tool is to detect voter marks that could be misinterpreted by the software and flag them for review. While the goal is admirable, the method of achieving this goal is quite flawed.

71. While it is compelling from development cost point of view to use commercial off the shelf COTS scanners and software, it requires additional steps to ensure that the integration of the information flow is flawless. In this case, the software provided by the scanner manufacturer and with settings and configurations have great impact in how the images are created and what information is removed from the images before the election software processes it. In recent years, many defective scanner software packages have been found. These software flaws include 'image enhancement' features which have remained enabled even when the feature has been chosen to be disabled from the scanner software provided by the manufacturer. An example of dangerous feature to keep

enabled is 'Punch Hole Removal', intended to make images of documents removed from notebook binders to look more aesthetically pleasing. The software can and in many cases will misinterpret a voted oval as a punch hole and erase the vote from the image file and to make this worse, the punch holes are expected to be found only in certain places near the edge of the paper, and therefore it will erase only votes from candidates whose targets are in those target zones.

72. Decades ago, when computing and storage capacity were expensive black-and-white image commonly meant 1-bit black-or-white pixel images like used by Dominion system. As computer got faster and storage space cheaper during the last 2-3 decades black-and-white image has become by default meaning 255 shades of gray grayscale images. For the purposes of reliable digitalization of physical documents, grayscale image carries more information from the original document for reliable processing and especially when colored markings are being processed. With today's technology, the difference in processing time and storage prices between grayscale and 1-bit images has become completely meaningless, and the benefits gained in accuracy are undeniable.

73. I am aware that the Georgia Secretary of State's office has stated that Georgia threshold settings are national industry standards for ballot scanners (Exhibit K). This is simply untrue. If, there were an industry standard for that, it

would be part of EAC certification. There is no EAC standard for such threshold settings. As mentioned before, the optimal settings are products of many elements. The type of the scanner used, the scanner settings and configuration, the type of the paper used, the type of the ink printer has used in printing the ballots, color dropout settings, just to name few. Older scanner models, which were optical mark recognitions scanners, used to be calibrated using calibration sheet – similar process is needed to be established for digital imaging scanners used this way as the ballot scanners.

74. Furthermore, the software settings in Exhibit E box 2 show that the software is instructed to ignore all markings in red color ("Color drop-out: Red"), This clearly indicates that the software was expecting the oval to be printed in Red and therefore it will be automatically removed from the calculation. The software does not anticipate printed black ovals as used in Fulton County. Voters have likely not been properly warned that any pen they use which ink contains high concentration of red pigment particles is at risk of not counting, even if to the human eye the ink looks very dark.

75. I listened to the August 10 meeting of the State Board of Elections as they approved a draft rule related to what constitutes a vote, incorporating the following language:

Ballot scanners that are used to tabulate optical scan ballots marked by hand shall be set so that:

1. Detection of 20% or more fill-in of the target area surrounded by the oval shall be considered a vote for the selection;

2. Detection of less than 10% fill-in of the target area surrounded by the oval shall not be considered a vote for that selection;

3. Detection of at least 10% but less than 20% fill-in of the target area surrounded by the oval shall flag the ballot for adjudication by a vote review panel as set forth in O.C.G.A. 21-2-483(g). In reviewing any ballot flagged for adjudication, the votes shall be counted if, in the opinion of the vote review panel, the voter has clearly and without question indicated the candidate or candidates and answers to questions for which such voter desires to vote.

76. The settings discussed in the rule are completely subject to the scanner settings. How the physical marking is translated into the digital image is determined by those values and therefore setting the threshold values without at the same time setting the scanner settings carries no value or meaning. If the ballots will be continuing to be printed with black only, there is no logic in having any drop-out colors.

77. Before the State sets threshold standards for the Dominion system, extensive testing is needed to establish optimal configuration and settings for each step of the process. Also, the scanners are likely to have settings additional configuration and settings which are not visible menus shown in the manual excerpt. All those should be evaluated and tested for all types of scanners approved for use in Georgia, including the precinct scanners

78. As temporary solution, after initial testing, the scanner settings and configuration should be locked and then a low threshold values should be chosen. All drop-out colors should be disabled. This will increase the number of ballots chosen for human review and reduce the number of valid votes not being counted as cast.

Logic and Accuracy Testing

79. Ballot-Marking Device systems inherits the same well-documented systemic security issues embedded in direct-recording electronic (DRE) voting machine design. Such design flaws eventually are causing the demise of DRE voting system across the country as it did in Georgia. In essence the Ballot Marking Device is a general-purpose computer running a general-purpose operating system with touchscreen that is utilized as a platform to run a software, very similar to DRE by displaying a ballot to the voter and recording the voter's intents. The main difference is that instead of recording those internally digitally, it prints out a ballot summary card of voter's choices.

80. Security properties of this approach would be positively different from DREs if the ballot contained only human-readable information and all voters are required to and were capable of verifying their choices from the paper ballot summary. That of course is unrealistic.

81. When voter fails to inspect the paper ballot and significant portion of the information is not in human readable from as a QR barcode, Ballot-Marking Device based voting effectively inherits most of the negative and undesirable security and reliability properties directly from DRE paradigm, and therefore should be subject to the same testing requirements and mitigation strategies as DREs.

82. In response to repeating myriad of issues with DREs, which have been attributed to causes from screen calibration issues to failures in ballot definition configuration distribution, a robust Logic & Accuracy testing regulation have been established. These root causes are present in BMDs and therefore should be evaluated in the same way as DREs have been.

I received the Georgia Secretary of State's manual "Logic and Accuracy Procedures "Version 1.0 January 2020 from Rhonda Martin. Procedure described in section D "Testing the BMD and Printer" is taking significant shortcuts, presumably to cut the labor work required. (Section D is attached as Exhibit L) These shortcuts significantly weaken the security and reliability posture of the system and protections against already known systemic pitfalls, usability predicaments and security inadequacies.

CONCLUSIONS

83. The scanner software and tabulation software settings and configurations being employed to determine which votes to count on hand marked paper ballots are likely causing clearly intentioned votes not to be counted as cast.

84. The method of using 1-bit images and calculated relative darkness values from such pre-reduced information to determine voter marks on ballots is severely outdated and obsolete. It artificially and unnecessarily increases the failure rates to recognize votes on hand-marked paper ballots. As a temporary mitigation, optimal configurations and settings for all steps of the process should be established after robust independent testing to mitigate the design flaw and augment it with human assisted processes, but that will not cure the root cause of the software deficiency which needs to be addressed.

85. The voting system is being deployed, configured and operated in Fulton County in a manner that escalates the security risk to an extreme level and calls into question the accuracy of the election results. The lack of well-defined process and compliance testing should be addressed immediately using independent experts. The use and the supervision of the Dominion personnel operating Fulton County's Dominion Voting System should be evaluated.

86. Voters are not reviewing their BMD printed ballots before scanning and casting them, which causes BMD-generated results to be un-auditable due to the untrustworthy audit trail. Furthermore, because BMDs are inheriting known fundamental architectural deficiencies from DREs, no mitigation and assurance measures can be weakened, including but not limited to Logic and Accuracy Testing procedures.

This 24th day of August 2020.

Harri Hursti

EXHIBIT A:

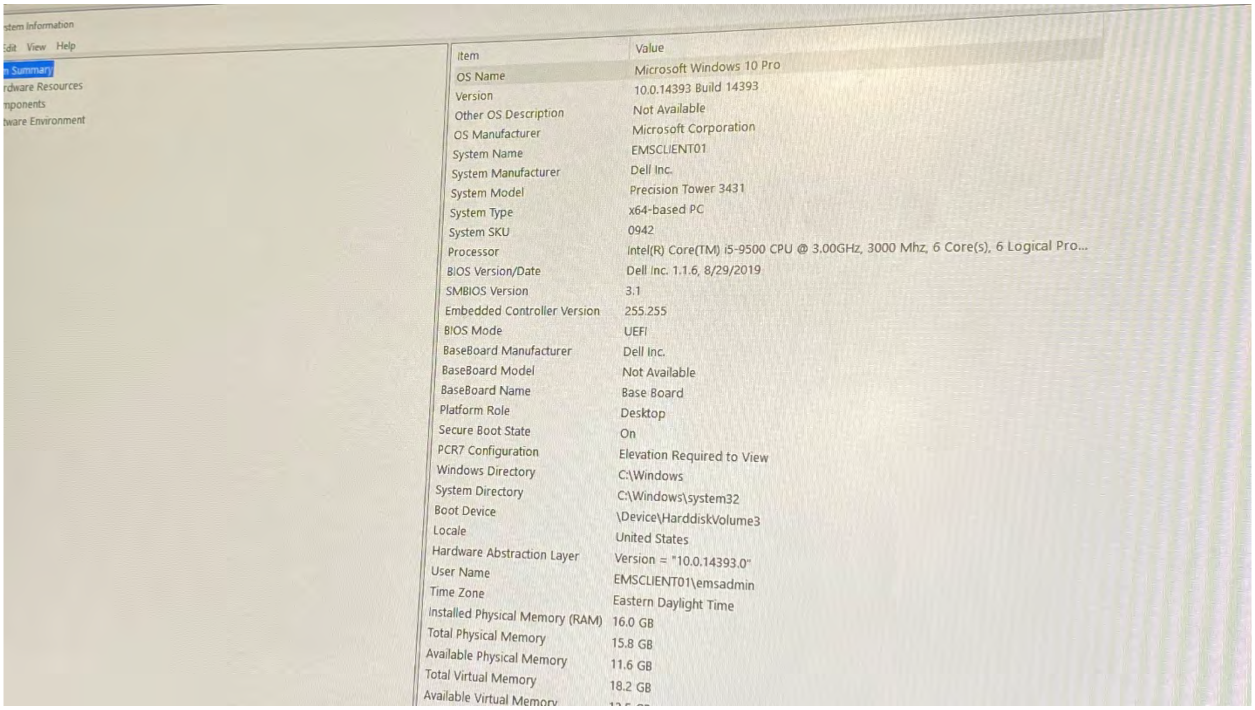

View Help
Item
Value
OS Name
Microsoft Windows 10 Pro
Version
10.0.14393 Build 14393
Other OS Description
Not Available
OS Manufacturer
Microsoft Corporation
System Name
EMSCLIENT01
System Manufacturer
Dell Inc.
System Model
Precision Tower 3431
System Type
x64-based PC
System SKU
0942
Processor
Intel(R) Core(TM) i5-9500 CPU @ 3.00GHz, 3000 Mhz, 6 Core(s), 6 Logical Pro...
BIOS Version/Date
Dell Inc. 1.1.6, 8/29/2019
SMBIOS Version
3.1
Embedded Controller Version
255.255
BIOS Mode
UEFI
BaseBoard Manufacturer
Dell Inc.
BaseBoard Model
Not Available
BaseBoard Name
Base Board
Platform Role
Desktop
Secure Boot State
On
PCR7 Configuration
Elevation Required to View
Windows Directory
C:\Windows
System Directory
C:\Windows\system32
Boot Device
\Device\HarddiskVolume3
Locale
United States
Hardware Abstraction Layer
Version = "10.0.14393.0"
User Name
EMSCLIENT01\emsadmin
Time Zone
Eastern Daylight Time
Installed Physical Memory (RAM)
16.0 GB
Total Physical Memory
15.8 GB
Available Physical Memory
11.6 GB
Total Virtual Memory
18.2 GB
Available Virtual Memory

EXHIBIT B:


MOCK
Most used
EMS Election Event Designer
File Explorer
EMS Results Tally and Reporting
Notepad
ImageCast® Adjudication
Calculator
1-Wire Drivers x64
3D Builder
Acrobat Reader DC
Alarms & Clock
Calculator
Calendar
Camera
Life at a glance
Monday
17
Get all your mail in one place
Mail
Microsoft Edge
Photos
Weather
Skype Preview
Microsoft News
Store
Play and explore
Xbox
Groove Music
Movies & TV
Paint 3D
WinZip Univer...
Get Office
OneNote

EXHIBIT C:

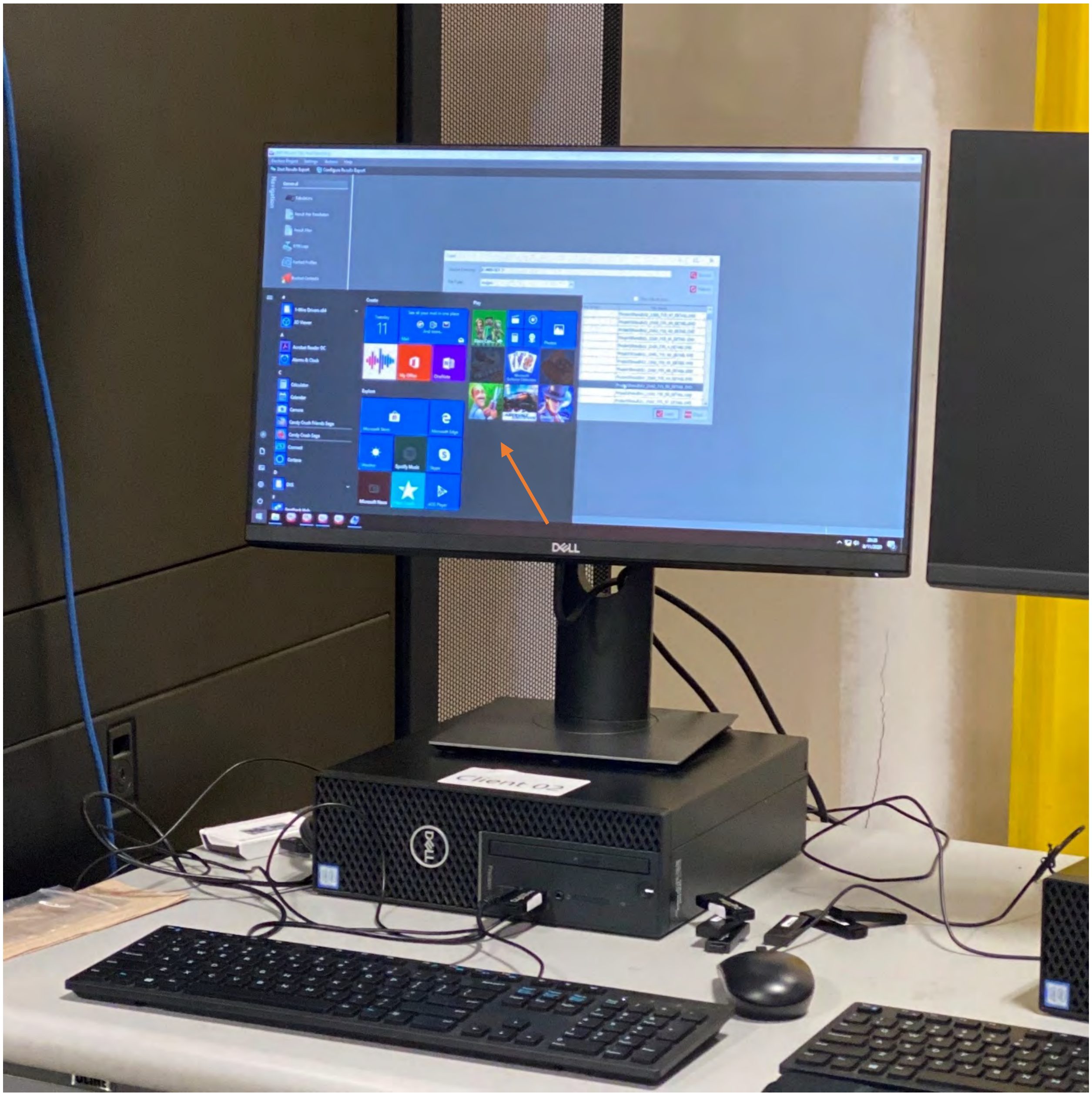


EXHIBIT D:

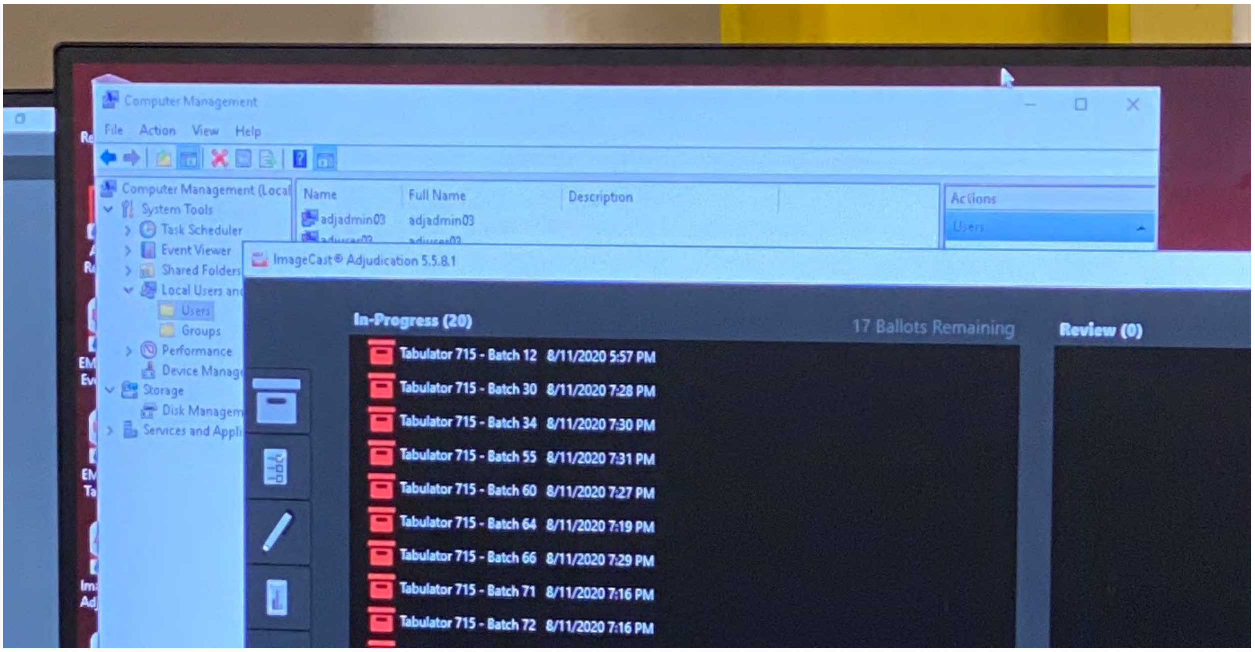


Exhibit 7

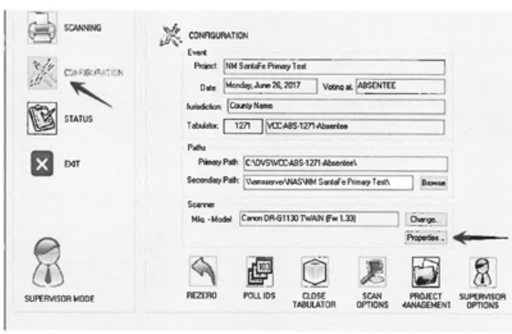
EXHIBIT E:

ICC SCANNER DRIVER SETTINGS

DOMINION VOTING

1

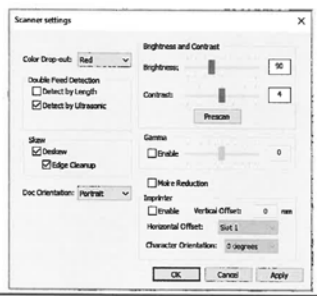
1. Click on the **ADMINISTRATOR MODE** icon in the lower left corner of the window. Enter the Supervisor password.
2. Click the **CONFIGURATION** button option on the left side of the window then click the **Properties** button located in the lower **Scanner** section.



2 Verify/select the following settings:

- a. **Color Drop-out**: Red
- b. **Detect by Length**: Not selected
- c. **Detect by Ultrasonic**: Selected
- d. **Deskew**: Selected
- e. **Edge Cleanup**: Selected
- f. **Doc Orientation**: Portrait
- g. **Brightness**: Set to 90
- h. **Contrast**: 4
- i. **Gamma**: Not selected
- j. **Moire Reduction**: Not selected
- k. **Imprinter**: Not selected

Click the **Apply** button then click the **OK** button.



9

EXHIBIT F:

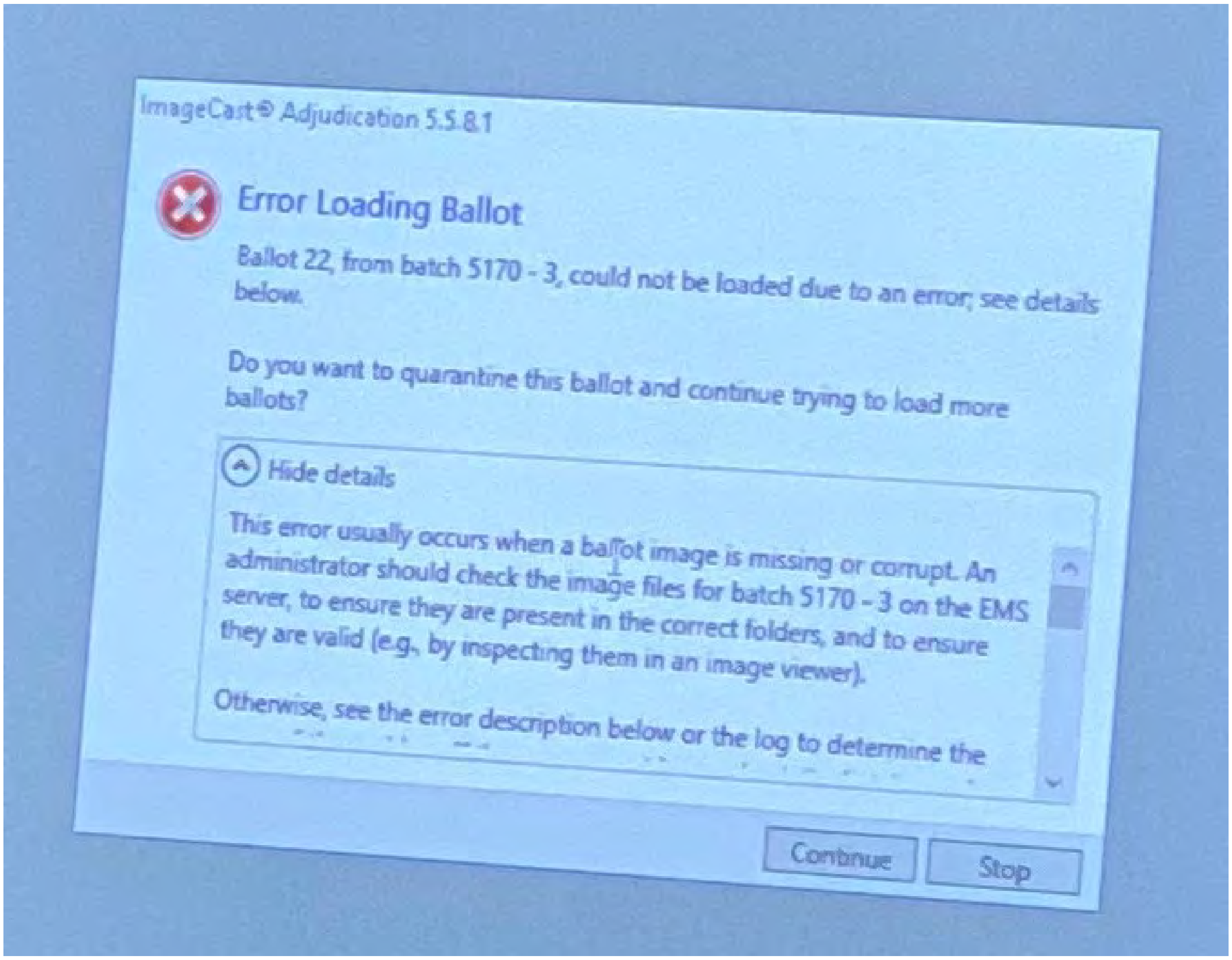

ImageCast® Adjudication 5.5.8.1
Error Loading Ballot
Ballot 22, from batch 5170 - 3, could not be loaded due to an error; see details below.
Do you want to quarantine this ballot and continue trying to load more ballots?
Hide details
This error usually occurs when a ballot image is missing or corrupt. An administrator should check the image files for batch 5170 - 3 on the EMS server, to ensure they are present in the correct folders, and to ensure they are valid (e.g., by inspecting them in an image viewer).
Otherwise, see the error description below or the log to determine the
Continue
Stop

EXHIBIT G:

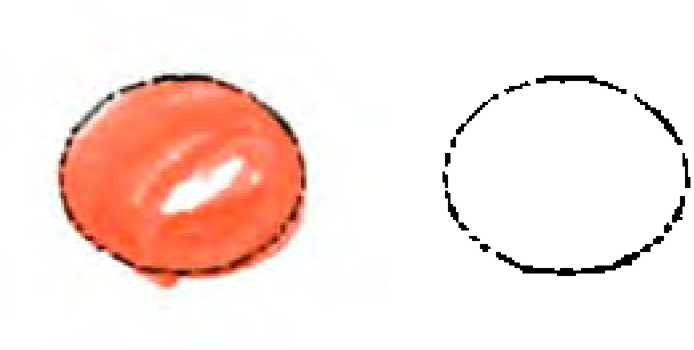


EXHIBIT H:

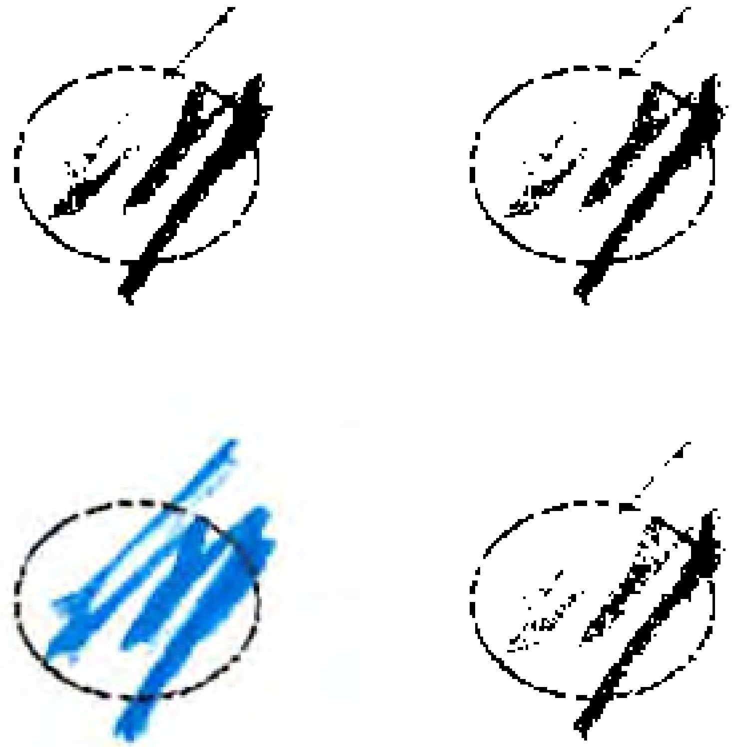
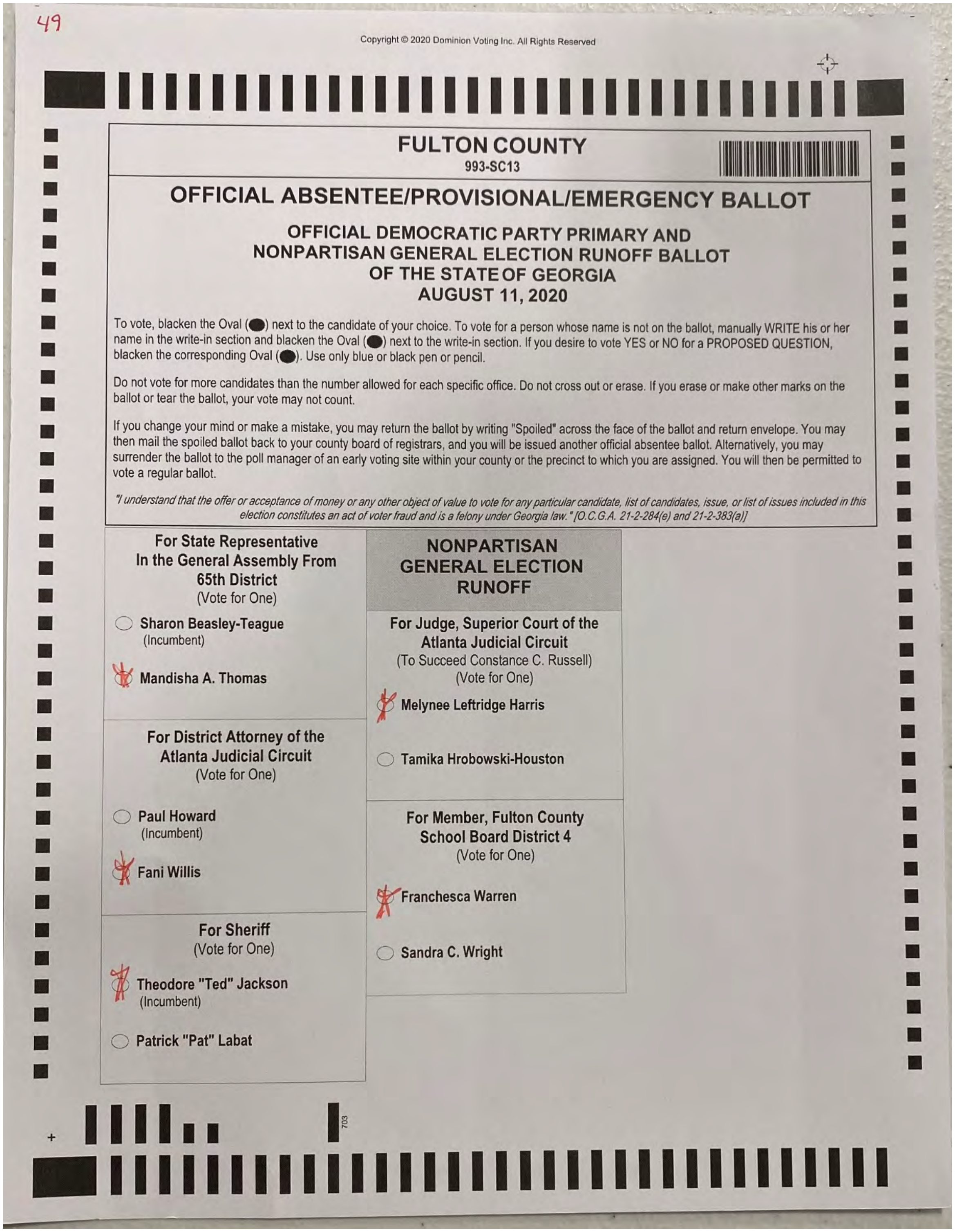


EXHIBIT I:



49

FULTON COUNTY
993-SC13

OFFICIAL ABSENTEE/PROVISIONAL/EMERGENCY BALLOT

OFFICIAL DEMOCRATIC PARTY PRIMARY AND
NONPARTISAN GENERAL ELECTION RUNOFF BALLOT
OF THE STATE OF GEORGIA
AUGUST 11, 2020

To vote, blacken the Oval (⬬) next to the candidate of your choice. To vote for a person whose name is not on the ballot, manually WRITE his or her name in the write-in section and blacken the Oval (⬬) next to the write-in section. If you desire to vote YES or NO for a PROPOSED QUESTION, blacken the corresponding Oval (⬬). Use only blue or black pen or pencil.

Do not vote for more candidates than the number allowed for each specific office. Do not cross out or erase. If you erase or make other marks on the ballot or tear the ballot, your vote may not count.

If you change your mind or make a mistake, you may return the ballot by writing "Spoiled" across the face of the ballot and return envelope. You may then mail the spoiled ballot back to your county board of registrars, and you will be issued another official absentee ballot. Alternatively, you may surrender the ballot to the poll manager of an early voting site within your county or the precinct to which you are assigned. You will then be permitted to vote a regular ballot.

"I understand that the offer or acceptance of money or any other object of value to vote for any particular candidate, list of candidates, issue, or list of issues included in this election constitutes an act of voter fraud and is a felony under Georgia law." [O.C.G.A. 21-2-284(e) and 21-2-383(a)]

For State Representative
In the General Assembly From
65th District
(Vote for One)

Sharon Beasley-Teague
(Incumbent)

Mandisha A. Thomas

For District Attorney of the
Atlanta Judicial Circuit
(Vote for One)

Paul Howard
(Incumbent)

Fani Willis

For Sheriff
(Vote for One)

Theodore "Ted" Jackson
(Incumbent)

Patrick "Pat" Labat

NONPARTISAN
GENERAL ELECTION
RUNOFF

For Judge, Superior Court of the
Atlanta Judicial Circuit
(To Succeed Constance C. Russell)
(Vote for One)

Melynee Leftridge Harris

Tamika Hrobowski-Houston

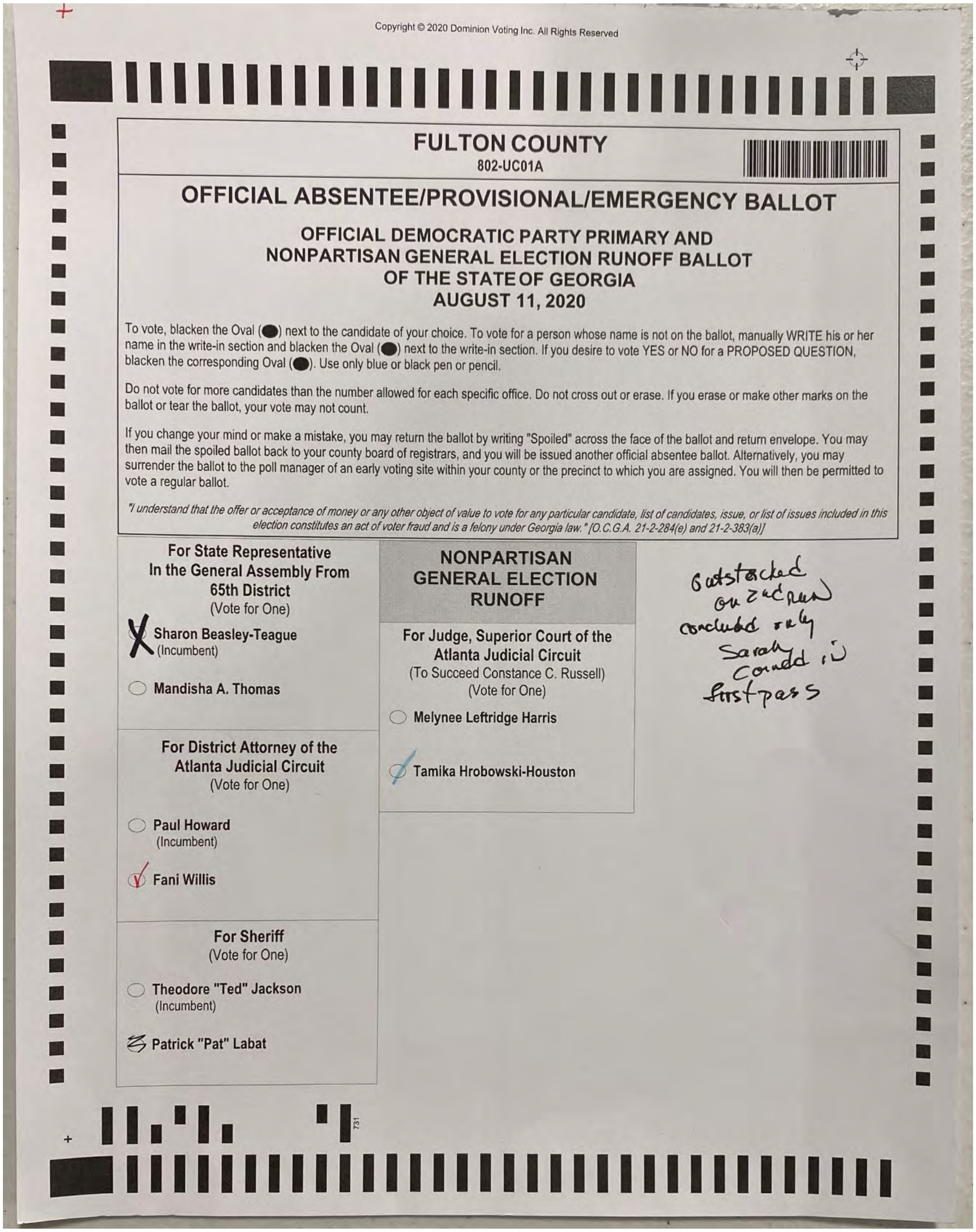
For Member, Fulton County
School Board District 4
(Vote for One)

Franchesca Warren

Sandra C. Wright

703

EXHIBIT J:



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FULTON COUNTY
802-UC01A

OFFICIAL ABSENTEE/PROVISIONAL/EMERGENCY BALLOT

OFFICIAL DEMOCRATIC PARTY PRIMARY AND NONPARTISAN GENERAL ELECTION RUNOFF BALLOT OF THE STATE OF GEORGIA AUGUST 11, 2020

To vote, blacken the Oval (⬤) next to the candidate of your choice. To vote for a person whose name is not on the ballot, manually WRITE his or her name in the write-in section and blacken the Oval (⬤) next to the write-in section. If you desire to vote YES or NO for a PROPOSED QUESTION, blacken the corresponding Oval (⬤). Use only blue or black pen or pencil.

Do not vote for more candidates than the number allowed for each specific office. Do not cross out or erase. If you erase or make other marks on the ballot or tear the ballot, your vote may not count.

If you change your mind or make a mistake, you may return the ballot by writing "Spoiled" across the face of the ballot and return envelope. You may then mail the spoiled ballot back to your county board of registrars, and you will be issued another official absentee ballot. Alternatively, you may surrender the ballot to the poll manager of an early voting site within your county or the precinct to which you are assigned. You will then be permitted to vote a regular ballot.

"I understand that the offer or acceptance of money or any other object of value to vote for any particular candidate, list of candidates, issue, or list of issues included in this election constitutes an act of voter fraud and is a felony under Georgia law." [O.C.G.A. 21-2-284(e) and 21-2-383(a)]

For State Representative In the General Assembly From 65th District
(Vote for One)

- Sharon Beasley-Teague (Incumbent)
- Mandisha A. Thomas

For District Attorney of the Atlanta Judicial Circuit
(Vote for One)

- Paul Howard (Incumbent)
- Fani Willis

For Sheriff
(Vote for One)

- Theodore "Ted" Jackson (Incumbent)
- Patrick "Pat" Labat

NONPARTISAN GENERAL ELECTION RUNOFF

For Judge, Superior Court of the Atlanta Judicial Circuit
(To Succeed Constance C. Russell)
(Vote for One)

- Melynee Leftridge Harris
- Tamika Hrobowski-Houston

Outstacked on 2nd run concluded only Sarah counted in first pass

731

44

EXHIBIT K:

Gabriel Sterling
@GabrielSterling

Replying to @MarilynRMarks1 @rahulbali and 9 others

Again, all Central scanners were set at the industry standard 0-13% is not a mark (the oval is 5%) 14-28% is the ambiguous level to be checked by review panels, 29%+ is a mark. You ar pointing out the inherent issues with HMPBs that we don't see with BMD marked ballots.

8:02 PM · Jun 13, 2020 from Georgia, USA · Twitter for iPhone

EXHIBIT L:

- Create a voter card from Poll Pad for each unique ballot style within the designated Polling Location
  - Recommend labels be placed on card identifying what ballot style will be displayed by BMD once card is inserted
  - BMD removes the activation code from the Voter Card once used, therefore create the card again from Poll Pad after each use by a BMD

D. Testing the BMD and Printer

Use a combination of Poll Worker Card with Ballot Activation Codes for the polling location, and Voter Cards created from a Poll Pad loaded with the LA/Advance Voting dataset to bring up ballots on the BMD

- Produce at least one printed ballot from each BMD assigned to the polling location
- Produce a test deck from the BMDs assigned to the polling location for each unique ballot style within the polling location. The test deck must contain at least one vote for each candidate listed in each race within the unique ballot style
  - **Example**: Ballot from BMD 1 contains a vote for only the first candidate in each race listed on Ballot Style 1, Ballot from BMD 2 contains a vote only for the second candidate in each race on Ballot Style 1, and continue through the line of devices until all candidates in all races within the unique ballot style have received a single vote
  - **If Number of BMDs outnumber the number of vote positions on the unique ballot style**, start the vote pattern over until all BMDs have produced one printed ballot
  - **If Number of unique ballot styles in the polling place is greater than 1,** once the vote pattern is complete for a unique ballot style, proceed to the next BMD in line to start the review of the next unique Ballot Style
  - **All unique ballot styles do not have to be tested on each BMD**
- Review BMD-generated Test Deck and confirm the vote content before placing in the designated Polling Place Scanner

E. Testing the Polling Place Scanner

- Scan the BMD-generated Test Deck into the Polling Place Scanner
- Scan one blank optical scan ballot style(s) associated to the Polling Place to verify the Polling Place Scanner will recognize the ballot style in case of emergency
- Verify Scanner(s) shows a number of Ballot Cast equal to the number of ballots in the BMD-generated test deck plus the scanned blank Optical Scan ballot styles
- Firmly place the Security Key Tab in the Security Key Slot
- Touch Close Polls
- Enter the passcode
- Touch Enter
- Touch Yes
- Touch No for additional tapes (Scanner will automatically produce 3 copies of the closing tape)

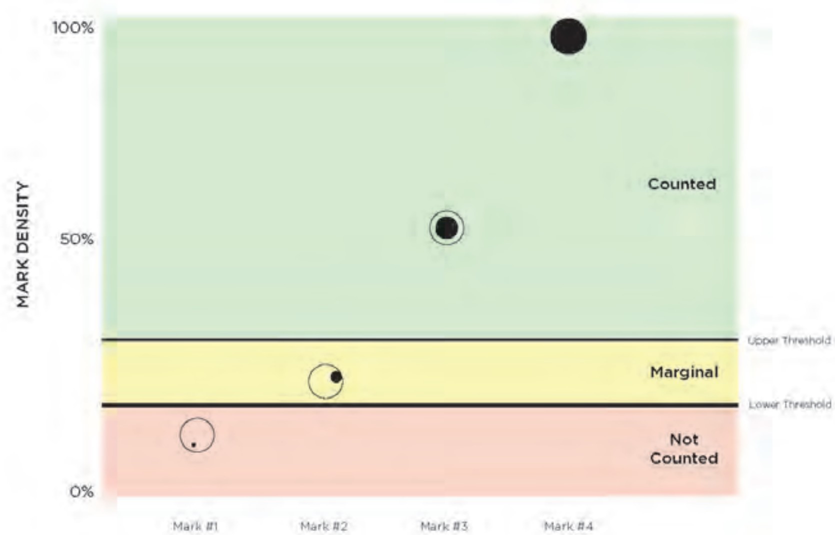
EXHIBIT M:

THE DOMINION DIFFERENCE

DUAL THRESHOLD TECHNOLOGY (MARGINAL MARKS)

From its early beginnings, Dominion Voting has emphasized the use of digital scanning, and continues to set the standard in digital image acquisition and analysis in the tabulation of digitally scanned ballots. When a ballot is fed into an ImageCast® tabulator - at the precinct level or centrally - a complete duplex image is created and then analyzed for tabulation by evaluating the pixel count of a voter mark. The pixel count of each mark is compared with two thresholds (which can be defined through the Election Management System) to determine what constitutes a vote. If a mark falls above the upper threshold, it's a valid vote. If a mark falls below the lower threshold, it will not be counted as a vote.

However, if a mark falls between the two thresholds (known as the "ambiguous zone"), it will be deemed as a marginal mark and the ballot will be returned to the voter for corrective action (please see diagram below). With this feature, the voter is given the ability to determine his or her intent, not an inspection or recount board after the fact, when it is too late. The chart below illustrates the Marginal Mark threshold interpretation.



THE DOMINION DIFFERENCE DUAL THRESHOLD TECHNOLOGY DOMINION VOTING

STATEMENT BY ANA MERCEDES DÍAZ CARDOZO

I, Ana Mercedes Díaz Cardozo, hereby declare the following:

1. My name is Ana Mercedes Díaz Cardozo. I'm known as Ana Diaz by many. I am an adult of the sound mine and was born in Caracas, Venezuela on March 24, 1960. I'm a naturalized American citizen. I reside at 923 Gulf Stream Court, Weston, Florida 33327.

2. I make this statement voluntarily and on my own initiative. I have not been promised, nor do I expect to receive anything in exchange for my testimony and give this statement. I have no expectation of any benefit or reward and understand that there are those who can try to hurt me for what I say in this statement.

3. I moved from Venezuela to the United States in 2004 due to political corruption and rapid decline in my home country of Venezuela. I want to alert the public and let the world know the truth about corruption, manipulation, and lies committed through a conspiracy of individuals and businesses with the intention of betraying the honest people of the United States and its legally constituted institutions and fundamental rights as citizens. This conspiracy began more than a decade ago in Venezuela and has spread to countries around the world. It is a conspiracy to unjustly gain and maintain power and wealth. These are political leaders, powerful companies, and others whose purpose is to gain and maintain power by changing people's free will and subverting the proper course of governing.

4. After graduating from high school, I attended the University of Santa Maria in Caracas, Venezuela and graduated as a lawyer in 1987. Then I studied a postgraduate degree in administrative law at the University of Central Venezuela. Before I could submit my thesis for a Master's degree in Administrative Law, I moved to the United States. I'm certified as an arbiter of international trade.

5. I was a career official for 25 years at the Supreme Electoral Council of Venezuela, which is the name that it was called in the 1970's. It is currently called the National Electoral Council. This is the highest electoral administrative agency in Venezuela and oversees all elections in Venezuela. In 1979, at the age of 19, I began my career at the Supreme Electoral Council of Venezuela as secretary in the regional delegation of the federal district. When I graduated from the university as a lawyer, my position on the Supreme Electoral Council changes to the position as an adviser to the Judicial Council of the Supreme Council Electoral. In 1991, I was appointed Assistant Director General of Political Parties, where I served until Hugo Chavez came to power in 1998. Also during this time, I served for seven years as a member of the Legislative Commission of the Venezuelan Electoral Council. It was the role of the Legislative Commission to review and identify any issues related to candidates

for elected positions. The Legislative Commission and my office had access to many resources within the various departments of the Electoral Council, including an information technology section that had experts in computers, computer programming, computer systems and telecommunications features such as modems, telephone lines. I was regularly in communication with the various departments of the Electoral Body for my daily duties. In the last years of my work for the Electoral Counsel, a little of my activities and duties were to learn about electronic voting systems and their functioning by Council experts.

6. As Deputy Director General of Political Parties in the Supreme Electoral Council, it was my duty to oversee everything related to political parties in Venezuela, particularly the participation of political parties in elections and the selection and qualifications of candidates for political office. My office reviewed everything to do with the ability of political parties to participate in the electoral process. Before a political party could be formed, it had to undergo a process for approval. This included legal approval of the party name, its colors and a list of its members. The proposed party had to have a certain percentage of Venezuela's population depending on whether it wanted to be a regional or national party. It could not be constituted as a political party until it was approved by the Supreme Electoral Council. My office also oversaw the creation of ballots that bore the name of the candidates and any party symbol or color that the candidate would like to use. When our office approved these matters, we sent the ballot for printing and circulation. Any conflict over which group could be a political party, which would be a candidate for elected office, how that candidate would be included in the vote, were decided by my office. I was a signatory to all decisions taken by the Political Parties office at the Supreme Electoral Council.

7. After Hugo Chavez was elected, he changed the Venezuelan Constitution. One such change was in the Supreme Electoral Council, now the Electoral Power. In February 2009, a national referendum was passed to change Venezuela's Constitution to end mandate limits for elected officials, including the President of Venezuela. This change allowed Hugo Chavez to be re-elected an unlimited number of times.

8. In 2003, I was appointed Director General of Political Parties at the National Electoral Council. At the end of that year there was a national effort to hold a referendum to remove Hugo Chavez from the post of President. In 2004 I was appointed to the Validation Committee that was responsible for reviewing petitions, the requirements of the signatories were their name, their signature, their fingerprint and their identification number. I discovered many ways that the party in power was trying to override requests. One was the change of forms to reflect that the petition was a referendum on the removal of members of the Venezuelan Congress

rather than the removal of the Venezuelan president. The purpose of manipulating petitions was to prevent a referendum to remove President Chavez from office. I investigated the allegations of fraud with the referendum petitions and lobbied for the fraudulent changes to be rectified. Because of my resistance and protests to this voter fraud, I received a letter in March 2004 stating that my position was trusted and trust had been lost in me and I was fired from the service.

9. After my dismissal, I decided to commit to the study of electoral processes both within Venezuela and in other countries, particularly in South American countries that were experiencing electoral unrest and government manipulation of constitutions, laws and elections. I joined a small group of highly educated and informed people who had access to information about the Venezuelan government and its activities. This group and I conduct interviews with Venezuelan citizens, read news publications and specialized treaties, and write evaluating the political, economic, legal and electoral changes taking place in Venezuela, South American countries, and other parts of the world controlled by socialist dictators and oligarchies. I read these treatises, studies, and publications to educate myself on how elections were manipulated and the use of empirical analysis to detect and identify the manipulation of elections and their results. In addition, I have collected copies of official Venezuelan government documents.

10. Official documents of the Venezuelan government include documents showing the bidding process for the implementation of a new electronic voting system in March 2004 and the award of the contract for that new system to Smartmatic. A true and authentic copy of the venezuelan National Electoral Council's tender documents, internal memorandums and contract signed between the Venezuelan government and the SBC Consortium (Smartmatic) are labeled Exhibit 1 and this statement is attached. I received the documents that constitute Exhibit 1 from a reliable person who had taken some notes on the documents and highlighted some parts for my attention. I have not made any alterations to what I have received, and the substantive content of the documents is authentic. For convenience, I've had the Bates document tagged at the bottom right of each page.

11. I have studied the documents contained in Exhibit 1 and have several observations. Exhibit 1 says that it is a contract between the National Electoral Council and the SBC Consortium (Smartmatic) and is dated 15 March 2004. It has a stamp that says Bolivarian Republic of Venezuela, Secretary General of the National Electoral Council. That is the official seal of the Secretary of the National Electoral Council. The initials at the bottom right side confirm the document's authenticity.

12. You would notice that page DIAZ 00002 is important because it shows that the contract is being made on February 16, 2004. Page DIAZ 00027, reflects that on February 14, 2004 at 11:50 a.m., in the Council's session room, Francisco Carrasquero López, Ezequiel Zamora Presilla, Jorge Rodríguez Gómez (Jorge Rodríguez), Sobella Mejías, and William Pacheco Medina, Vice President, the directors of the Secretary General of Electoral Voters respectively, in order to proceed with the delivery to the technical commissions, designated at the meeting dated 13 February 2004, they opened the tender envelopes containing the tenders of the companies that wanted to be awarded a contract for the automation of Venezuela's voting system and the processes used to carry out the 2004 referendum on the revocation of Hugo Chavez's election. Below you can read the amounts of offers made by Smartmatic SBC, Diebold and other bidders.

13. Then, on page DIAZ 000031, there is an internal note from the Director General of Administration, Mr. Medina. It was dated 14 February 2004 and said that a report on the research and evaluation of companies bidding for the automation of the voting system needed to be prepared.

14. It would then draw attention to the page marked DIAZ 000029. It is a document made on February 13, 2004. While this page is out of sequence, it shows the speed at which the decision was made to award the electoral system contract. The tender began on February 13 and had ended on February 16th -- a three-day period to review contracts and evaluate the specifications and performance of bidders' systems, including software, hardware, security, performance and bidding costs for the procurement, installation, training and operation of the systems. By February 16th, a decision to choose Smartmatic was made. This is convincing evidence that there was no genuine competition for the electoral system contract or serious consideration for alternative contracts. There was no due diligence and the bidding was rigged. It is not possible that within three or four days to do the formal investigation to evaluate the bids and award a contract of this size and important. The impropriety of this action is confirmed by the fact that the contract with Smartmatic was signed a month later, on 15 March 2004.

15. After the contract was awarded to Smartmatic, it was learned that Smartmatic had no previous experience in conducting elections and electoral tabulations. More importantly, it was discovered that the Smartmatic voting system contained two-way communication functions that allowed voting data not only to be sent to a central system of operation and voting, but the central voting system in operation and tabulation to send operational instructions and data to voting machines. It is not mentioned in the contract documents and specifications that the system would be bidirectional and would allow the transmission of data and instructions from the central operating system directly to voting machines. One

simply has to examine the system diagram on page DIAZ 000057 of Exhibit 1. If this feature of the Smartmatic system had been disclosed to the Electoral Council, it could not have adequately accepted Smartmatic's offer because it would allow the Smartmatic voting system to be handled in a way that manipulated votes and interfered with the legitimate voting and electoral process by impersonating the will to govern officials with the will of the electorate: the citizens of Venezuela. It was not surprising that Hugo Chávez and his successors then constantly won the election through the use and manipulation of the Smartmatic voting system.

16. In the 16 years since I left my post as Director General of Political Parties at the National Electoral Council of Venezuela, I have studied the electoral systems of Bolivia, Colombia, Ecuador, Guatemala, Honduras and Nicaragua and have observed elections and participated in pro-democratic forums in Colombia, Ecuador, Honduras and Nicaragua. I have also studied and researched electoral processes in Europe, participating in public academic conferences in Spain and Italy on the subject of democratic electoral processes.

17. Based on my specialized experiences with electoral systems, I have a firm view that no legitimate electronic voting system should be allowed to have the ability of two-way communications to send data and instructions between central tabulation operations and voting machines over telephone lines or the Internet. Having such characteristics compromise the integrity of the entire voting process by allowing injection of data and instructions to manipulate voting before, during and after an election and to avoid detection of processes and mechanisms designed to prevent voting manipulation and fraud.

I declare under penalty of perjury that the above is true and correct and that this Statement was prepared in Dallas County, Texas, and executed on November 20, 2020.

Ana Mercedes Díaz Cardozo

Declaration of Seth Keshel

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

1. I am over the age of 21 years and I am under no legal disability, which would prevent me from giving this declaration.
2. I am a trained data analyst with experience in multiple fields, including service in the United States Army as a Captain of Military Intelligence, with a one-year combat tour in Afghanistan. My experience includes political involvement requiring a knowledge of election trends and voting behavior.
3. I reside at 233 Muir Hill Dr., Aledo, TX 76008.
4. My declaration highlights substantial deviance from statistical norms and results regarding voting patterns in Wisconsin.
5. All 2020-related voting totals are taken from the Decision Desk HQ unofficial tracker, are not certified, and are subject to change from the time of the creation of this declaration.
6. Wisconsin has shown a steady decrease for support in Democratic presidential nominees since Barack Obama won the state by 13.91% in 2008. He won Wisconsin again in 2012, but only by a margin of 6.94%, and Republican Donald Trump won the state by 0.77% in 2016.
7. As part of an overall working-class voter shift, Wisconsin has moved in the same manner as Pennsylvania, Ohio, Michigan, and Minnesota – decreasing levels of support for Democratic nominees, and by consequence of this shift, increasing levels of support for Republican

nominees. This shift is captured in visual form in Exhibit A to this declaration.

8. The following counties have cast more Democratic presidential votes than cast for Obama in 2008, when he won the state by 13.91%:

    a. Ozaukee – 26,515 Biden votes, a 31.5% increase from 2016, and 28.8% more than cast for Obama in 2008. President Trump has increased his vote share by 11.3%, receiving 33,912 votes. Democratic vote shifts were -6.9% in 2012 and +5.3% in 2016.

    b. Dane – 260,157 Biden votes, a 19.5% increase from 2016, and 26.3% more than cast for Obama in 2008. President Trump has increased his vote share by 10.5%, receiving 78,789 votes. Democratic vote shifts were +4.9% in 2012 and +0.8% in 2016. Dane County is home to the University of Wisconsin. President Obama had record support, turnout, and enthusiasm among college-age students and did not have to navigate pandemic-related challenges to turn out these voters, which makes Biden's total extremely suspicious.

    c. Waukesha – 103,867 Biden votes, a 31.1% increase from 2016, and 21.7% more than cast for Obama in 2008. President Trump has increased his vote share by 12.0%, receiving 159,633 votes. Democratic vote shifts were -7.7% in 2012 and +0.6% in 2016.

    d. St. Croix - 23,190 Biden votes, a 32.7% increase from 2016, and 9.5% more than cast for Obama in 2008. President Trump has increased his vote share by 22.8%, receiving 32,190 votes. Democratic vote shifts were -6.0% in 2012 and -12.2% in 2016, making such a sharp Democratic turnabout in the face of a strong President Trump vote increase extremely suspect.

e. Washington - 26,647 Biden votes, a 27.8% increase from 2016, and 3.6% more than cast for Obama in 2008. President Trump has increased his vote share by 16.4%, receiving 60,235 votes. Democratic vote shifts were -9.9% in 2012 and -10.0% in 2016. A rebound of 27.8% for Democrats from two consecutive cycles of heavy losses, particularly with President Trump reconsolidating the Republican Party base and lost third-party voters, seems unlikely.

f. Bayfield - 6,155 Biden votes, a 24.3% increase from 2016, and 3.1% more than cast for Obama in 2008. President Trump has increased his vote share by 12.0%, receiving 4,617 votes. Democratic vote shifts were +1.0% in 2012 and -18.9% in 2016.

9. Milwaukee County's voter rolls shrank from 2016 to 2020, after losing 13.1% of President Obama's Democratic vote total from 2012; however, this year, Milwaukee County has surged in Democratic votes to nearly equal Obama re-election levels with 317,251 votes, even as President Trump has made an increase of 6.6% in votes. With a declining voter roll, Milwaukee County was likely on track to cast less than 275,000 Democratic ballots this year. Combining these resurgent totals with the transparency issues experienced on the early morning hours of November 4, their current total of 317,251 is strikingly suspect.

10. *New York Times* live vote reporting shows a dump of 168,541 votes at 3:42:20 (a.m.) on November 4, 2020. Of those votes, 143,378

(85.07%) went for Biden, and just 25,163 (14.93%) went for Trump. This dump was enough to flip the race with almost no transparency to the viewing public. The live graph showing this vote dump (circled) is attached as Exhibit D to this document.

11. President Trump has vastly increased his vote share in the entirety of Wisconsin, and also in the rural parts of the state, including the counties he flipped from Democratic to Republican in 2016; however, against the trends of the previous election, the Democrats have increased at greater margins than Trump has, thereby erasing margin gain, and allowing for suspicious vote totals in Milwaukee, Dane, Ozaukee, Waukesha, St. Croix, and other counties with strikingly high Democratic vote totals to overwhelm Trump's totals. A county classification of Wisconsin is available in Exhibit B to this declaration, and a full analysis of Wisconsin's voter irregularities is available in Exhibit C.

Seth Keshel

17 Nov. 2020

Aledo, Texas

Improbable Voting Trend Reversals in Wisconsin

Seth Keshel, MBA

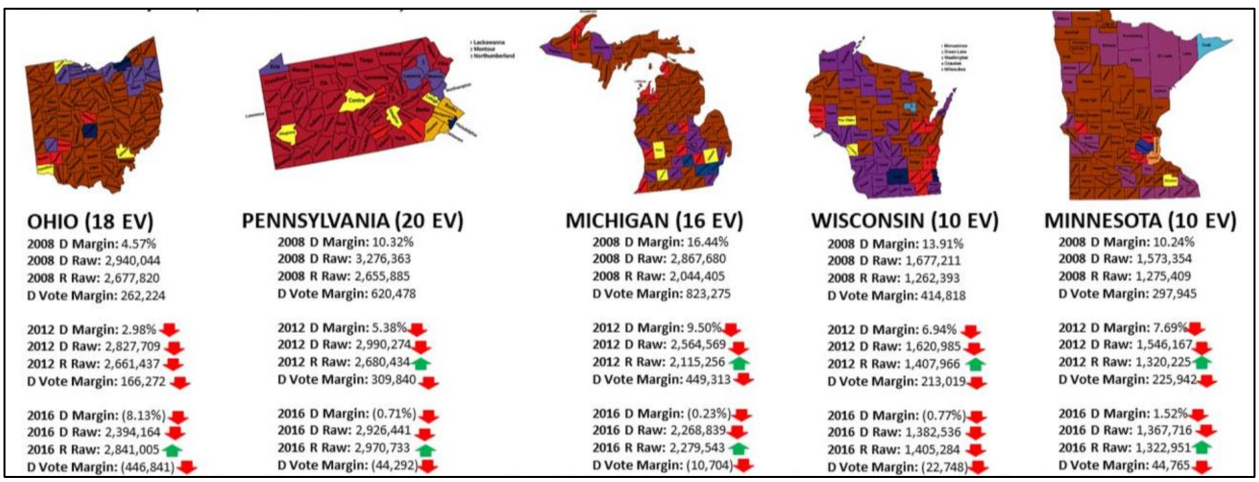
Executive Summary

Wisconsin is showing the same pattern of potential widespread fraud as observed in Pennsylvania, Michigan, Georgia, and North Carolina. While Milwaukee County is focal for transparency and observation violations, including reporting statistically impossible vote counts in the early morning hours away from scrutiny, Dane County has surged far past support totals for President Obama, despite expected difficulties mobilizing student voters to polls. President Trump has reconsolidated the Republican base in suburban Milwaukee and far surpassed his 2016 support levels but has been limited in margin growth by historically improbable Democratic support in these strongholds, which defy years of data in Wisconsin in which the Republican party surged as the Democratic Party plunged. Finally, in strong Trump counties showing a double inversion cycle (one party up, the other down), particularly in rural and exurban Wisconsin, Trump's totals are soaring, and against established trends, Biden's totals are at improbable levels of support despite lacking registration population growth.

The entire vote must be recanvassed and audited for both electronic vote fraud and mail/absentee fraud.

Opening

Since President Obama swept through the Midwest ("Rust Belt") region in 2008, winning Pennsylvania by 10 percent, Michigan by 16 percent, and Wisconsin by 14 percent, the Democratic Party has declined steadily in all successive Presidential elections in not only share of the vote, but in raw votes overall, without exception (pending the final results of the 2020 election). Pennsylvania is the only state mentioned in this paragraph which registers voters by party, and it has trended three percentage points in favor of Republicans since the 2016 election. The raw vote trends and results in these three states, plus Ohio and Minnesota, are pictured below.



These trends show the Democrats losing raw votes in every election since 2008, with the Republicans gaining in eight of 10 samples, and with the margins moving in favor of Republicans each time. This is a product of limited or stagnant population growth in these states, which given stable turnout numbers, means one party is typically going down if another is going up. In fast-growing states such as Florida, Texas, or Arizona, it should be expected for both parties to make substantial gains in a "horse race" scenario.

Wisconsin

President Obama's margin of victory in Wisconsin from 2008 fell from 13.91% to 6.94% in his reelection campaign, and that margin moved 7.71% toward Republicans in 2016 as the working-class communities that historically favored Democrats moved to support then-candidate Donald Trump. Declining voting power from these working class counties beginning and 2012, and then from Milwaukee County in 2016 was an instrumental part of this shift, as was the substantial movement of northern Wisconsin toward the Republican Party. President Trump was able to win Wisconsin in 2016 thanks to substantially decreased support for Democrats, and even overcame less than optimal support from the Republican strongholds of southeastern Wisconsin.

The consistent characteristic in the shift in Wisconsin's political landscape is the declining Democratic Party raw vote totals, and the increasing Republican totals. Thus far, according to the Decision Desk unofficial vote tally, President Trump is substantially adding to his vote totals in every Wisconsin County, while his opponent adds votes at a greater percentage, often in counties that have trended steadily away from Democrats since at least 2008. The following counties, which have mostly lost Democratic votes since 2008, have now contributed more Biden votes than Obama received in 2008, when he won the state by 13.91%. Green font represents growth in raw votes. Red font represents decrease in raw votes.

County	Rep ’08	Dem ’08	Rep ’12	Dem ’12	Rep ’16	Dem ’16	Rep ’20	Dem ’20	Dem Percentage of Obama 2008 Votes
Ozaukee	32,172	20,579	36,077	19,159	30,464	20,170	33,912	26,515	128.8%
% Increase	N/A	N/A	12.1%	(6.9%)	(15.6%)	5.3%	11.3%	31.5%	

Dane	73,065	205,984	83,644	216,071	71,275	217,697	78,789	260,157	126.3%
% Increase	N/A	N/A	14.5%	4.9%	(14.8%)	0.8%	10.5%	19.5%	

Waukesha	145,152	85,339	162,798	78,779	142,543	79,224	159,633	103,867	121.7%
% Increase	N/A	N/A	12.2%	(7.7%)	(12.4%)	0.6%	12.0%	31.1%	

Racine	45,954	53,408	49,347	53,008	46,681	42,641	54,475	50,154	117.6%
% Increase	N/A	N/A	7.4%	(0.7%)	(5.4%)	(19.6%)	16.7%	17.6%	

St. Croix	22,837	21,177	25,503	19,910	26,222	17,482	32,190	23,190	109.5%
% Increase	N/A	N/A	11.7%	(6.0%)	2.8%	(12.2%)	22.8%	32.7%	

Wash’ton	47,729	25,719	54,765	23,166	51,740	20,852	60,235	26,647	103.6%
% Increase	N/A	N/A	14.7%	(9.9%)	(5.5%)	(10.0%)	16.4%	27.8%	

Bayfield	3,365	5,972	3,603	6,033	4,124	4,953	4,617	6,155	103.1%
% Increase	N/A	N/A	7.1%	1.0%	14.5%	(18.9%)	12.0%	24.3%	

OTHER NOTABLE COUNTIES

County	Rep ’08	Dem ’08	Rep ’12	Dem ’12	Rep ’16	Dem ’16	Rep ’20	Dem ’20	Dem Percentage of Obama 2008 Votes
Milwaukee	149,445	319,819	154,924	332,438	126,069	288,822	134,355	317,251	99.2%
% Increase	N/A	N/A	3.7%	3.9%	(18.6%)	(13.1%)	6.6%	9.8%	

La Crosse	23,701	38,524	25,751	36,693	26,378	32,406	28,661	37,817	98.5%
% Increase	N/A	N/A	8.6%	(4.8%)	2.4%	(11.7%)	8.7%	16.7%	

Brown	55,854	67,269	64,836	62,526	67,210	53,382	75,865	65,509	97.4%
% Increase	N/A	N/A	16.1%	(7.1%)	3.7%	(14.6%)	12.9%	22.7%	

Eau Claire	20,959	33,146	23,256	30,666	23,331	27,340	25,339	31,617	95.6%
% Increase	N/A	N/A	11.0%	(7.5%)	0.3%	(10.8%)	8.6%	15.6%	

Outagamie	39,667	50,294	47,372	45,659	49,879	38,068	58,379	47,659	94.8%
% Increase	N/A	N/A	19.4%	(9.2%)	5.3%	(16.4%)	17.0%	25.2%	

Walworth	25,485	24,117	29,006	22,552	28,863	18,710	33,844	22,783	94.2%
% Increase	N/A	N/A	13.8%	(6.7%)	(0.5%)	(17.0%)	17.3%	21.8%	

Rock	27,364	50,529	30,517	49,219	31,493	39,339	37,133	46,649	92.3%
% Increase	N/A	N/A	11.5%	(2.6%)	3.2%	(20.1%)	17.9%	18.6%	

Kenosha	31,609	45,836	34,977	44,867	36,037	35,799	44,972	42,191	92.0%
% Increase	N/A	N/A	10.6%	(2.1%)	3.0%	(20.2%)	24.8%	17.9%	

Winnebago	37,946	48,167	42,122	45,449	43,445	37,047	47,795	44,060	91.5%
% Increase	N/A	N/A	11.0%	(5.6%)	3.1%	(18.5%)	10.0%	18.9%	

Sheboygan	30,801	30,395	34,072	27,918	32,514	23,000	37,624	27,109	89.2%
% Increase	N/A	N/A	10.6%	(8.1%)	(4.6%)	(17.6%)	15.7%	17.9%	

Fond D.L.	28,164	23,463	30,355	22,379	31,022	17,387	35,754	20,588	87.7%
% Increase	N/A	N/A	7.8%	(4.6%)	2.1%	(22.3%)	15.3%	18.4%	

Marathon	30,345	36,367	36,617	32,363	39,014	26,481	44,623	30,807	84.7%
% Increase	N/A	N/A	20.7%	(11.0%)	6.5%	(18.2%)	14.4%	16.3%	

Findings

The most suspicious counties are those that showed two consecutive elections trending upward for the Republican candidate and downward for the Democratic candidate. These show a similar pattern to counties in Pennsylvania trending heavily Republican in registration, with a significant increase for President Trump in raw votes in 2020, but a smaller than expected margin due to an unexpected sharp reversal of votes for Biden in counties showing inverse trends for parties in recent elections. The only counties not showing two consecutive cycles of decline for Democrats are Waukesha, Bayfield, and Milwaukee. Wisconsin had several Republican counties in 2016 with fewer votes for Trump and higher third-party vote shares (hence 2,682 fewer votes for Trump than Romney), but based on 2020 returns to this point, that has been overcome in every single county.

Dane County is clearly associated with a major university, with student turnout thought to be reaching record lows due to campus shutdowns and lack of mobilization. This county is over 2008 Obama levels by 26.3% (54,173 votes), when that candidate drew record support from young voters, and up 19.5% since 2016, after two consecutive elections of sparse growth in Democrat votes. This county is one of few counties Obama overperformed in for his reelection, and 2020's total is still 20.4% over that number. The same mathematical improbability given the circumstances of 2020 was also seen in Washtenaw County, Michigan (home county of the University of Michigan). Dane County should be audited and recanvassed significantly, particularly for mail and absentee ballot fraud.

Trump slightly underperformed Romney's 2012 vote totals statewide because he lagged in total votes from suburban counties Waukesha, Racine, Washington, Ozaukee, and Walworth. This year, he has reconsolidated the Republican base and improved at a minimum of 11.3% (Ozaukee) in raw votes in these counties, and at a high of 17.3% (Walworth). President Trump has grown his share of raw votes in Wisconsin by a minimum of 4.1% (Menominee) in all counties, and at a high of 24.8% (Kenosha).

Among the largest counties in the state, the largest spikes in growth since 2016 by the Democratic candidate came in St. Croix (32.7%), Ozaukee (31.5%), Waukesha (31.1%), Washington (27.7%), placing them ahead of President Obama's total of votes in those counties in 2008, a year in which he won the state by 13.91%. This could be feasible if the inverse pattern of "one party up, one party down" were present, suggesting the transfer of voters from one party to the next, but President Trump has also greatly overperformed his 2016 vote totals and does not exhibit the collapse in support seen by Democrats in 2012 and 2016, especially in known Republican strongholds. While it is plausible that Democrats should add votes in those counties based on observed party registration trends in the Philadelphia area, it is unfathomable that those counties would overperform their 2008 Obama vote numbers by such margins, while still adding substantial increases in raw votes to President Trump in 2020.

Despite ranking 67th in the state in percentage increase in voter registrations, Milwaukee County increased its share of Democratic votes by 9.8%, even as President Trump increased by 6.6% while supposedly securing a higher share of minority votes than any Republican since 1960. Biden's total is nearly equal to Obama's 2008 performance and reverses a massive loss of Democratic votes in 2016 in a post-Obama environment, despite a decreasing voter roll (more than 3% decrease in registrations since 2016). Strangely, Milwaukee's turnout dwarfs other regional counterparts like Cleveland, Gary, and Indianapolis. This county is reported to have had many flagrant abuses of transparency regulations and is also known to have reported results without observation in the early morning hours of November 4, 2020, which was just enough to overcome a once formidable lead in the state by President Trump. The best course of action in Milwaukee is to recanvass and audit every mail-in and absentee ballot for massive fraud. The trend in Cleveland, Detroit, Milwaukee, and Philadelphia recently has suggested decreasing vote totals from one election to the next and is supported by the aforementioned significant decrease in the voter rolls in Milwaukee. This year's reported vote totals necessitate and improbable turnout level and suggest illegality in reporting and mail balloting.

All counties showing two consecutive cycles of inverse party trend (Republican up twice, Democrat down twice), with Democrats substantially up this year, may be subject to counting errors, or "glitches," like those reported in Antrim County, Michigan, or even recently in Rock County, Wisconsin. These voting machines and their associated software should be audited and examined by coding professionals, especially if the recent newsworthy events regarding corrupted voting software are widespread. It is highly possible that tampered or corrupted software in known Trump strongholds may be responsible for reducing margins of raw vote victory in counties that have massively left the Democratic Party since 2008.

The entire vote in Wisconsin is suspect against recent trends and should be subject to recanvass and audit, not just a recount of hundreds of thousands of illegal ballots. It appears that the major case in the state is that in spite of substantially growing his vote share in strong-Trump counties, and surging in votes in urban and suburban counties, Trump's margin is substantially limited, even after two consecutive inverse party trends. In urban or suburban areas, Democratic vote share is soaring to record numbers, even over Obama's totals after a 13.91% win, all while Trump surges in votes in those counties as well. Urban areas have issues with transparency and should be fully audited for mail and absentee fraud.

Ballot-Marking Devices (BMDs) Cannot Assure the Will of the Voters

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Abstract

The complexity of U.S. elections usually requires computers to count ballots—but computers can be hacked, so election integrity requires a voting system in which paper ballots can be recounted by hand. However, paper ballots provide no assurance unless they accurately record the vote as the voter expresses it.

Voters can express their intent by indelibly hand-marking ballots, or using computers called ballot-marking device (BMDs). Voters can make mistakes in expressing their intent in either technology, but only BMDs are also subject to hacking, bugs, and misconfiguration of the software that prints the marked ballots. Most voters do not review BMD-printed ballots, and those who do often fail to notice when the printed vote is not what they expressed on the touchscreen. Furthermore, there is no action a voter can take to demonstrate to election officials that a BMD altered their expressed votes, nor is there a corrective action that election officials can take if notified by voters—there is no way to deter, contain, or correct computer hacking in BMDs. These are the essential security flaws of BMDs.

Risk-limiting audits can assure that the votes recorded on paper ballots are tabulated correctly, but no audit can assure that the votes on paper are the ones expressed by the voter on a touchscreen: Elections conducted on current BMDs cannot be confirmed by audits. We identify two properties of voting systems, *contestability* and *defensibility*, necessary for audits to confirm election outcomes. No available EAC-certified BMD is contestable or defensible.

† Authors are listed alphabetically; they contributed equally to this work.

1 Introduction: Criteria for Voting Systems

Elections for public office and on public questions in the United States or any democracy must produce outcomes based on the votes that voters *express* when they indicate their choices on a paper ballot or on a machine. Computers have become indispensable to conducting elections, but computers are vulnerable. They can be hacked—compromised by insiders or external adversaries who can replace their software with fraudulent software that deliberately miscounts votes—and they can contain design errors and bugs—hardware or software flaws or configuration errors that result in mis-recording or mis-tabulating votes. Hence there must be some way, *independent* of any software in any computers, to ensure that reported election outcomes are correct, i.e., consistent with the expressed votes as intended by the voters.

Voting systems should be *software independent*, meaning that "an undetected change or error in its software cannot cause an undetectable change or error in an election outcome" [29, 30, 31]. Software independence is similar to tamper-evident packaging: if somebody opens the container and disturbs the contents, it will leave a trace.

The use of software-independent voting systems is supposed to ensure that if someone fraudulently hacks the voting machines to steal votes, we'll know about it. But we also want to know *the true outcome* in order to avoid a do-over election.[1] A voting system is *strongly software independent* if it is software independent and, moreover, a detected change or error in an election outcome (due to change or error in the software) can be corrected using only the ballots and ballot records of the current election [29, 30]. Strong software independence combines tamper evidence with a kind of resilience: there's a way to tell whether faulty software caused a problem, and a way to recover from the problem if it did.

Software independence and *strong software independence* are now standard terms in the analysis of voting systems, and it is widely accepted that voting systems should be software independent. Indeed, version 2.0 of the Voluntary Voting System Guidelines (VVSG 2.0) incorporates this principle [10].

But as we will show, these standard definitions are incomplete and inadequate, because in the word *undetectable* they hide several important questions: *Who* detects the change or error in an election outcome? How can a person *prove* that she has detected

[1] Do-overs are expensive; they may delay the inauguration of an elected official; there is no assurance that the same voters will vote in the do-over election as voted in the original; they decrease public trust. And if the do-over election is conducted with the same voting system that can only detect but not correct errors, then there may need to be a do-over of the do-over, *ad infinitum.*

an error? *What happens* when someone detects an error—does the election outcome remain erroneous? Or conversely: How can an election administrator *prove* that the election outcome not been altered, or prove that the correct outcome was recovered if a software malfunction was detected? The standard definition does not distinguish evidence available to an election official, to the public, or just to a single voter; nor does it consider the possibility of false alarms.

Those questions are not merely academic, as we show with an analysis of ballot-marking devices. Even if some *voters* "detect" that the printed output is not what they expressed to the BMD—even if some of *those* voters report their detection to election officials—there is no mechanism by which the *election official* can "detect" whether a BMD has been hacked to alter election outcomes. The questions of *who detects, and then what happens,* are critical—but unanswered by the standard definitions.

We will define the terms *contestable* and *defensible* to better characterize properties of voting systems that make them acceptable for use in public elections.[2]

A voting system is *contestable* if an undetected change or error in its software that causes a change or error in an election outcome can always produce *public* evidence that the outcome is untrustworthy. For instance, if a voter selected candidate A on the touchscreen of a BMD, but the BMD prints candidate B on the paper ballot, then this A-vs-B evidence is available to the individual voter, but the voter cannot demonstrate this evidence to anyone else, since nobody else saw—nor should have seen—where the voter touched the screen.[3] Thus, the voting system does not provide a way for the voter who observed the misbehavior to prove to anyone else that there was a problem, even if the problems altered the reported outcome. Such a system is therefore not *contestable*.

While the definition of software independence might allow evidence available only to individual voters as "detection," such evidence does not suffice for a system to be contestable. Contestibility is software independence, plus the requirement that "detect" implies "can generate public evidence." "Trust me" does not count as public evidence. If a voting system is not contestable, then problems voters "detect" might never see the light of day, much less be addressed or corrected.[4]

[2]There are other notions connected to contestability and defensibility, although essentially different: Benaloh et al. [6] define a *P-resilient canvass framework*, *personally verifiable P-resilient canvass framework*, and *privacy-perserving personally verifiable P-resilient canvass frameworks*.

[3]See footnote 18.

[4]If voters are the only means of detecting and quantifying the effect of those problems—as they are for BMDs—then in practice the system is not strongly software independent. The reason is that, as we will show, such claims by (some) voters *cannot* correct software-dependent changes to other voters' ballots, and *cannot* be used as the basis to invalidate or correct an election outcome. Thus, BMD-based

Similarly, while strong software independence demands that a system be able to report the correct outcome even if there was an error or alteration of the software, it does not require *public evidence* that the (reconstructed) reported outcome is correct. We believe, therefore, that voting systems must also be *defensible*. We say that a voting system is defensible if, when the reported electoral outcome is correct, it is possible to generate convincing public evidence that the reported electoral outcome is correct—despite any malfunctions, software errors, or software alterations that might have occurred. If a voting system is not defensible, then it is vulnerable to "crying wolf": malicious actors could claim that the system malfunctioned when in fact it did not, and election officials will have no way to prove otherwise.

By analogy with *strong software independence*, we define: A voting system is *strongly defensible* if it is defensible and, moreover, a detected change or error in an election outcome (due to change or error in the software) can be corrected (with convincing public evidence) using only the ballots and ballot records of the current election.

In short, a system is contestable if it can generate public evidence of a problem whenever a reported outcome is wrong, while a system is defensible if it can generate public evidence whenever a reported outcome is correct—despite any problems that might have occurred. Contestable systems are publicly tamper-evident; defensible systems are publicly, demonstrably resilient.

Defensibility is a key requirement for *evidence-based elections* [38]: defensibility makes it possible in principle for election officials to generate convincing evidence that the reported winners really won—if the reported winners did really win. (We say an election *system* may be defensible, and an *election* may be evidence-based; there's much more *process* to an election than just the choice of system.)

Examples. The only known practical technology for contestable, strongly defensible voting is a system of *hand-marked paper ballots*, kept demonstrably physically secure, counted by machine, audited manually, and recountable by hand.[5] In a hand-marked paper ballot election, ballot-marking software cannot be the source of an error or change-of-election-outcome, because no software is used in marking ballots. Ballot-scanning-and-counting software can be the source of errors, but such errors can be

election systems are not even (weakly) software independent, unless one takes "detection" to mean "somebody claimed there was a problem, with no evidence to support that claim."

[5]The election must also generate convincing evidence that physical security of the ballots was not compromised, and the audit must generate convincing public evidence that the audit itself was conducted correctly.

detected and corrected by audits.

That system is *contestable:* if an optical scan voting machine reports the wrong outcome because it miscounted (because it was hacked, misprogrammed, or miscalibrated), the evidence is *public*: the paper ballots, recounted before witnesses, will not match the claimed results, also witnessed. It is *strongly defensible:* a recount before witnesses can demonstrate that the reported outcome is correct, or can find the correct outcome if it was wrong—and provide public evidence that the (reconstructed) outcome is correct.

Some other paper-based systems such as Prêt-à-Voter [32] and Scantegrity [9] are also contestable and strongly defensible (provided the marked ballots are kept demonstrably secure through tabulation and posting). Scantegrity inherits these properties from the fact that it amounts to a cryptographic enhancement of hand-marked paper ballots. Prêt-à-Voter has these properties if the blank ballots are audited appropriately before the election.

Paper-based systems that rely on the "Benaloh challenge"—to ensure that the encryption of the vote printed on the ballot (by an electronic device) is correct—generally are neither contestable nor defensible.[6] The reason is that, while the challenge can produce public evidence that a machine did not accurately encrypt the plaintext vote on the ballot, if the machine prints the wrong plaintext vote and a correct encryption of that incorrect vote, there is no evidence the voter can use to prove that to anyone else. STAR-Vote [5] is an example of such a system.

Over 40 states now use some form of paper ballot for most voters [18]. Most of the remaining states are taking steps to adopt paper ballots. But *not all voting systems that use paper ballots are equally secure*.

Some are not even software independent. Some are software independent, but not strongly software independent, contestable, or defensible. In this report we explain:

- *Hand-marked paper ballot* systems are the only practical technology for contestable, strongly defensible voting systems.
- *Some ballot-marking devices (BMDs)* can be software independent, but they not strongly software independent, contestable, or defensible. Hacked or misprogrammed BMDs can alter election outcomes undetectably, so elections conducted using BMDs cannot provide public evidence that reported outcomes are correct. If BMD malfunctions are detected, there is no way to determine who

[6] Nor are they strongly software independent.

really won. Therefore BMDs should not be used by voters who are able to mark an optical-scan ballot with a pen.

- *All-in-one BMD or DRE+VVPAT voting machines* are not software independent, contestable, or defensible. They should not be used in public elections.

2 Background

We briefly review the kinds of election equipment in use, their vulnerability to computer hacking (or programming error), and in what circumstances risk-limiting audits can mitigate that vulnerability.

Voting equipment

Although a voter may form an intention to vote for a candidate or issue days, minutes, or seconds before actually casting a ballot, that intention is a psychological state that cannot be directly observed by anyone else. Others can have access to that intention through what the voter (privately) *expresses* to the voting technology by interacting with it, e.g., by making selections on a BMD or marking a ballot by hand.[7] Voting systems must accurately record the vote as the voter *expressed* it.

With a *hand-marked paper ballot optical-scan* system, the voter is given a paper ballot on which all choices (candidates) in each contest are listed; next to each candidate is a *target* (typically an oval or other shape) which the voter marks with a pen to indicate a vote. Ballots may be either preprinted or printed (unvoted) at the polling place using *ballot on demand* printers. In either case, the voter creates a tamper-evident record of intent by marking the printed paper ballot with a pen.

Such hand-marked paper ballots may be scanned and tabulated at the polling place using a *precinct-count optical scanner* (PCOS), or may be brought to a central place to

[7]We recognize that voters make mistakes in expressing their intentions. For example, they may misunderstand the layout of a ballot or express an unintended choice through a perceptual error, inattention, or lapse of memory. The use of touchscreen technology does not necessarily correct for such user errors, as every smartphone user who has mistyped an important text message knows. Poorly designed ballots, poorly designed touchscreen interfaces, and poorly designed assistive interfaces increase the rate of error in voters' expressions of their votes. For the purposes of this report, we assume that properly engineered systems seek to minimize such usability errors.

be scanned and tabulated by a *central-count optical scanner* (CCOS). Mail-in ballots are typically counted by CCOS machines.

After scanning a ballot, a PCOS machine deposits the ballot in a secure, sealed ballot box for later use in recounts or audits; this is *ballot retention*. Ballots counted by CCOS are also retained for recounts or audits.[8]

Paper ballots can also be hand counted, but in most jurisdictions (especially where there are many contests on the ballot) this is hard to do quickly; Americans expect election-night reporting of unofficial totals. Hand counting—i.e., manually determining votes directly from the paper ballots—is appropriate for audits and recounts.

A *ballot-marking device* (BMD) provides a computerized user interface that presents the ballot to voters and captures their expressed selections—for instance, a touchscreen interface or an assistive interface that enables voters with disabilities to vote independently. Voter inputs (expressed votes) are recorded electronically. When a voter indicates that the ballot is complete and ready to be cast, the BMD prints a paper version of the electronically marked ballot. We use the term *BMD* for devices that mark ballots but do not tabulate or retain them, and *all-in-one* for devices that combine ballot marking, tabulation, and retention into the same paper path.

The paper ballot printed by a BMD may be in the same format as an optical-scan form (e.g., with ovals filled as if by hand) or it may list just the names of the candidate(s) selected in each contest. The BMD may also encode these selections into barcodes or QR codes for optical scanning. We discuss issues with barcodes later in this report.

An *all-in-one touchscreen voting machine* combines computerized ballot marking, tabulation, and retention in the same paper path. All-in-one machines come in several configurations:

- DRE+VVPAT machines—direct-recording electronic (DRE) voting machines with a voter-verifiable paper audit trail (VVPAT)—provide the voter a touchscreen (or other) interface, then print a paper ballot that is displayed to the voter under glass. The voter is expected to review this ballot and approve it, after which the machine deposits it into a ballot box. DRE+VVPAT machines do not contain optical scanners; that is, they do not read what is marked on the paper ballot; instead, they tabulate the vote directly from inputs to the touchscreen or other interface.

[8] Regulations and procedures governing custody and physical security of ballots are uneven and in many cases inadequate, but straightforward to correct because of decades of development of best practices.

- BMD+Scanner all-in-one machines[9] provide the voter a touchscreen (or other) interface to input ballot choices and print a paper ballot that is ejected from a slot for the voter to inspect. The voter then reinserts the ballot into the slot, after which the all-in-one BMD+scanner scans it and deposits it into a ballot box. Or, some BMD+Scanner all-in-one machines display the paper ballot behind plexiglass for the voter to inspect, before mechanically depositing it into a ballot box.

Opscan+BMD with separate paper paths. At least one model of voting machine (the Dominion ICP320) contains an optical scanner (opscan) and a BMD in the same cabinet,[10] so that the optical scanner and BMD-printer are not in the same paper path; no possible configuration of the software could cause a BMD-marked ballot to be deposited in the ballot box without human handling of the ballot. We do not classify this as an *all-in-one* machine.

Hacking

There are many forms of computer hacking. In this analysis of voting machines we focus on the alteration of voting machine software so that it miscounts votes or mismarks ballots to alter election outcomes. There are many ways to alter the software of a voting machine: a person with physical access to the computer can open it and directly access the memory; one can plug in a special USB thumbdrive that exploits bugs and vulnerabilities in the computer's USB drivers; one can connect to its WiFi port or Bluetooth port or telephone modem (if any) and exploit bugs in those drivers, or in the operating system.

"Air-gapping" a system (i.e., never connecting it to the Internet nor to any other network) does not automatically protect it. Before each election, election administrators must transfer a *ballot definition* into the voting machine by inserting a *ballot definition cartridge* that was programmed on election-administration computers that may have been connected previously to various networks; it has been demonstrated that vote-changing viruses can propagate via these ballot-definition cartridges [17].

Hackers might be corrupt insiders with access to a voting-machine warehouse; corrupt insiders with access to a county's election-administration computers; outsiders who can gain remote access to election-administration computers; outsiders who can

[9]Some voting machines, such as the ES&S ExpressVote, can be configured as either a BMD or a BMD+Scanner all-in-one. Others, such as the ExpressVoteXL, work only as all-in-one machines.

[10]More precisely, the ICP320 optical scanner and the BMD audio+buttons interface are in the same cabinet, but the printer is a separate box.

gain remote access to voting-machine manufacturers' computers (and "hack" the firmware installed in new machines, or the firmware updates supplied for existing machines), and so on. Supply-chain hacks are also possible: the hardware installed by a voting system vendor may have malware pre-installed by the vendor's component suppliers.[11]

Computer systems (including voting machines) have so many layers of software that it is impossible to make them perfectly secure [23, pp. 89–91]. When manufacturers of voting machines use the best known security practices, adversaries may find it more difficult to hack a BMD or optical scanner—but not impossible. Every computer in every critical system is vulnerable to compromise through hacking, insider attacks or exploiting design flaws.

Election assurance through risk-limiting audits

To ensure that the reported electoral outcome of each contest corresponds to what the voters expressed, the most practical known technology is a *risk-limiting audit* (RLA) of trustworthy paper ballots [34, 35, 22]. The National Academies of Science, Engineering, and Medicine, recommend routine RLAs after every election [23], as do many other organizations and entities concerned with election integrity.[12]

The *risk limit* of a risk-limiting audit is the maximum chance that the audit will not correct the reported electoral outcome, if the reported outcome is wrong. "Electoral outcome" means the political result—who or what won—not the exact tally. "Wrong" means that the outcome does not correspond to what the voters expressed.

A RLA involves manually inspecting randomly selected paper ballots following a rigorous protocol. The audit stops if and when the sample provides convincing evidence that the reported outcome is correct; otherwise, the audit continues until every ballot has been inspected manually, which reveals the correct electoral outcome if the paper trail is trustworthy. RLAs protect against vote-tabulation errors, whether those errors are caused by failures to follow procedures, misconfiguration, miscalibration, faulty

[11]Given that many chips and other components are manufactured in China and elsewhere, this is a serious concern. Carsten Schürmann has found Chinese pop songs on the internal memory of voting machines (C. Schürmann, personal communication, 2018). Presumably those files were left there accidentally—but this shows that malicious code *could* have been pre-installed deliberately, and that neither the vendor's nor the election official's security and quality control measures discovered and removed the extraneous files.

[12]Among them are the Presidential Commission on Election Administration, the American Statistical Association, the League of Women Voters, and Verified Voting Foundation.

engineering, bugs, or malicious hacking.[13]

The risk limit should be determined as a matter of policy or law. For instance, a 5% risk limit means that, if a reported outcome is wrong solely because of tabulation errors, there is at least a 95% chance that the audit procedure will correct it. Smaller risk limits give higher confidence in election outcomes, but require inspecting more ballots, other things being equal. RLAs never revise a correct outcome.

RLAs can be very efficient, depending in part on how the voting system is designed and how jurisdictions organize their ballots. If the computer results are accurate, an efficient RLA with a risk limit of 5% requires examining just a few—about 7 divided by the margin—ballots selected randomly from the contest.[14] For instance, if the margin of victory is 10% and the results are correct, the RLA would need to examine about $7/10\% = 70$ ballots to confirm the outcome at 5% risk. For a 1% margin, the RLA would need to examine about $7/1\% = 700$ ballots. The sample size does not depend much on the total number of ballots cast in the contest, only on the margin of the winning candidate's victory.

RLAs assume that a full hand tally of the paper trail would reveal the correct electoral outcomes: the paper trail must be trustworthy. Other kinds of audits, such as *compliance audits* [6, 22, 38, 36] are required to establish whether the paper trail itself is trustworthy. Applying an RLA procedure to an untrustworthy paper trail cannot limit the risk that a wrong reported outcome goes uncorrected.

Properly preserved hand-marked paper ballots ensure that expressed votes are identical to recorded votes. But BMDs might not record expressed votes accurately, for instance, if BMD software has bugs, was misconfigured, or was hacked: BMD printout is not a trustworthy record of the expressed votes. Neither a compliance audit nor a RLA can possibly check whether errors in recording expressed votes altered election outcomes. RLAs that rely on BMD output therefore cannot limit the risk that an incorrect reported election outcome will go uncorrected.

A paper-based voting system (such as one that uses optical scanners) is systematically more secure than a paperless system (such as DREs) *only if the paper trail is trustworthy and the results are checked against the paper trail using a rigorous method such as an RLA or full manual tally*. If it is possible that error, hacking, bugs, or mis-

[13]RLAs do not protect against problems that cause BMDs to print something other than what was shown to the voter on the screen, nor do they protect against problems with ballot custody.

[14]Technically, it is the *diluted margin* that enters the calculation. The diluted margin is the number of votes that separate the winner with the fewest votes from the loser with the most votes, divided by the number of ballots cast, including undervotes and invalid votes.

calibration caused the recorded-on-paper votes to differ from the expressed votes, an RLA or even a full hand recount cannot not provide convincing public evidence that election outcomes are correct: such a system cannot be *defensible*. In short, paper ballots provide little assurance against hacking if they are never examined or if the paper might not accurately reflect the votes expressed by the voters.

3 (Non)Contestability/Defensibility of BMDs

A BMD-generated paper trail is not a reliable record of the vote expressed by the voter. Like any computer, a BMD (or a DRE+VVPAT) is vulnerable to bugs, misconfiguration, hacking, installation of unauthorized (fraudulent) software, and alteration of installed software.

If a hacker sought to steal an election by altering BMD software, what would the hacker program the BMD to do? In cybersecurity practice, we call this the *threat model*.

The simplest threat model is this one: In some contests, not necessarily top-of-the-ticket, change a small percentage of the votes (such as 5%).

In recent national elections, analysts have considered a candidate who received 60% of the vote to have won by a landslide. Many contests are decided by less than a 10% margin. Changing 5% of the votes can change the margin by 10%, because "flipping" a vote for one candidate into a vote for a different candidate changes the difference in their tallies—i.e., the margin—by 2 votes. If hacking or bugs or misconfiguration could change 5% of the votes, that would be a very significant threat.

Although public and media interest often focus on top-of-the-ticket races such as President and Governor, elections for lower offices such as state representatives, who control legislative agendas and redistricting, and county officials, who manage elections and assess taxes, are just as important in our democracy. Altering the outcome of smaller contests requires altering fewer votes, so fewer voters are in a position to notice that their ballots were misprinted. And most voters are not as familiar with the names of the candidates for those offices, so they might be unlikely to notice if their ballots were misprinted, even if they checked.

Research in a real polling place in Tennessee during the 2018 election, found that half the voters *didn't look at all* at the paper ballot printed by a BMD, even when they were holding it in their hand and directed to do so while carrying it from the BMD to the optical scanner [13]. Those voters who did look at the BMD-printed ballot spent *an average of 4 seconds* examining it to verify that the eighteen or more choices they made were correctly recorded. That amounts to 222 milliseconds per contest, barely enough time for the human eye to move and refocus under perfect conditions and not nearly enough time for perception, comprehension, and recall [27]. A study by other researchers [7], in a simulated polling place using real BMDs deliberately hacked to alter one vote on each paper ballot, found that only 6.6% of voters told a pollworker something was wrong.[15][16] The same study found that among voters who examined their hand-marked ballots, half were unable to recall key features of ballots cast moments before, a prerequisite step for being able to recall their own ballot choices. This finding is broadly consistent with studies of effects like "change blindness" or "choice blindness," in which human subjects fail to notice changes made to choices made only seconds before [19].

Suppose, then, that 10% of voters examine their paper ballots carefully enough to even *see* the candidate's name recorded as their vote for legislator or county commissioner. Of those, perhaps only half will remember the name of the candidate they intended to vote for.[17]

Of those who notice that the vote printed is not the candidate they intended to vote for, what will they think, and what will they do? Will they think, "Oh, I must have made a mistake on the touchscreen," or will they think, "Hey, the machine is cheating or malfunctioning!" There's no way for the voter to know for sure—voters do make mistakes—and there's *absolutely* no way for the voter to prove to a pollworker or election official that a BMD printed something other than what the voter entered on the

[15] You might think, "the voter really *should* carefully review their BMD-printed ballot." But because the scientific evidence shows that voters *do not* [13] and cognitively *cannot* [16] perform this task well, legislators and election administrators should provide a voting system that counts the votes *as voters express them*.

[16] Studies of voter confidence about their ability to verify their ballots are not relevant: in typical situations, subjective confidence and objective accuracy are at best weakly correlated. The relationship between confidence and accuracy has been studied in contexts ranging from eyewitness accuracy [8, 12, 40] to confidence in psychological clinical assessments [14] and social predictions [15]. The disconnect is particularly severe at high confidence. Indeed, this is known as "the overconfidence effect." For a lay discussion, see *Thinking, Fast and Slow* by Nobel economist Daniel Kahnemann [20].

[17] We ask the reader, "do you know the name of the most recent losing candidate for county commissioner?" We recognize that some readers of this document *are* county commissioners, so we ask those readers to imagine the frame of mind of their constituents.

screen.[18][19]

Either way, polling-place procedures generally advise voters to ask a pollworker for a new ballot if theirs does not show what they intended. Pollworkers should void that BMD-printed ballot, and the voter should get another chance to mark a ballot. Anecdotal evidence suggests that many voters are too timid to ask, or don't know that they have the right to ask, or are not sure whom to ask. Even if a voter asks for a new ballot, training for pollworkers is uneven, and we are aware of no formal procedure for resolving disputes if a request for a new ballot is refused. Moreover, there is no sensible protocol for ensuring that BMDs that misbehave are investigated—nor can there be, as we argue below.

Let's summarize. If a machine alters votes on 5% of the ballots (enabling it to change the margin by 10%), and 10% of voters check their ballots carefully and 50% of the voters who check notice the error, then optimistically we might expect $5\% \times 10\% \times 50\%$ or 0.25% of the voters to request a new ballot and correct their vote.[20] This means that the machine will change the margin by 9.75% and get away with it.

In this scenario, 0.25% of the voters, one in every 400 voters, has requested a new ballot. You might think, "that's a form of *detection* of the hacking." But is isn't, as a practical matter: a few individual voters may have detected that there was a problem, but there's no procedure by which this translates into any action that election administrators can take to correct the outcome of the election. Polling-place procedures *cannot correct or deter hacking, or even reliably detect it*, as we discuss next. This is essentially the distinction between a system that is merely software independent and one that is contestable: a change to the software that alters the outcome might generate evidence for an alert, conscientious, individual voter, but it does not generate public evidence that an election official can rely on to conclude there is a problem.

Even if some voters notice that BMDs are altering votes, there's no way to correct the election outcome. That is, BMD voting systems are *not contestable*, *not defen-*

[18]You might think, "the voter can prove it by showing someone that the vote on the paper doesn't match the vote onscreen." But that won't work. On a typical BMD, by the time a paper record is printed and ejected for the voter to hold and examine, the touchscreen no longer shows the voter's choice. You might think, "BMDs should be designed so that the choices still show on the screen for the voter to compare with the paper." But a hacked BMD could easily alter the on-screen choices to match the paper, *after* the voter hits the "print" button.

[19]Voters should *certainly not* videorecord themselves voting! That would defeat the privacy of the secret ballot and is illegal in most jurisdictions.

[20]This calculation assumes that the 10% of voters who check are in effect a random sample of voters: voters' propensity to check BMD printout is not associated with their political preferences.

sible (and therefore *not strongly defensible*), and *not strongly software independent*. Suppose a state election official wanted to detect whether the BMDs are cheating, and correct election results, based on actions by those few alert voters who notice the error. What procedures could possibly work against the manipulation we are considering?

1. How about, "If at least 1 in 400 voters claims that the machine misrepresented their vote, void the entire election."[21] No responsible authority would implement such a procedure. A few dishonest voters could collaborate to invalidate entire elections simply by falsely claiming that BMDs changed their votes.
2. How about, "If at least 1 in 400 voters claims that the machine misrepresented their vote, then investigate." Investigations are fine, but then what? The only way an investigation can ensure that the outcome accurately reflects what voters expressed to the BMDs is to void an election in which the BMDs have altered votes and conduct a new election. But how do you know whether the BMDs have altered votes, except based the claims of the voters?[22] Furthermore, the investigation itself would suffer from the same problem as above: how can one distinguish between voters who detected BMD hacking or bugs from voters who just want to interfere with an election?

This is the essential security flaw of BMDs: few voters will notice and promptly report discrepancies between what they saw on the screen and what is on the BMD printout, and even when they do notice, there's nothing appropriate that can be done. Even if election officials are convinced that BMDs malfunctioned, *there is no way to determine who really won*.

Therefore, BMDs should not be used by most voters.

Why can't we rely on pre-election and post-election logic and accuracy testing, or parallel testing? Most, if not all, jurisdictions perform some kind of *logic and accuracy testing* (LAT) of voting equipment before elections. LAT generally involves voting on the equipment using various combinations of selections, then checking whether the

[21]Note that in many jurisdictions, far fewer than 400 voters use a given machine on election day: BMDs are typically expected to serve fewer than 300 voters per day. (The vendor ES&S recommended 27,000 BMDs to serve Georgia's 7 million voters, amounting to 260 voters per BMD [33].) Recall also that the rate 1 in 400 is tied to the amount of manipulation. What if the malware flipped only one vote in 50, instead of 1 vote in 20? That could still change the margin by 4%, but—in this hypothetical—would be noticed by only one voter in 1,000, rather than one in 400. The smaller the margin, the less manipulation it would have taken to alter the electoral outcome.

[22]Forensic examination of the BMD might show that it *was* hacked or misconfigured, but it cannot prove that the BMD *was not* hacked or misconfigured.

equipment tabulated the votes correctly. As the Volkswagen/Audi "Dieselgate" scandal shows, devices can be programmed to behave properly when they are tested but misbehave in use [11]. Therefore, LAT can never prove that voting machines performed properly in practice.

Parallel or "live" testing involves pollworkers or election officials using some BMDs at random times on election day to mark (but not cast) ballots with test patterns, then check whether the marks match the patterns. The idea is that the testing is not subject to the "Dieselgate" problem, because the machines cannot "know" they are being tested on election day.[23] As a practical matter, the number of tests required to provide a reasonable chance of detecting outcome-changing errors is prohibitive: it would leave no time for actual voting [37]. Moreover, it would require additional staff, infrastructure, and other resources.

Suppose, counterfactually, that it was practical to perform enough parallel testing to guarantee a large chance of detecting a problem if BMD hacking or malfunction altered electoral outcomes. Suppose, counterfactually, that election officials were required to conduct that amount of parallel testing during every election, and that the required equipment, staffing, infrastructure, and other resources were provided. Even then, the system would not be *strongly defensible*; that is, if testing detected a problem, there would be no way to to determine who really won. The only remedy would be a new election.

Don't voters need to check hand-marked ballots, too? It is always a good idea to check one's work, but there is a substantial body of research (e.g., [28]) suggesting that preventing error as a ballot is being marked is a fundamentally different cognitive task than detecting an error on a previously marked ballot. In cognitively similar tasks, such as proof reading for non-spelling errors, ten percent rates of error detection are common [28, pp 167ff], whereas by carefully attending to the task of correctly marking their ballots, voters apparently can largely avoid marking errors.

A fundamental difference between hand-marked paper ballots and ballot-marking devices is that, with hand-marked paper ballots, voters are responsible for catching and

[23] BMDs do "know" their own settings and other aspects of each voting session, so malware can use that information to target sessions that use the audio interface, increase the font size, use the sip-and-puff interface, set the language to something other than English, or take much longer than average to vote. (Voters who use those settings might be less likely to be believed if they report that the equipment altered their votes.) For parallel testing to have a good chance of detecting all outcome-changing problems, the tests must have a large chance of probing *every* combination of settings and voting patterns that includes enough ballots to change any contest result. It is not practical.

correcting *their own errors*, while if BMDs are used, voters are also responsible for catching *machine errors, bugs, and hacking*. Voters are the *only* people who can detect such problems with BMDs—but, as explained above, if voters do find problems, there's no way they can prove to poll workers or election officials that there were problems and no way to ensure that election officials take appropriate remedial action.

4 Other tradeoffs, BMDs versus hand-marked opscan

Supporters of ballot-marking devices advance several other arguments for their use.

- **Mark legibility.** A common argument is that a properly functioning BMD will generate clean, error-free, unambiguous marks, while hand-marked paper ballots may contain mistakes and stray marks that make it impossible to discern a voter's intent. However appealing this argument seems at first blush, the data are not nearly so compelling. Experience with statewide recounts in Minnesota and elsewhere suggest that truly ambiguous handmade marks are very rare.[24] For instance, 2.9 million hand-marked ballots were cast in the 2008 Minnesota race between Al Franken and Norm Coleman for the U.S. Senate. In a manual recount, between 99.95% and 99.99% of ballots were unambiguously marked.[25] [26] In addition, usability studies of hand-marked bubble ballots—the kind in most common use in U.S. elections—indicate a *voter* error rate of 0.6%, much lower than the 2.5–3.7% error rate for machine-marked ballots [16].[27] Moreover, modern image-based opscan equipment (*digital scan* machinery) is better than older

[24] States do need clear and complete regulations for interpreting voter marks.

[25] "During the recount, the Coleman and Franken campaigns initially challenged a total of 6,655 ballot-interpretation decisions made by the human recounters. The State Canvassing Board asked the campaigns to voluntarily withdraw all but their most serious challenges, and in the end approximately 1,325 challenges remained. That is, approximately 5 ballots in 10,000 were ambiguous enough that one side or the other felt like arguing about it. The State Canvassing Board, in the end, classified all but 248 of these ballots as votes for one candidate or another. That is, approximately 1 ballot in 10,000 was ambiguous enough that the bipartisan recount board could not determine an intent to vote." [1] See also [25]

[26] We have found that some local election officials consider marks to be ambiguous if *machines* cannot read the marks. That is a different issue from *humans* being unable to interpret the marks. Errors in machine interpretation of voter intent can be dealt with by manual audits: if the reported outcome is wrong because machines misinterpreted handmade marks, a RLA has a known, large chance of correcting the outcome.

[27] Better designed user interfaces (UI) might reduce the error rate for machine-marked ballots below the historical rate for DREs; however, UI improvements cannot keep BMDs from printing something other than what the voter is shown on the screen.

"marksense" machines at interpreting imperfect marks. Thus, mark legibility is not a good reason to adopt BMDs for all voters.

- **Undervotes, overvotes.** Another argument offered for BMDs is that the machines can alert voters to undervotes and prevent overvotes. That is true, but modern PCOS systems can also alert a voter to overvotes and undervotes, allowing a voter to eject the ballot and correct it.
- **Bad ballot design.** Ill-designed paper ballots, just like ill-designed touchscreen interfaces, may lead to unintentional undervotes [24]. For instance, the 2006 Sarasota, Florida, touchscreen ballot was badly designed. The 2018 Broward County, Florida, opscan ballot was badly designed: it violated three separate guidelines from the EAC's 2007 publication, "Effective Designs for the Administration of Federal Elections, Section 3: Optical scan ballots." [39] In both of these cases (touchscreens in 2006, hand-marked optical-scan in 2018), undervote rates were high. The solution is to follow standard, published ballot-design guidelines and other best practices, both for touchscreens and for hand-marked ballots [3, 24].
- **Low-tech paper-ballot fraud.** All paper ballots, however they are marked, are vulnerable to *loss*, *ballot-box stuffing*, *alteration*, and *substitution* between the time they are cast and the time they are recounted. That's why it is so important to make sure that ballot boxes are always in multiple-person (preferably bipartisan) custody whenever they are handled, and that appropriate physical security measures are in place. Strong, verifiable chain-of-custody protections are essential.

  Hand-marked paper ballots are vulnerable to alteration by anyone with a pen. Both hand-marked and BMD-marked paper ballots are vulnerable to substitution: anyone who has poorly supervised access to a legitimate BMD during election day can create fraudulent ballots, not necessarily to deposit them in the ballot box immediately (in case the ballot box is well supervised on election day) but with the hope of substituting it later in the chain of custody.[28]

  All those attacks (on hand-marked and on BMD-marked paper ballots) are fairly low-tech. There are also higher-tech ways of producing ballots indistinguishable from BMD-marked ballots for substitution into the ballot box if there is inadequate chain-of-custody protection.
- **Accessible voting technology.** When hand-marked paper ballots are used with PCOS, there is (as required by law) also an accessible voting technology available in the polling place for voters unable to mark a paper ballot with a pen. This

[28]Some BMDs print a barcode indicating when and where the ballot was produced, but that does not prevent such a substitution attack against currently EAC-certified, commercially available BMDs. We understand that systems under development might make ballot-substitution attacks against BMDs more difficult.

is typically a BMD or a DRE. When the accessible voting technology is not the same as what most voters vote on—when it is used by very few voters—it may happen that the accessible technology is ill-maintained or even (in some polling places) not even properly set up by pollworkers. This is a real problem. One proposed solution is to require all voters to use the same BMD or all-in-one technology. But the failure of some election officials to properly maintain their accessible equipment is not a good reason to adopt BMDs for *all* voters. Among other things, it would expose all voters to the security flaws described above.[29] Other advocates object to the idea that disabled voters must use a different method of marking ballots, arguing that their rights are thereby violated. Both HAVA and ADA require reasonable accommodations for voters with physical and cognitive impairments, but neither law requires that those accommodations must be used by all voters. To best enable and facilitate participation by all voters, each voter should be provided with a means of casting a vote best suited to their abilities.

- **Ballot printing costs.** Preprinted optical-scan ballots cost 20–50 cents each.[30] Blank cards for BMDs cost up to 15 cents each, depending on the make and model of BMD.[31] But optical-scan ballots must be preprinted for as many voters as *might* show up, whereas blank BMD cards are consumed in proportion to how many voters *do* show up. The Open Source Election Technology Institute (OSET) conducted an independent study of total life cycle costs[32] for hand-marked paper ballots and BMDs in conjunction with the 2019 Georgia legislative debate regarding BMDs [26]. OSET concluded that, even in the most optimistic (i.e., lowest cost) scenario for BMDs and the most pessimistic (i.e, highest cost) scenario for hand-marked paper ballots and ballot-on-demand (BOD) printers—which can print unmarked ballots as needed—the total lifecycle costs for BMDs would be higher than the corresponding costs for hand-marked paper ballots.[33]
- **Vote centers.** To run a vote center that serves many election districts with different ballot styles, one must be able to provide each voter a ballot containing

[29] Also, some accessibility advocates argue that requiring disabled voters to use BMDs compromises their privacy since hand-marked ballots are easily distinguishable from machine marked ballots. That issue can be addressed without BMDs-for-all: Accessible BMDs are already available and in use that mark ballots with marks that cannot easily be distinguished from hand-marked ballots.

[30] Single-sheet (one- or two-side) ballots cost 20-28 cents; double-sheet ballots needed for elections with many contests cost up to 50 cents.

[31] Ballot cards for ES&S ExpressVote cost about 15 cents. New Hampshire's (One4All / Prime III) BMDs used by sight-impaired voters use plain paper that is less expensive.

[32] They include not only the cost of acquiring and implementing systems but also the ongoing licensing, logistics, and operating (purchasing paper stock, printing, and inventory management) costs.

[33] BOD printers currently on the market arguably are best suited for vote centers, but less expensive options suited for polling places could be developed. Indeed, BMDs that print full-face ballots could be re-purposed as BOD printers for polling place use, with modest changes to the programming.

the contests that voter is eligible to vote in, possibly in a number of different languages. This is easy with BMDs, which can be programmed with all the appropriate ballot definitions. With preprinted optical-scan ballots, the PCOS can be programmed to *accept* many different ballot styles, but the vote center must still maintain *inventory* of many different ballots. BOD printers are another economical alternative for vote centers.[34]

- **Paper/storage.** BMDs that print summary cards rather than full-face ballots can save paper and storage space. However, many BMDs print full-face ballots—so they do not save storage—while many BMDs that print summary cards (which could save storage) use thermal printers and paper that is fragile and can fade in a few months.[35]

Advocates of hand-marked paper ballot systems advance these additional arguments.

- **Cost.** Using BMDs for all voters substantially increases the cost of acquiring, configuring, and maintaining the voting system. One PCOS can serve 1200 voters in a day, while one BMD can serve only about 260 [33]—though both these numbers vary greatly depending on the length of the ballot and the length of the day. OSET analyzed the relative costs of acquiring BMDs for Georgia's nearly seven million registered voters versus a system of hand-marked paper ballots, scanners, and BOD printers [26]. A BMD solution for Georgia would cost taxpayers between 3 and 5 times more than a system based on hand-marked paper ballots. Open-source systems might eventually shift the economics, but current commercial universal-use BMD systems are more expensive than systems that use hand-marked paper ballots for most voters.
- **Mechanical reliability and capacity.** Pens are likely to have less downtime than BMDs. It is easy and inexpensive to get more pens and privacy screens when additional capacity is needed. If a precinct-count scanner goes down, people can still mark ballots with a pen; if the BMD goes down, voting stops. Thermal

[34] Ballot-on-demand printers *may* require maintenance such as replacement of toner cartridges. This is readily accomplished at a vote center with a professional staff. Ballot-on-demand printers may be a less attractive option for many small precincts on election day, where there is no professional staff—but on the other hand, they are less necessary, since far fewer ballot styles will be needed in any one precinct.

[35] The California Top-To-Bottom Review (TTBR) of voting systems found that thermal paper can also be covertly spoiled wholesale using common household chemicals https://votingsystems.cdn.sos.ca.gov/oversight/ttbr/red-diebold.pdf, last visited 8 April 2019. The fact that thermal paper printing can fade or deteriorate rapidly might mean it does not satisfy the federal requirement to preserve voting materials for 22 months. http://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title52-section20701&num=0&edition=prelim, last visited 8 April 2019.

printers used in DREs with VVPAT are prone to jams; those in BMDs might have similar flaws.

These secondary pros and cons of BMDs do not outweigh the primary security and accuracy concern: BMDs, if hacked or erroneously programmed, can change votes in a way that is not correctable. BMD voting systems are not contestable or defensible. Audits that rely on BMD printout cannot make up for this defect in the paper trail: they cannot reliably detect or correct problems that altered election outcomes.

Barcodes

A controversial feature of some BMDs allows them to print 1-dimensional or 2-dimensional barcodes on the paper ballots. A 1-dimensional barcode resembles the pattern of vertical lines used to identify products by their universal product codes. A 2-dimensional barcode or QR code is a rectangular area covered in coded image *modules* that encode more complex patterns and information. BMDs print barcodes on the same paper ballot that contains human-readable ballot choices. Voters using BMDs are expected to verify the human-readable printing on the paper ballot card, but the presence of barcodes with human-readable text poses some significant problems.

- **Barcodes are not human readable.** The whole purpose of a paper ballot is to be able to recount (or audit) the *voters'* votes in a way independent of any (possibly hacked or buggy) computers. If the official vote on the ballot card is the barcode, then it is impossible for the voters to verify that the official vote they cast is the vote they expressed. Therefore, before a state even *considers* using BMDs that print barcodes (and we do not recommend doing so), the State must ensure by statute that recounts and audits are based *only* on the human-readable portion of the paper ballot. Even so, audits based on untrustworthy paper trails suffer from the verifiability the problems outlined above.
- **Ballot cards with barcodes contain two different votes.** Suppose a state does ensure by statute that recounts and audits are based on the human-readable portion of the paper ballot. Now a BMD-marked ballot card with both barcodes and human-readable text contains two different votes in each contest: the barcode (used for electronic tabulation), and the human-readable selection printout (official for audits and recounts). In few (if any) states has there even been a discussion of the legal issues raised when the official markings to be counted differ between the original count and a recount.
- **Barcodes pose technical risks.** Any coded input into a computer system—including wired network packets, WiFi, USB thumbdrives, *and barcodes*—pose

the risk that the input-processing software can be vulnerable to attack via deliberately ill-formed input. Over the past two decades, many such vulnerabilities have been documented on *each* of these channels (including barcode readers) that, in the worst case, give the attacker complete control of a system.[36] If an attacker were able to compromise a BMD, the barcodes are an attack vector for the attacker to take over an optical scanner (PCOS or CCOS), too. Since it is good practice to close down all such unneeded attack vectors into PCOS or CCOS voting machines (e.g., don't connect your PCOS to the Internet!), it is also good practice to avoid unnecessary attack channels such as barcodes.

End-to-End Verifiable BMDs

In all BMD systems currently on the market, and in all BMD systems certified by the EAC, the printed ballot or ballot summary is the only channel by which voters can verify the correct recording of their ballots, independently of the computers. The analysis in this paper applies to all of those BMD systems.

There is a class of voting systems called "end-to-end verifiable" (E2E-V), which provide an alternate mechanism for voters to verify their votes [2]. Some E2E-V systems incorporate BMDs, for instance STAR-Vote[37] [5]. As we discuss above in Section 1, such systems are not contestable, defensible, or strongly software independent. In any event, no E2E-V system is currently certified by the EAC, nor to our knowledge is any such system under review for certification, nor are any of the 5 major voting-machine vendors offering such a system for sale.[38]

[36] An example of a barcode attack is based on the fact that many commercial barcode-scanner components (which system integrators use to build cash registers or voting machines) treat the barcode scanner using the same operating-system interface as if it were a keyboard device; and then some operating systems allow "keyboard escapes" or "keyboard function keys" to perform unexpected operations.

[37] The STAR-Vote system is actually a DRE+VVPAT system with a smart ballot box, rather than a BMD system: voters interact with a device that captures their votes electronically and prints a paper record that voters can inspect, but the electronic votes are held "in limbo" until the paper ballot is deposited in the smart ballot box. The ballot box does not read the votes from the ballot; rather, depositing the ballot tells the system that it has permission to cast the vote that it had already recorded from the touchscreen.

[38] Some vendors, notably Scytl, have sold systems advertised as E2E-V in other countries. Those systems were not in fact E2E-V. Moreover, serious security flaws have been found in their implementations. See, e.g., [21].

5 Insecurity of All-in-One BMDs

Some voting machines incorporate a BMD interface, printer, and optical scanner into the same cabinet. Other DRE+VVPAT voting machines incorporate ballot-marking, tabulation, and paper-printout retention, but without scanning. These are often called "all-in-one" voting machines. To use an all-in-one machine, the voter makes choices on a touchscreen or through a different accessible interface. When the selections are complete, the BMD prints the completed ballot for the voter to review and verify, before depositing the ballot in a ballot box attached to the machine.

Such machines are especially unsafe: like any BMD described in Section 3 they are not contestable or defensible, but in addition, if hacked they can print votes onto the ballot *after* the voter last inspects the ballot.

- The ES&S ExpressVote (in all-in-one mode) allows the voter to mark a ballot by touchscreen or audio interface, then prints a paper ballot card and ejects it from a slot. The voter has the opportunity to review the ballot, then the voter redeposits the ballot into the same slot, where it is scanned and deposited into a ballot box.
- The ES&S ExpressVoteXL allows the voter to mark a ballot by touchscreen or audio interface, then prints a paper ballot and displays it under glass. The voter has the opportunity to review the ballot, then the voter touches the screen to indicate "OK," and the machine pulls paper ballot up (still under glass) and into the integrated ballot box.
- The Dominion ImageCast Evolution (ICE) allows the voter to deposit a hand-marked paper ballot, which it scans and drops into the attached ballot box. *Or*, a voter can use a touchscreen or audio interface to direct the marking of a paper ballot, which the voting machine ejects through a slot for review; then the voter redeposits the ballot into the slot, where it is scanned and dropped into the ballot box.

In all three of these machines, the ballot-marking printer is in the same paper path as the mechanism to deposit marked ballots into an attached ballot box. This opens up a very serious security vulnerability: the voting machine can mark the paper ballot (to add votes or spoil already-cast votes) after the last time the voter sees the paper, and then deposit that marked ballot into the ballot box without the possibility of detection.

Vote-stealing software could easily be constructed that looks for *undervotes* on the ballot, and marks those unvoted spaces for the candidate of the hacker's choice. This is very straightforward to do on optical-scan bubble ballots (as on the Dominion ICE) where undervotes are indicated by no mark at all. On machines such as the ExpressVote and ExpressVoteXL, the normal software indicates an undervote with the words NO SELECTION MADE on the ballot summary card. Hacked software could simply leave a blank space there (most voters wouldn't notice the difference), and then fill in that space and add a matching bar code after the voter has clicked "cast this ballot."

An even worse feature of the ES&S ExpressVote and the Dominion ICE is the *auto-cast* configuration setting (in the manufacturer's standard software) that allows the voter to indicate, "don't eject the ballot for my review, just print it and cast it without me looking at it." If fraudulent software were installed in the ExpressVote, it could change *all* the votes of any voter who selected this option, because the voting machine software would know *in advance of printing* that the voter had waived the opportunity to inspect the printed ballot. We call this auto-cast feature "permission to cheat" [4].

Regarding these all-in-one machines, we conclude:

- Any machine with ballot printing in the same paper path with ballot deposit is not *software independent*; it is *not* the case that "an error or fault in the voting system software or hardware cannot cause an undetectable change in election results." Therefore such all-in-one machines do not comply with the VVSG 2.0 (the Election Assistance Commission's Voluntary Voting Systems Guidelines). Such machines are not contestable or defensible, either.
- All-in-one machines on which all voters use the BMD interface to mark their ballots (such as the ExpressVote and ExpressVoteXL) *also* suffer from the same serious problem as ordinary BMDs: most voters do not review their ballots effectively, and elections on these machines are not contestable or defensible.
- The auto-cast option for a voter to allow the paper ballot to be cast without human inspection is particularly dangerous, and states must insist that vendors disable or eliminate this mode from the software. However, even disabling the auto-cast feature does not eliminate the risk of undetected vote manipulation.

Remark. The Dominion ImageCast Precinct ICP320 is a precinct-count optical scanner (PCOS) that also contains an audio+buttons ballot-marking interface for disabled voters. This machine can be configured to cast electronic-only ballots from the BMD interface, or an external printer can be attached to print paper optical-scan ballots from the BMD interface. When the external printer is used, that printer's paper path is *not* connected to the scanner+ballot-box paper path (a person must take the ballot from the printer and deposit it into the scanner slot). Therefore this machine is as safe to use as any PCOS with a separate external BMD.

6 Conclusion

Ballot-Marking Devices produce ballots that do not necessarily record the vote expressed by the voter when they enter their selections on the touchscreen: hacking, bugs, and configuration errors can cause the BMDs to print votes that differ from what the voter entered and verified electronically. Because outcome-changing errors in BMD printout do not produce public evidence, BMD systems are not *contestable*. Because there is no way to generate convincing public evidence that reported outcomes are correct despite any BMD malfunctions that might have occurred, BMD systems are not *defensible*. Therefore, BMDs should not be used by voters who can hand mark paper ballots.

All-in-one voting machines, which combine ballot-marking and ballot-box-deposit into the same paper path, are even worse. They have all the disadvantages of BMDs (they are not contestable or defensible), and they can mark the ballot after the voter has inspected it. Therefore they are not even *software independent*, and should not be used by those voters who are capable of marking, handling, and visually inspecting a paper ballot.

When computers are used to record votes, the original transaction (the voter's expression of the votes) is not documented in a verifiable way.[39] When pen-and-paper is used to record the vote, the original expression of the vote *is* documented in a verifiable way (if demonstrably secure chain of custody of the paper ballots is maintained). Audits of elections conducted with hand-marked paper ballots, counted by optical scanners, can ensure that reported election outcomes are correct. Audits of elections conducted with BMDs *cannot* ensure that reported outcomes are correct.

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Ruth R. Hughs
Secretary of State

REPORT OF REVIEW OF DOMINION VOTING SYSTEMS DEMOCRACY SUITE 5.5-A

PRELIMINARY STATEMENT

On October 2-3, 2019, Dominion Voting Systems ("Dominion" or the "Vendor") presented the Democracy Suite 5.5-A system for examination and certification. The examination was conducted in Austin, Texas. Pursuant to Sections 122.035(a) and (b) of the Texas Election Code, the Secretary of State appointed the following examiners:

1. Mr. Tom Watson, an expert in electronic data communication systems;
2. Mr. Brian Mechler, an expert in electronic data communication systems;
3. Mr. Brandon Hurley, an expert in election law and procedure; and
4. Mr. Charles Pinney, an expert in election law and procedure.

Pursuant to Section 122.035(a), the Texas Attorney General appointed the following examiners:

1. Dr. Jim Sneeringer, an expert in electronic data communication systems; and
2. Mr. Ryan Vassar, an employee of the Texas Attorney General.

On October 2, 2019, Mr. Pinney, Mr. Mechler, and Dr. Sneeringer witnessed the installation of the Democracy Suite 5.5-A software and firmware that the Office of the Texas Secretary of State (the "Office") received directly from the Independent Testing Authority. The next day, Mr. Pinney examined the accessibility components of the ImageCast X Ballot Marking Device.

On October 3, 2019, the Vendor demonstrated the Democracy Suite 5.5-A system and answered questions presented by the examiners. Test ballots were then processed on each voting device. The results were accumulated and later verified for accuracy by staff of the Secretary of State.

Examiner reports regarding the Democracy Suite 5.5-A system are attached hereto and incorporated herein by this reference.

BRIEF DESCRIPTION OF DEMOCRACY SUITE 5.5-A

The Democracy Suite 5.5-A system is an updated version of the Democracy Suite 5.5 system, which was denied certification by the Office on June 20, 2019. The Democracy Suite 5.5-A system includes certain software and hardware updates to the Suite 5.5 version.

Democracy Suite 5.5-A has been evaluated at an accredited independent voting system laboratory for conformance to the 2005 Voluntary Voting System Guidelines (VVSG). Democracy Suite 5.5-A was certified by the Election Assistance Commission (EAC) on January 30, 2019.

The components of Democracy Suite 5.5-A are as follows:

Component	Version	Description
EMS – Election Management System	5.5.12.1	Election Management System
ADJ – Adjudication	5.5.8.1	
ICC – ImageCast Central	5.5.3.0002	Central scanner
ICX – ImageCast X BMD	5.5.10.30	Ballot marking device
ICP – ImageCast Precinct	5.5.3-0002	Precinct scanner

FINDINGS

The following are the findings, based on written evidence submitted by the Vendor in support of its application for certification, oral evidence presented at the examination, and the findings of the voting system examiners as set out in their written reports.

The examiner reports identified multiple hardware and software issues that preclude the Office of the Texas Secretary of State from determining that the Democracy Suite 5.5-A system satisfies each of the voting-system requirements set forth in the Texas Election Code. Specifically, the examiner reports raise concerns about whether the Democracy Suite 5.5-A system is suitable for its intended purpose; operates efficiently and accurately; and is safe from fraudulent or unauthorized manipulation. Therefore, the Democracy Suite 5.5-A system and corresponding hardware devices do not meet the standards for certification prescribed by Section 122.001 of the Texas Election Code.

CONCLUSION

Accordingly, based upon the foregoing, I hereby deny certification of Dominion Voting Systems' Democracy Suite 5.5-A system for use in Texas elections.

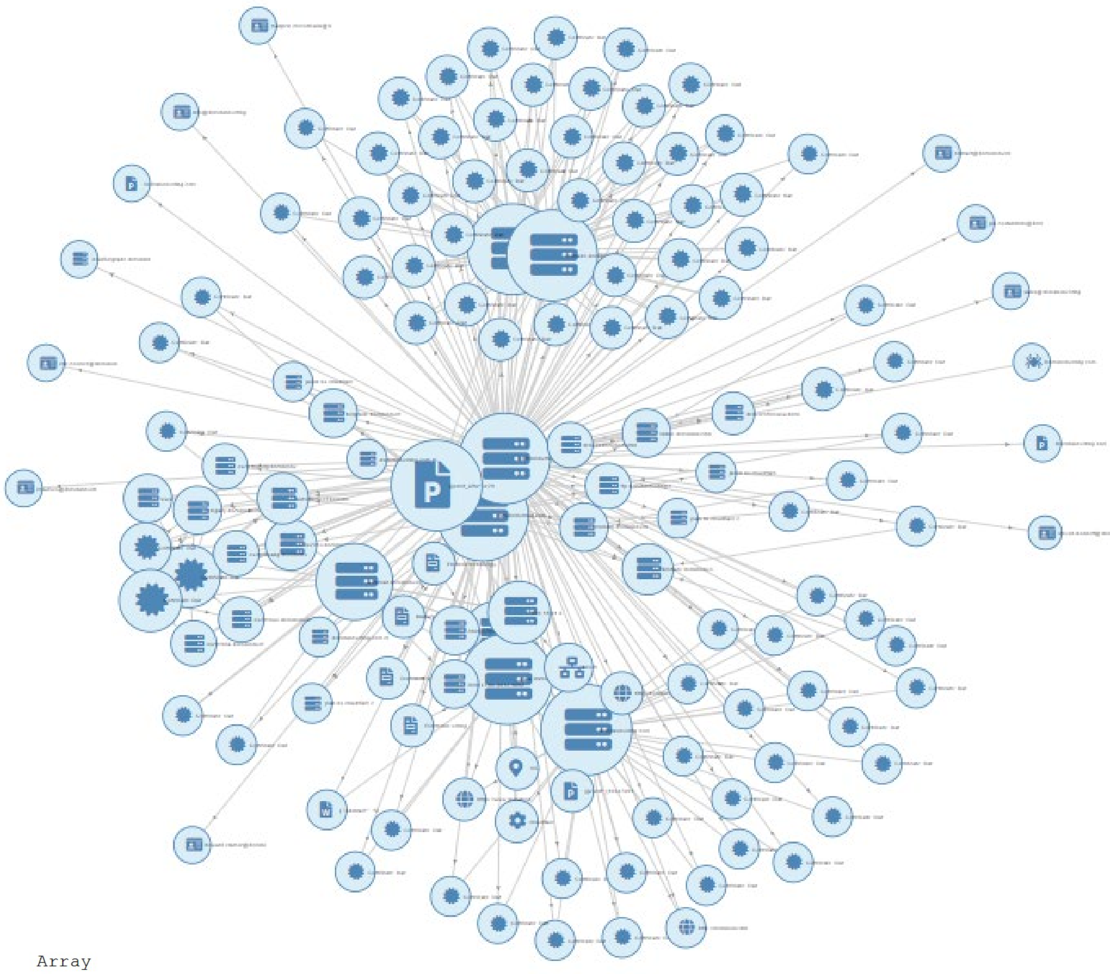
Signed under my hand and seal of office, this 24th day of January 2020.

JOSE A. ESPARZA
DEPUTY SECRETARY OF STATE

Declaration of [redacted]

Pursuant to 28 U.S.C Section 1746, [redacted] make the following declaration.

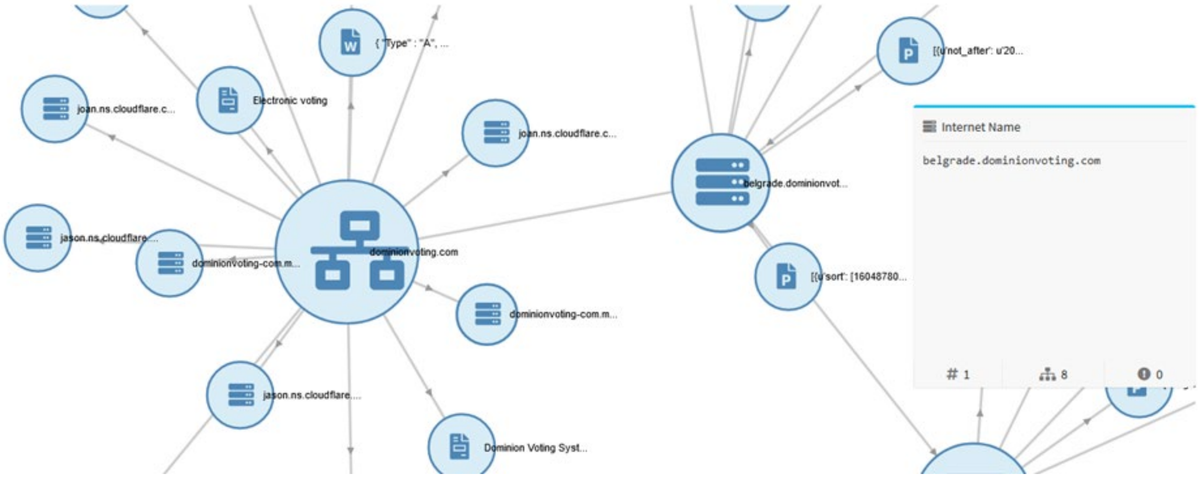
1. I am over the age of 21 years and I am under no legal disability, which would prevent me from giving this declaration.
2. I was an electronic intelligence analyst under 305th Military Intelligence with experience gathering SAM missile system electronic intelligence. I have extensive experience as a white hat hacker used by some of the top election specialists in the world. The methodologies I have employed represent industry standard cyber operation toolkits for digital forensics and OSINT, which are commonly used to certify connections between servers, network nodes and other digital properties and probe to network system vulnerabilities.
3. I am a US citizen and I reside [redacted] location in the United States of America.
4. Whereas the Dominion and Edison Research systems exist in the internet of things, and whereas this makes the network connections between the Dominion, Edison Research and related network nodes available for scanning,
5. And whereas Edison Research's primary job is to report the tabulation of the count of the ballot information as received from the tabulation software, to provide to Decision HQ for election results,
6. And whereas Spiderfoot and Robtex are industry standard digital forensic tools for evaluation network security and infrastructure, these tools were used to conduct public security scans of the aforementioned Dominion and Edison Research systems,
7. A public network scan of Dominionvoting.com on 2020-11-08 revealed the following inter-relationships and revealed 13 unencrypted passwords for dominion employees, and 75 hashed passwords available in TOR nodes:

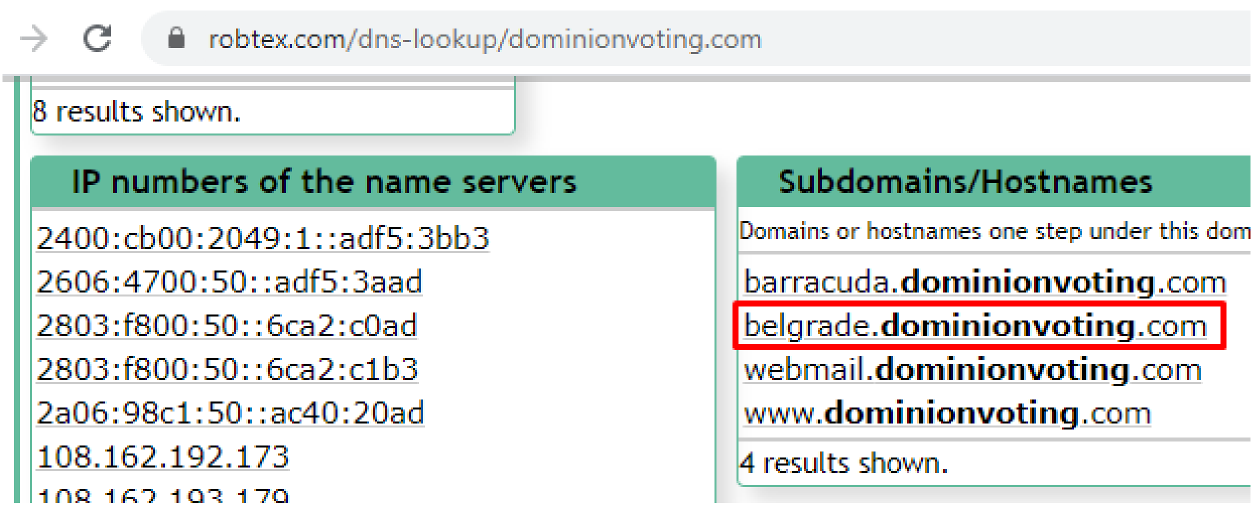



```
Array
(
    [id] => 544167324
    [luser] => ian.macvicar
    [domain] => dominionvoting.com
    [password] => jamley
)

7
Array
(
    [id] => 599400504
    [luser] => jelena.tanaskovic
    [domain] => dominionvoting.com
```

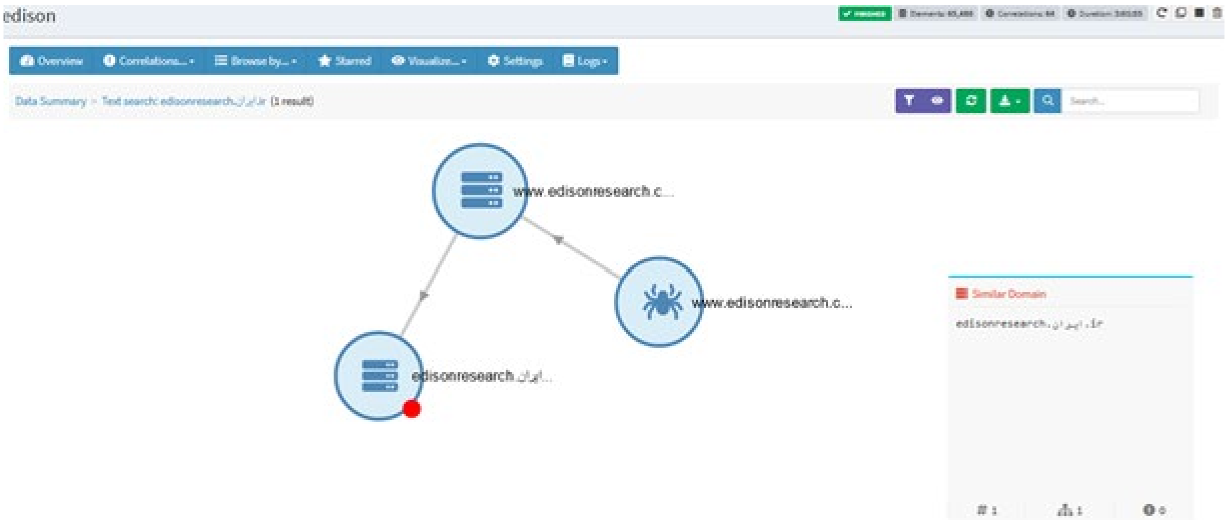
8. The same public scan also showed a direct connection to the group in Belgrade as highlighted below:





9. A cursory search on LinkedIn of "dominion voting" on 11/19/2020 confirms the numerous employees in Serbia:

10. An additional search of Edison Research on 2020-11-08 showed that Edison Research has an Iranian server seen here:



Inputting the Iranian IP into Robtex confirms the direct connection into the "edisonresearch" host from the perspective of the Iranian domain also. This means that it is not possible that the connection was a unidirectional reference.

QUICK INFO

Quick summary of the host name

edisonresearch.xn--mgba3a4fra.ir quick info

General	
FQDN	edisonresearch.xn--mgba3a4fra.ir
Host Name	edisonresearch
Domain Name	xn--mgba3a4fra.ir
Registry	ir
TLD	ir

SHARED

This section shows related hostnames and ipnumbers

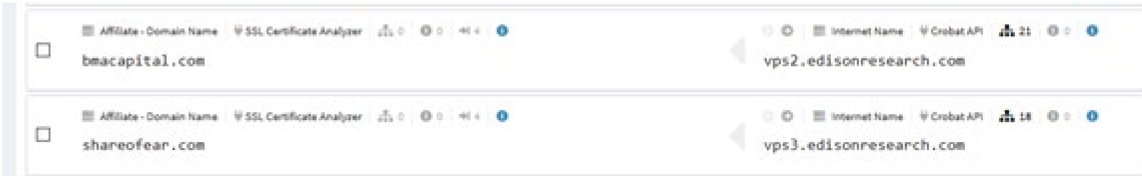
On other TLD:s and domains

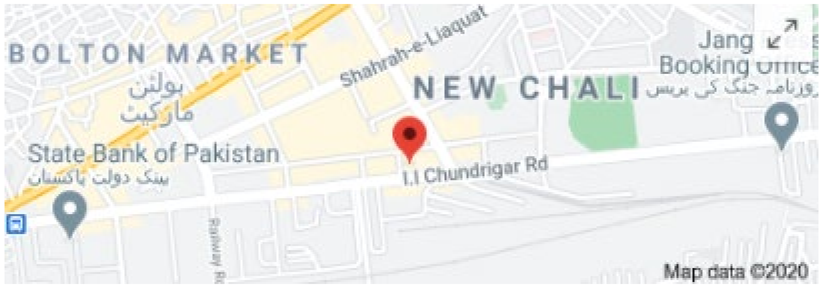
This sub section shows this name on other top level domains.

xn--mgba3a4fra.com
xn--mgba3a4fra.net
xn--mgba3a4fra.tk

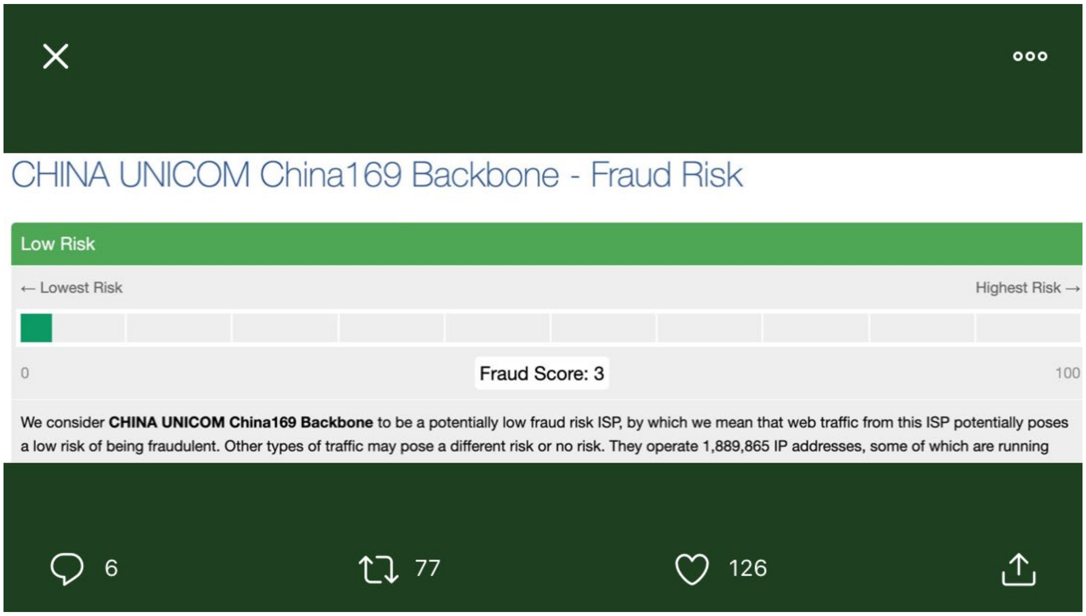
3 results shown.

A deeper search of the ownership of Edison Research "edisonresearch.com" shows a connection to BMA Capital Management, where shareofear.com and bmacapital.com are both connected to edisonresearch.com via a VPS or Virtual Private Server, as denoted by the "vps" at the start of the internet name:





Dominionvoting is also dominionvotingsystems.com, of which there are also many more examples, including access of the network from China. The records of China accessing the server are reliable.



Domain Name: dominionvotingsystems.com
Registry Domain ID: 2530599738_DOMAIN_COM-VRSN
Registrar WHOIS Server: whois.godaddy.com
Registrar URL: http://www.godaddy.com
Updated Date: 2020-05-26T15:48:58Z
Creation Date: 2020-05-26T15:48:57Z
Registrar Registration Expiration Date: 2021-05-26T15:48:57Z
Registrar: GoDaddy.com, LLC
Registrar IANA ID: 146
Registrar Abuse Contact Email: abuse@godaddy.com
Registrar Abuse Contact Phone: +1.4806242505
Domain Status: clientTransferProhibited http://www.icann.org/epp#clientTransferProhibited
Domain Status: clientUpdateProhibited http://www.icann.org/epp#clientUpdateProhibited
Domain Status: clientRenewProhibited http://www.icann.org/epp#clientRenewProhibited
Domain Status: clientDeleteProhibited http://www.icann.org/epp#clientDeleteProhibited
Registrant Organization:
Registrant State/Province: Hunan
Registrant Country: CN
Registrant Email: Select Contact Domain Holder link at
https://www.godaddy.com/whois/results.aspx?domain=dominionvotingsystems.com
Admin Email: Select Contact Domain Holder link at
https://www.godaddy.com/whois/results.aspx?domain=dominionvotingsystems.com
Tech Email: Select Contact Domain Holder link at
https://www.godaddy.com/whois/results.aspx?domain=dominionvotingsystems.com
Name Server: NS1.DNS.COM
Name Server: NS2.DNS.COM
DNSSEC: unsigned

Overview - dominionvotingsystems.com

DNS Records 4

Type	Value	OSH	Security score
A	45.195.162.194 - AS132839 - POWER LINE DATACENTER	2	15
NS	ns1.dns.com		
	27.152.186.193 - AS133776 - Quanzhou	9	100
	119.167.180.131 - AS4837 - CHINA UNICOM China169 Bac...	8	100
	218.98.111.202 - AS21859 - ZNET	14	100
NS	ns2.dns.com		
	183.253.57.193 - AS9808 - Guangdong Mobile Communic...	6	100
	121.12.104.65 - AS134763 - CHINANET Guangdong provin...	4	100
SOA	ns1.dns.com Hostname dnsadmin.dns.com		

View all DNS Records

Domains with same A records - dominionvotingsystems.com

1 Domains with same A records

Domain	Site Title	Alexa rank	DNS A	OSH	DNS CNAME
boaoglobal.com	–	–	45.195.162.194 - AS132839 - POWER LINE DATACENTER	2	–

CVE - dominionvotingsystems.com

22 CVE

Columns Copy Download

Id	Base Score	Severity	Vector	Source	Description
CVE-2018-20685	2.6	LOW	AV:N/AC:H/Au:N/C:N/I:P/A:N	45.195.162.194	In OpenSSH 7.9, scp.c in the scp client allows remote SSH servers to bypass intended access restrictions via the filename of . or an empty filename. The impact is modifying the permissions of the target directory on the client side.
CVE-2015-6564	6.9	MEDIUM	AV:L/AC:M/Au:N/C:C/I:C/A:C	45.195.162.194	Use-after-free vulnerability in the mm_answer_pam_free_ctx function in monitor.c in sshd in OpenSSH before 7.0 on non-OpenBSD platforms might allow local users to gain privileges by leveraging control of the sshd uid to send an unexpectedly early MONITOR_REQ_PAM_FREE_CTX request.
CVE-2016-1908	7.5	HIGH	AV:N/AC:L/Au:N/C:P/I:P/A:P	45.195.162.194	The client in OpenSSH before 7.2 mishandles failed cookie generation for untrusted X11 forwarding and relies on the local X11 server for access-control decisions, which allows remote X11 clients to trigger a fallback and obtain trusted X11 forwarding privileges by leveraging configuration issues on this X11 server, as demonstrated by lack of the SECURITY extension on this X11 server.
CVE-2016-10010	6.9	MEDIUM	AV:L/AC:M/Au:N/C:C/I:C/A:C	45.195.162.194	sshd in OpenSSH before 7.4, when privilege separation is not used, creates forwarded Unix-domain sockets as root, which might allow local users to gain privileges via unspecified vectors, related to serverloop.c.
CVE-2016-6515	7.8	HIGH	AV:N/AC:L/Au:N/C:N/I:N/A:C	45.195.162.194	The auth_password function in auth-passwd.c in sshd in OpenSSH before 7.3 does not limit password lengths for password authentication, which allows remote attackers to cause a denial of service (crypt CPU consumption) via a long string.
CVE-2015-5600	8.5	HIGH	AV:N/AC:L/Au:N/C:P/I:N/A:C	45.195.162.194	The kbdint_next_device function in auth2-chall.c in sshd in OpenSSH through 6.9 does not properly restrict the processing of keyboard-interactive devices within a single connection, which makes it easier for remote attackers to conduct brute-force attacks or cause a denial of service (CPU consumption) via a long and duplicative list in the ssh -oKbdInteractiveDevices option, as demonstrated by a modified client that provides a different password for each pam element on this list.
CVE-2015-6563	1.9	LOW	AV:L/AC:M/Au:N/C:N/I:P/A:N	45.195.162.194	The monitor component in sshd in OpenSSH before 7.0 on non-OpenBSD platforms accepts extraneous username data in MONITOR_REQ_PAM_INIT_CTX requests, which allows local users to conduct impersonation attacks by leveraging any SSH login access in conjunction with control of the sshd uid to send a crafted MONITOR_REQ_PWNAM request, related to monitor.c and monitor_wrap.c.
CVE-2018-15919	5	MEDIUM	AV:N/AC:L/Au:N/C:P/I:N/A:N	45.195.162.194	Remotely observable behaviour in auth-gss2.c in OpenSSH through 7.8 could be used by remote attackers to detect existence of users on a target system when GSS2 is in use. NOTE: the discoverer states 'We understand that the OpenSSH developers do not want to treat such a username enumeration (or "oracle") as a vulnerability.'

CVE - dominionvotingsystems.com

Id	Base Score	Severity	Vector	Source	Description
CVE-2020-15778	6.8	MEDIUM	AV:N/AC:M/Au:N/C:P/I:P/A:P	45.195.162.194	scp in OpenSSH through 8.3p1 allows command injection in the scp.c toremote function, as demonstrated by backtick characters in the destination argument. NOTE: the vendor reportedly has stated that they intentionally omit validation of "anomalous argument transfers" because that could "stand a great chance of breaking existing workflows."
CVE-2019-6110	4	MEDIUM	AV:N/AC:H/Au:N/C:P/I:P/A:N	45.195.162.194	In OpenSSH 7.9, due to accepting and displaying arbitrary stderr output from the server, a malicious server (or Man-in-The-Middle attacker) can manipulate the client output, for example to use ANSI control codes to hide additional files being transferred.
CVE-2016-10011	2.1	LOW	AV:L/AC:L/Au:N/C:P/I:N/A:N	45.195.162.194	authfile.c in sshd in OpenSSH before 7.4 does not properly consider the effects of realloc on buffer contents, which might allow local users to obtain sensitive private-key information by leveraging access to a privilege-separated child process.
CVE-2016-10012	7.2	HIGH	AV:L/AC:L/Au:N/C:C/I:C/A:C	45.195.162.194	The shared memory manager (associated with pre-authentication compression) in sshd in OpenSSH before 7.4 does not ensure that a bounds check is enforced by all compilers, which might allows local users to gain privileges by leveraging access to a sandboxed privilege-separation process, related to the m_zback and m_zlib data structures.
CVE-2015-5352	4.3	MEDIUM	AV:N/AC:M/Au:N/C:N/I:P/A:N	45.195.162.194	The x11_open_helper function in channels.c in ssh in OpenSSH before 6.9, when ForwardX11Trusted mode is not used, lacks a check of the refusal deadline for X connections, which makes it easier for remote attackers to bypass intended access restrictions via a connection outside of the permitted time window.
CVE-2015-8325	7.2	HIGH	AV:L/AC:L/Au:N/C:C/I:C/A:C	45.195.162.194	The do_setup_env function in session.c in sshd in OpenSSH through 7.2p2, when the UseLogin feature is enabled and PAM is configured to read .pam_environment files in user home directories, allows local users to gain privileges by triggering a crafted environment for the /bin/login program, as demonstrated by an LD_PRELOAD environment variable.
CVE-2016-10009	7.5	HIGH	AV:N/AC:L/Au:N/C:P/I:P/A:P	45.195.162.194	Untrusted search path vulnerability in ssh-agent.c in ssh-agent in OpenSSH before 7.4 allows remote attackers to execute arbitrary local PKCS#11 modules by leveraging control over a forwarded agent-socket.
CVE-2016-10708	5	MEDIUM	AV:N/AC:L/Au:N/C:N/I:N/A:P	45.195.162.194	sshd in OpenSSH before 7.4 allows remote attackers to cause a denial of service (NULL pointer dereference and daemon crash) via an out-of-sequence NEWKEYS message, as demonstrated by Honggfuzz, related to kex.c and packet.c.
CVE-2019-6109	4	MEDIUM	AV:N/AC:H/Au:N/C:P/I:P/A:N	45.195.162.194	An issue was discovered in OpenSSH 7.9. Due to missing character encoding in the progress display, a malicious server (or Man-in-The-Middle attacker) can employ crafted object names to manipulate the client output, e.g., by using ANSI control codes to hide additional files being transferred. This affects refresh_progress_meter() in progressmeter.c.
CVE-2016-6210	4.3	MEDIUM	AV:N/AC:M/Au:N/C:P/I:N/A:N	45.195.162.194	sshd in OpenSSH before 7.3, when SHA256 or SHA512 are used for user password hashing, uses BLOWFISH hashing on a static password when the username does not exist, which allows remote attackers to enumerate users by leveraging the timing difference between responses when a large password is provided.
CVE-2020-14145	4.3	MEDIUM	AV:N/AC:M/Au:N/C:P/I:N/A:N	45.195.162.194	The client side in OpenSSH 5.7 through 8.3 has an Observable Discrepancy leading to an information leak in the algorithm negotiation. This allows in-the-middle attackers to target initial connection attempts (where no host key for the server has been cached by the client).
CVE-2016-3115	5.5	MEDIUM	AV:N/AC:L/Au:S/C:P/I:P/A:N	45.195.162.194	Multiple CRLF injection vulnerabilities in session.c in sshd in OpenSSH before 7.2p2 allow remote authenticated users to bypass intended shell-command restrictions via crafted X11 forwarding data, related to the (1) do_authenticated1 and (2) session_x11_req functions.

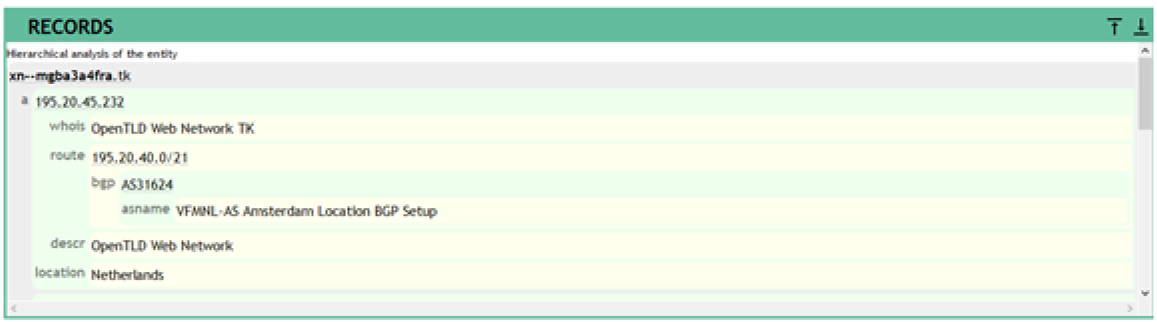
11. BMA Capital Management is known as a company that provides Iran access to capital markets with direct links publicly discoverable on LinkedIn (found via google on 11/19/2020):

www.linkedin.com › muhammad-talha-a0759660

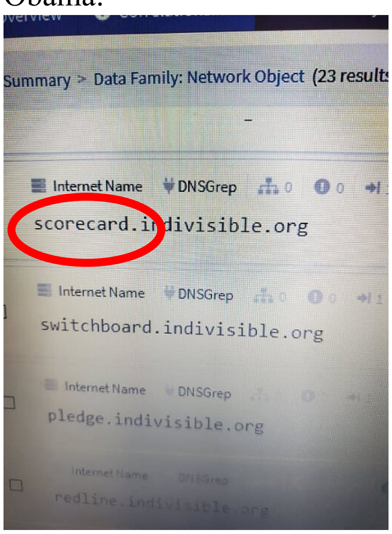
Muhammad Talha - BMA Capital Management Limited

Manager, Money Market & Fixed Income at **BMA Capital** Management Limited. **BMA Capital** ...
Manager-FMR at Pak **Iran** Joint Investment Company. Pakistan.
Pakistan · Manager, Money Market & Fixed Income · BMA Capital Management Limited

The same Robtex search confirms the Iranian address is tied to the server in the Netherlands, which correlates to known OSINT of Iranian use of the Netherlands as a remote server (See Advanced Persistent Threats: APT33 and APT34):

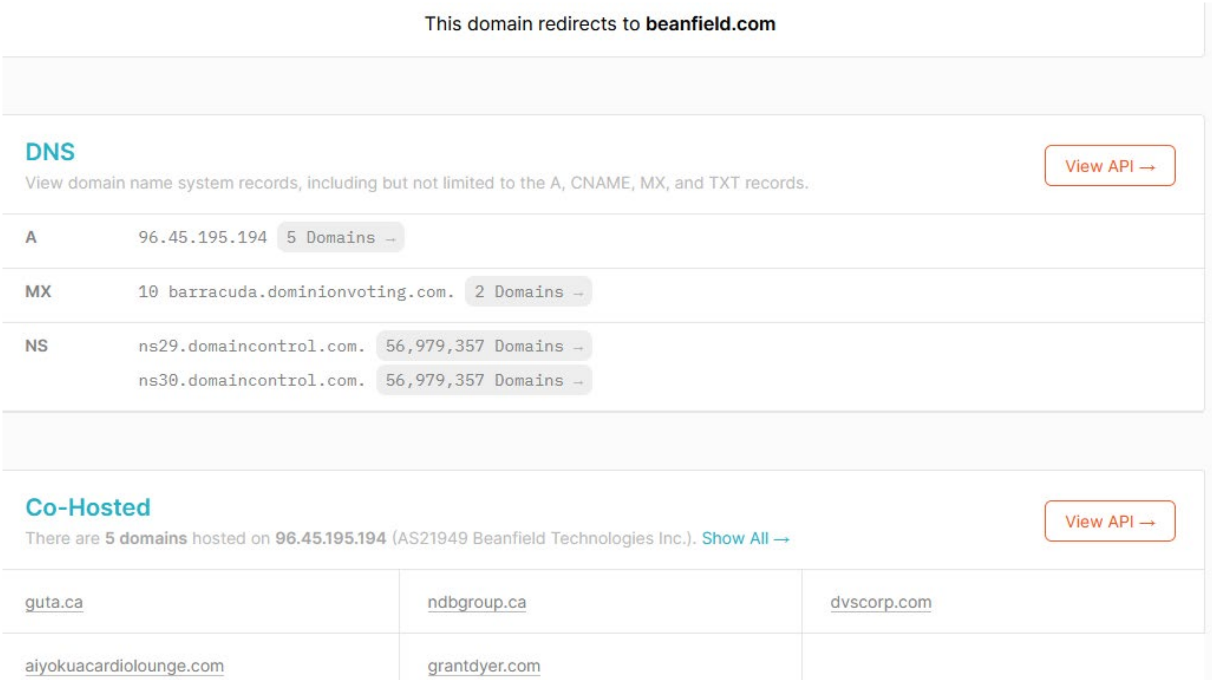


12. A search of the indivisible.org network showed a subdomain which evidences the existence of scorecard software in use as part of the Indivisible (formerly ACORN) political group for Obama:

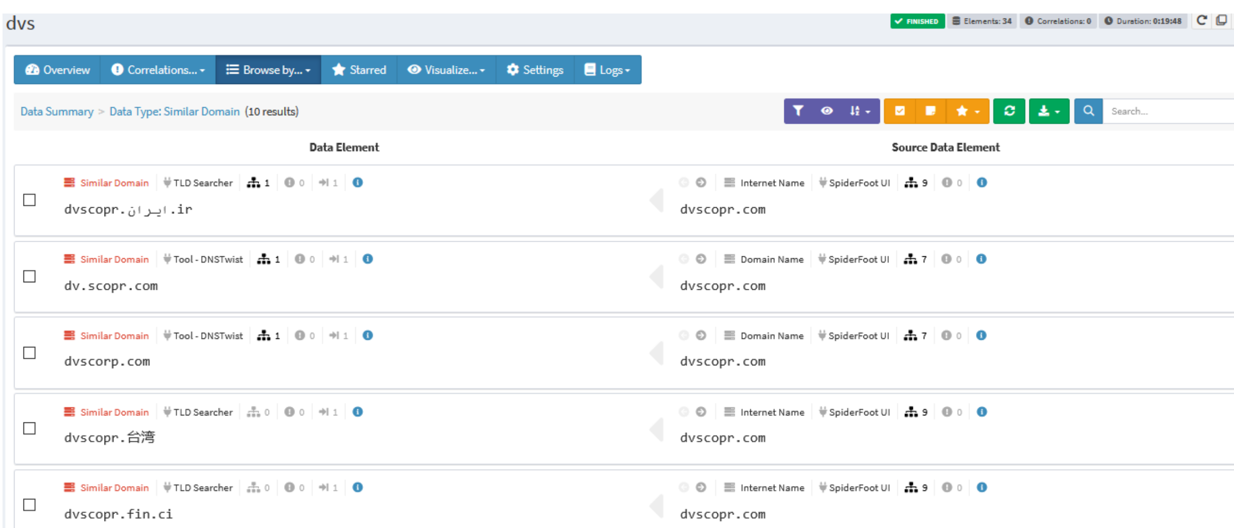


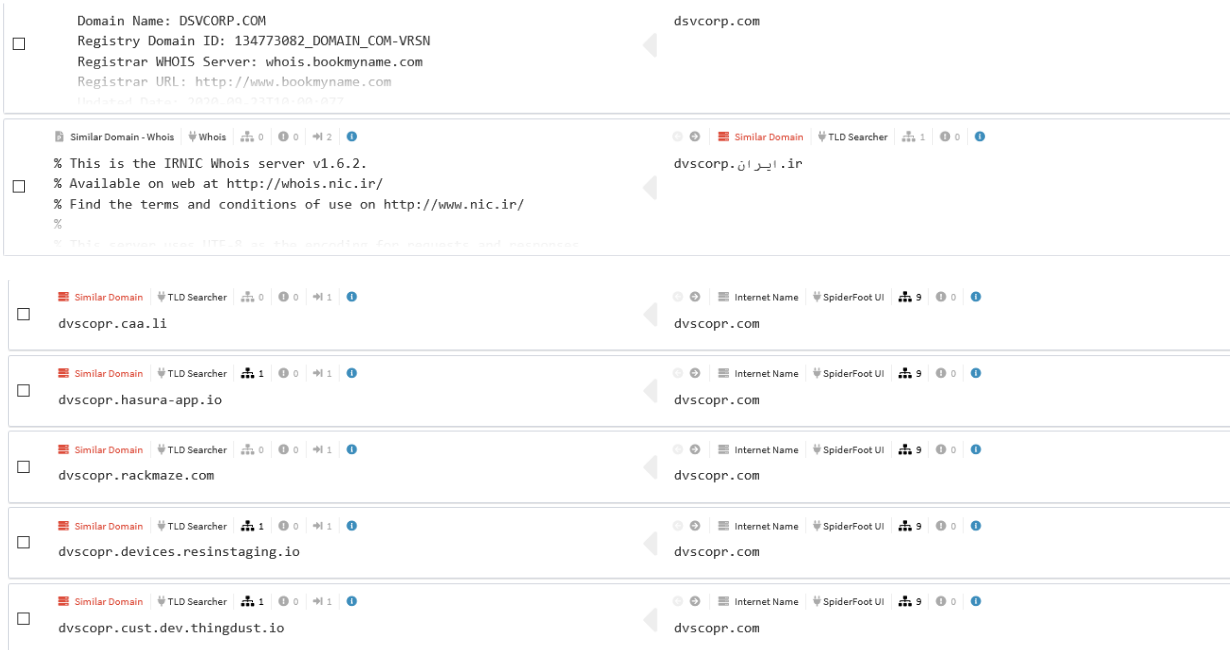
13. Each of the tabulation software companies have their own central reporting "affiliate". Edison Research is the affiliate for Dominion.

14. Beanfield.com out of Canada shows the connections via co-hosting related sites, including dvscorp.com:

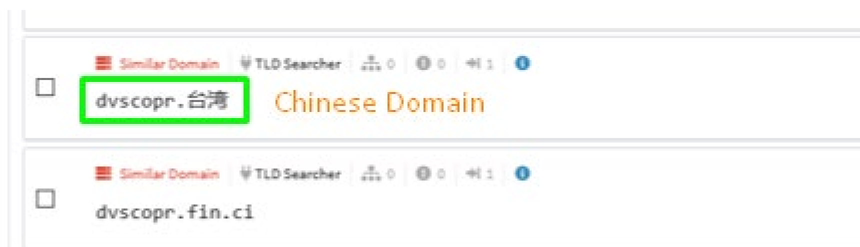


This Dominion partner domain "dvscorp" also includes an auto discovery feature, where new in-network devices automatically connect to the system. The following diagram shows some of the related dvscopr.com mappings, which mimic the infrastructure for Dominion and are an obvious typo derivation of the name. Typo derivations are commonly purchased to catch redirect traffic and sometimes are used as honeypots. The diagram shows that infrastructure spans multiple different servers as a methodology.





The above diagram shows how these domains also show the connection to Iran and other places, including the following Chinese domain, highlighted below:



15. The auto discovery feature allows programmers to access any system while it is connected to the internet once it's a part of the constellation of devices (see original Spiderfoot graph).

16. Dominion Voting Systems Corporation in 2019 sold a number of their patents to China (via HSBC Bank in Canada):

Assignment details for assignee "HSBC BANK CANADA, AS COLLATERAL AGENT"

Assignments (1 total)

Assignment 1

Reel/frame	Execution date	Date recorded	Pages
050500/0236	Sep 25, 2019	Sep 26, 2019	7

Conveyance
SECURITY AGREEMENT

Assignors	Correspondent	Attorney docket
DOMINION VOTING SYSTEMS CORPORATION	CHAPMAN & CUTLER LLP 1270 AVENUE OF THE AMERICAS, 30TH FLOOR ATTN: SOREN SCHWARTZ NEW YORK, NY 10020	

Assignee	
HSBC BANK CANADA, AS COLLATERAL AGENT 4TH FLOOR, 70 YORK STREET TORONTO M5J 1S9 CANADA	

Properties (18)

Patent	Publication	Application	PCT	International registration
8844813	20130306724	13476836		
8913787	20130301873	13470091		
9202113	20150071501	14539684		
8195505	20050247783	11121997		
9870666	20120232963	13463536		
9710988	20120259680	13525187		
9870667	20120259681	13525208		
7111782	20040238632	10811969		
7422151	20070012767	11526028		
D599131		29324281		

View all

This searchable database contains all recorded Patent Assignment information from August 1980 to the present.

When the USPTO receives relevant information for its assignment database, the USPTO puts the information in the public record and does not verify the validity of the information. Recordation is a ministerial function–the USPTO neither makes a determination of the legality of the transaction nor the right of the submitting party to take the action.

Release 2.0.0 | Release Notes | Send Feedback | Legacy Patent Assignment Search | Legacy Trademark Assignment Search

Of particular interest is a section of the document showing aspects of the nature of the patents dealing with authentication:

Patent assignment 050500/0236

SECURITY AGREEMENT

Date recorded
Sep 26, 2019

Reel/frame
050500/0236

Pages
7

Assignors
DOMINION VOTING SYSTEMS CORPORATION

Execution date
Sep 25, 2019

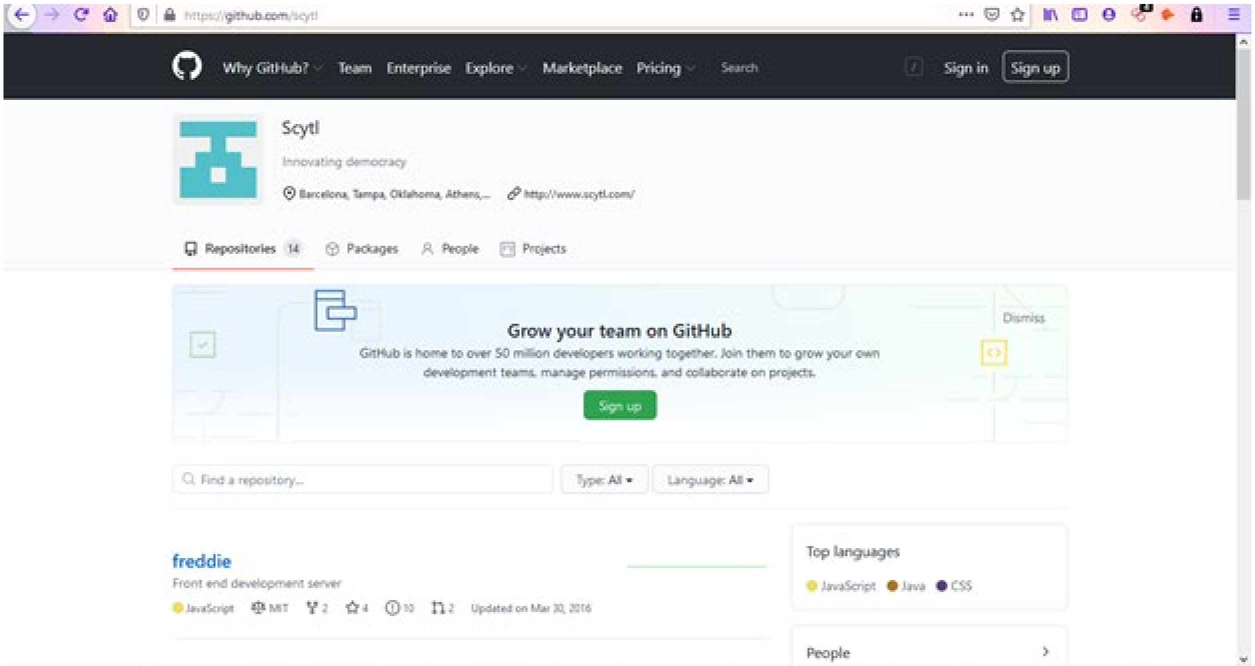
Assignee
HSBC BANK CANADA, AS COLLATERAL AGENT
4TH FLOOR, 70 YORK STREET
TORONTO M5J 1S9
CANADA

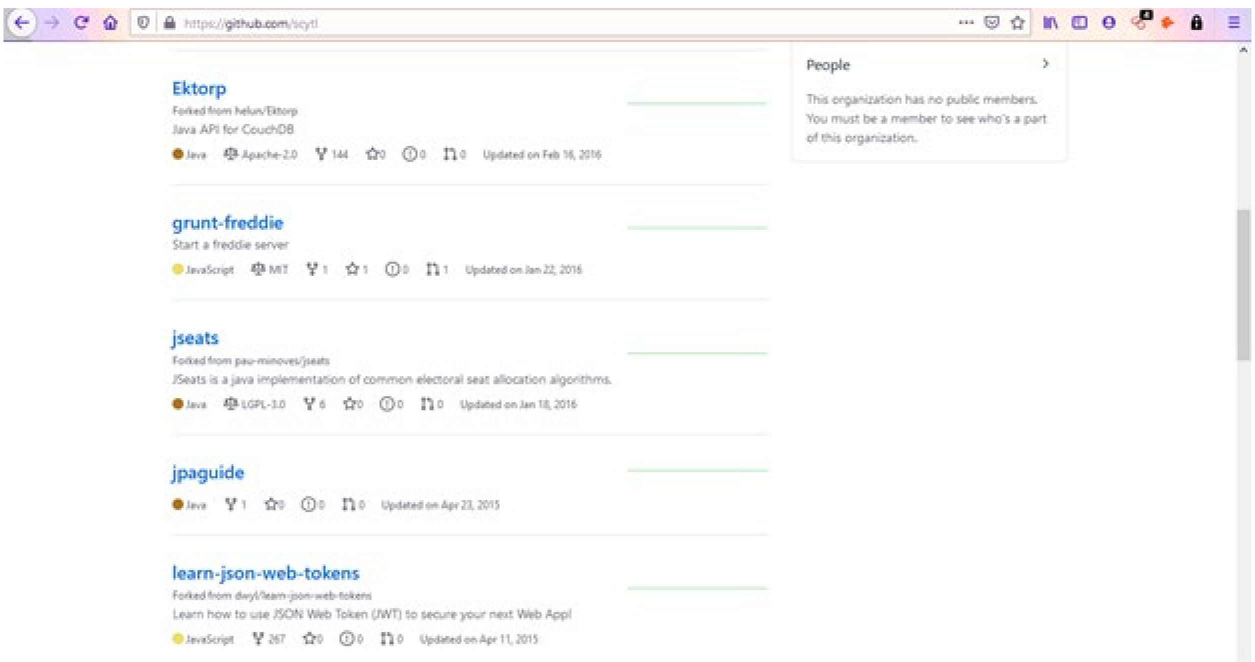
Correspondent
CHAPMAN & CUTLER LLP
1270 AVENUE OF THE AMERICAS, 30TH FLOOR
ATTN: SOREN SCHWARTZ
NEW YORK, NY 10020

Properties (18 total)

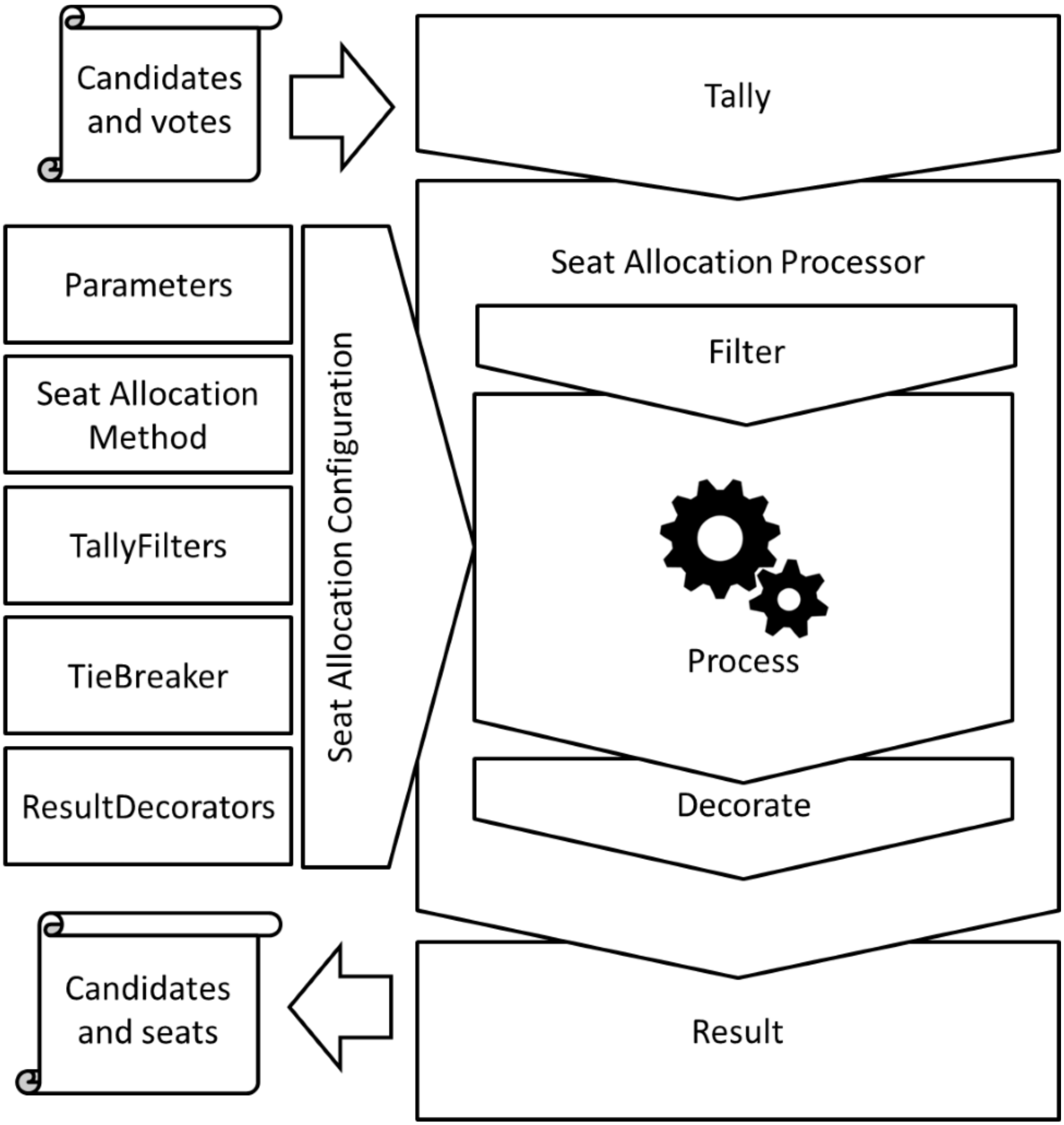
Patent	Publication	Application
1. SYSTEMS AND METHODS FOR PROVIDING SECURITY IN A VOTING MACHINE Inventors: JOHN PAUL HOMEWOOD, THOMAS E. KEELING, PAUL DAVID TERWILLIGER, MARC R. LATOUR		
7111782 Sep 26, 2006	20040238632 Dec 2, 2004	10811969 Mar 30, 2004
2. SYSTEM, METHOD AND COMPUTER PROGRAM FOR VOTE TABULATION WITH AN ELECTRONIC AUDIT TRAIL Inventors: JOHN POULOS, JAMES HOOVER, NICK IKONOMAKIS, GORAN OBRADOVIC		
8195505 Jun 5, 2012	20050247783 Nov 10, 2005	11121997 May 5, 2005
3. SYSTEMS AND METHODS FOR PROVIDING SECURITY IN A VOTING MACHINE Inventors: JOHN PAUL HOMEWOOD, THOMAS E. KEELING, PAUL DAVID TERWILLIGER, MARC R. LATOUR		
7422151 Sep 9, 2008	20070012767 Jan 18, 2007	11526028 Sep 25, 2006
4. BALLOT LEVEL SECURITY FEATURES FOR OPTICAL SCAN VOTING MACHINE CAPABLE OF BALLOT IMAGE PROCESSING, SECURE BALLOT PRINTING, AND BALLOT LAYOUT AUTHENTICATION AND VERIFICATION Inventors: ERIC COOMER, LARRY KORB, BRIAN GLENN LIERMAN		

17. Smartmatic creates the backbone (like the cloud). SCYTL is responsible for the security within the election system.

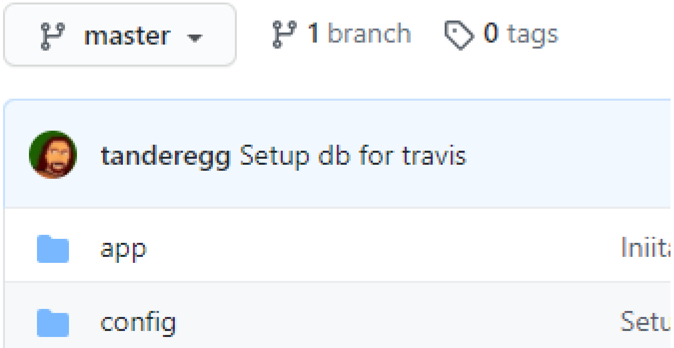




18. In the GitHub account for Scytl, Scytl Jseats has some of the programming necessary to support a much broader set of election types, including a decorator process where the data is smoothed, see the following diagram provided in their source code:



19. Unrelated, but also a point of interest is CTCL or Center for Tech and Civic Life funded by Mark Zuckerberg. Within their github page (https://github.com/ctcl), one of the programmers holds a government position. The Bipcoop repo shows tanderegg as one of the developers, and he works at the Consumer Financial Protection Bureau:



20. As seen in included document titled "AA20-304A-Iranian_Advanced_Persistent_Threat_Actor_Identified_Obtaining_Voter_Registration_Data" that was authored by the Cybersecurity & Infrastructure Security Agency (CISA) with a Product ID of AA20-304A on a specified date of October 30, 2020, CISA and the FBI reports that Iranian APT teams were seen using ACUTENIX, a website scanning software, to find vulnerabilities within Election company websites, confirmed to be used by the Iranian APT teams buy seized cloud storage that I had personally captured and reported to higher authorities. These scanning behaviors showed that foreign agents of aggressor nations had access to US voter lists, and had done so recently.

21. In my professional opinion, this affidavit presents unambiguous evidence that Dominion Voter Systems and Edison Research have been accessible and were certainly compromised by rogue actors, such as Iran and China. By using servers and employees connected with rogue actors and hostile foreign influences combined with numerous easily discoverable leaked credentials, these organizations neglectfully allowed foreign adversaries to access data

and intentionally provided access to their infrastructure in order to monitor and manipulate elections, including the most recent one in 2020. This represents a complete failure of their duty to provide basic cyber security. This is not a technological issue, but rather a governance and basic security issue: if it is not corrected, future elections in the United States and beyond will not be secure and citizens will not have confidence in the results.

I declare under penalty of perjury that the forgoing is true and correct to the best of my knowledge. Executed this November 23rd, 2020.

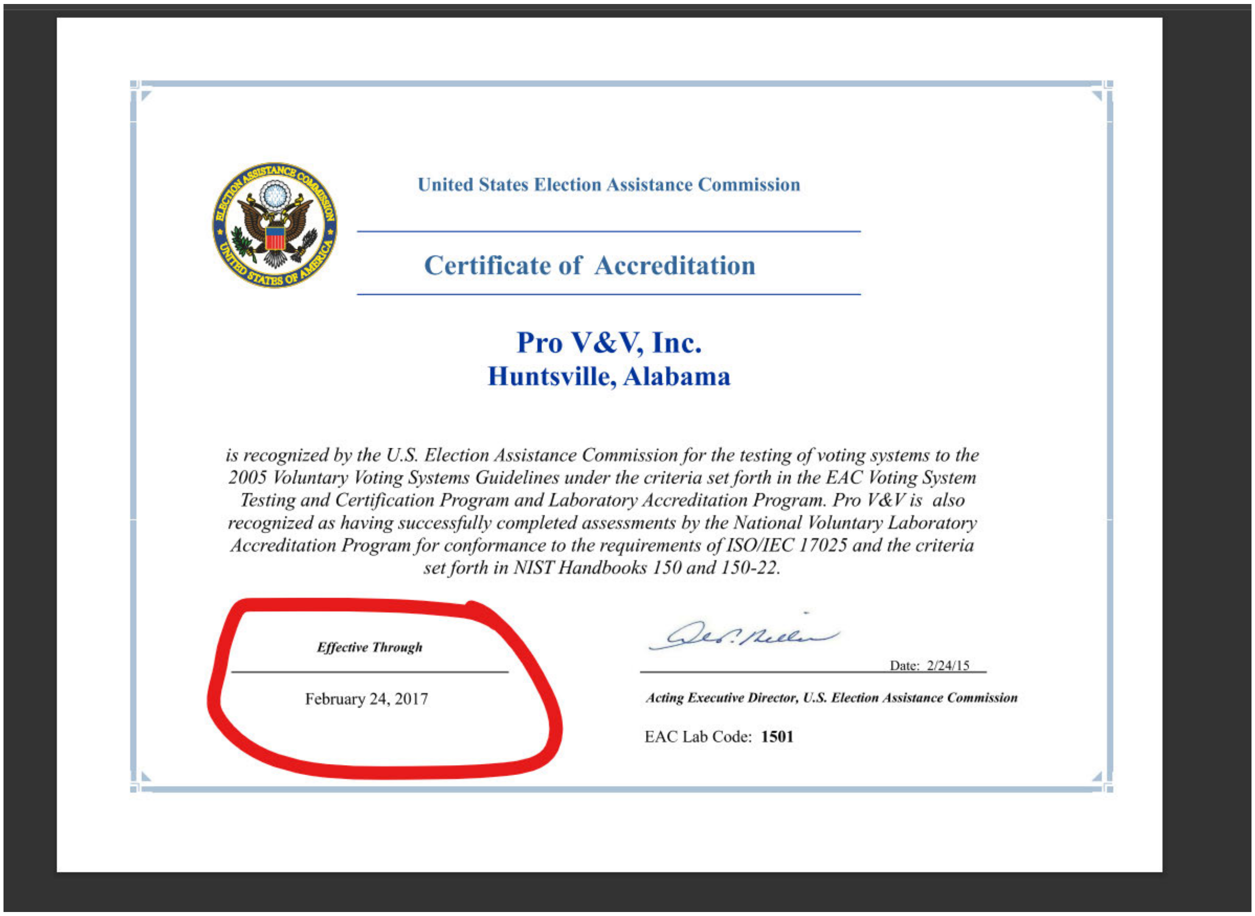
[redacted]

Declaration of [redacted]

Pursuant to 28 U.S.C Section 1746, I, [redacted], make the following declaration.

1. I am over the age of 21 years and I am under no legal disability, which would prevent me from giving this declaration.
2. I have been a private contractor with experience gathering and analyzing foreign intelligence and acted as a LOCALIZER during the deployment of projects and operations both OCONUS and CONUS. I am a trained Cryptolinguist, hold a completed degree in Molecular and Cellular Physiology and have FORMAL training in other sciences such as Computational Linguistics, Game Theory, Algorithmic Aspects of Machine Learning, Predictive Analytics among others.
3. I have operational experience in sources and methods of implementing operations during elections both CONUS and OCONUS
4. I am an amateur network tracer and cryptographer and have over two decades of mathematical modeling and pattern analysis.
5. In my position from 1999-2014 I was responsible for delegating implementation via other contractors sub-contracting with US or 9 EYES agencies identifying connectivity, networking and subcontractors that would manage the micro operations.
6. My information is my personal knowledge and ability to detect relationships between the companies and validate that with the cryptographic knowledge I know and attest to as well as evidence of these relationships.
7. In addition, I am WELL versed due to my assignments during my time as a private contractor of how elections OCONUS (for countries I have had an assignment at) and CONUS (well versed in HAVA ACT) and more.
8. On or about October 2017 I had reached out to the US Senate Majority Leader with an affidavit claiming that our elections in 2017 may be null and void due to lack of EAC certifications. In fact Sen. Wyden sent a letter to Jack Cobb on 31 OCT 2017 advising discreetly pointing out the importance of being CERTIFIED EAC had issued a certificate to

Pro V & V and that expired on Feb 24, 2017. No other certification has been located.


United States Election Assistance Commission

Certificate of Accreditation

Pro V&V, Inc.
Huntsville, Alabama

is recognized by the U.S. Election Assistance Commission for the testing of voting systems to the 2005 Voluntary Voting Systems Guidelines under the criteria set forth in the EAC Voting System Testing and Certification Program and Laboratory Accreditation Program. Pro V&V is also recognized as having successfully completed assessments by the National Voluntary Laboratory Accreditation Program for conformance to the requirements of ISO/IEC 17025 and the criteria set forth in NIST Handbooks 150 and 150-22.

Effective Through
February 24, 2017

Date: 2/24/15
Acting Executive Director, U.S. Election Assistance Commission

EAC Lab Code: **1501**

9. Section 231(b) of the Help America Vote Act (HAVA) of 2002 (42 U.S.C. §15371(b)) requires that the EAC provide for the accreditation and revocation of accreditation of independent, non-federal laboratories qualified to test voting systems to Federal standards. Generally, the EAC considers for accreditation those laboratories evaluated and recommended by the National Institute of Standards and Technology (NIST) pursuant to HAVA Section 231(b)(1). However, consistent with HAVA Section 231(b)(2)(B), the Commission may also vote to accredit laboratories outside of those recommended by NIST upon publication of an explanation of the reason for any such accreditation.

10. 

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200978-0

Pro V&V
Huntsville, AL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Voting System Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

DEPARTMENT OF COMMERCE • UNITED STATES OF AMERICA

2020-03-26 through 2021-03-31
Effective Dates

For the National Voluntary Laboratory Accreditation Program

11. VSTL's are VERY important because equipment vulnerabilities allow for deployment of algorithms and scripts to intercept, alter and adjust voting tallies.
12. There are only TWO accredited VSTLs (VOTING SYSTEM TEST LABORATORIES). In order to meet its statutory requirements under HAVA §15371(b), the EAC has developed the EAC's Voting System Test Laboratory Accreditation Program. The procedural requirements of the program are established in the proposed information collection, the EAC **Voting System Test Laboratory Accreditation Program Manual**. Although participation in the program is voluntary, adherence to the program's procedural requirements is mandatory for participants. The procedural requirements of this Manual will supersede any prior laboratory accreditation requirements issued by the EAC. This manual shall be read in conjunction with the EAC's **Voting System Testing and Certification Program Manual** (OMB 3265-0019).

MICHIGAN

State Participation:	**Requires Testing by an Independent Testing Authority.** MI requires that voting systems are certified by an independent testing authority accredited by NASED and the board of state canvassers.
Applicable Statute(s):	"An electronic voting system shall not be used in an election unless it is approved by the board of state canvassers … and unless it meets 1 of the following conditions: (a) Is certified by an independent testing authority accredited by the national association of state election directors and by the board of state canvassers. (b) In the absence of an accredited independent testing authority, is certified by the manufacturer of the voting system as meeting or exceeding the performance and test standards referenced in subdivision (a) in a manner prescribed by the board of state canvassers." MICH. COMP. LAWS ANN § 168.795a (2009).
Applicable Regulation(s):	MI does not have a regulation regarding the federal certification process.
State Certification Process:	The Secretary of State accepts requests from persons/corporations wishing to have their voting system examined. The requestor must pay the Secretary of State an application fee of $1,500.00, file a report listing all of the states in which the voting system has been approved and any reports that these states have made regarding the performance of the voting system. The Board of State Canvassers conducts a field test involving Michigan electors and election officials in simulated election day conditions. The Board of State Canvassers shall approve the voting system if it meets all of the state requirements. MICH. COMP. LAWS ANN § 168.795a (2009).
Fielded Voting Systems:	*[After the EAC completes and issues the 2008 Election Administration and Voting Survey, information about fielded voting systems will be added to this document. In the meantime, readers may find information on the voting systems at the following website (if available)].* http://www.michigan.gov/sos/0,1607,7-127-1633_8716_45458---,00.html

13.

WISCONSIN

State Participation:	**Requires Testing by a Federally Accredited Laboratory.** WI requires that its voting systems receive approval from an independent testing authority accredited by NASED verifying that the voting systems meet all of the recommended FEC standards.
Applicable Statute(s):	"No ballot, voting device, automatic tabulating equipment or relating equipment and materials to be used in an electronic voting system may be utilized in this state unless it is approved by the board [of election commissioners]." WIS. STAT.ANN. § 5.91 (West 2009).
Applicable Regulation(s):	"An application for approval of an electronic voting system shall be accompanied by all of the following … [r]eports from an independent testing authority accredited by the national association of state election directors (NASED) demonstrating that the voting system conforms to all the standards recommended by the federal elections commission." WIS. ADMIN. CODE GAB § 7.01 (2009).
State Certification Process:	The Board of Election Commissioners accepts applications for the approval of electronic voting systems. Once the application is completed, the vendor must set up the voting system for three mock elections using; (1) offices, (2) referenda questions and (3) candidates. A panel of local election officials can assist the Board in the review of the voting system. The Board conducts the test using a mock election for the partisan primary, general election, and nonpartisan election. The Board may also require that the voting system be used in an actual election as a condition of the approval. WIS. ADMIN. CODE GAB §§ 7.01, 7.02 (2009).
Fielded Voting Systems:	*[After the EAC completes and issues the 2008 Election Administration and Voting Survey, information about fielded voting systems will be added to this document. In the meantime, readers may find information on the voting systems at the following website (if available)].* http://elections.state.wi.us/section.asp?linkid=643&locid=47

14.

GEORGIA

State Participation: **Requires Federal Certification.** GA requires that its voting systems are tested to EAC standards by EAC accredited labs and certified by the EAC.

Applicable Statute(s): "Any person or organization owning, manufacturing, or selling, or being interested in the manufacture or sale of, any voting machine may request the Secretary of State to examine the machine. Any ten or more electors of this state may, at any time, request the Secretary of State to reexamine any voting machine previously examined and approved by him or her. Before any such examination or reexamination, the person, persons, or organization requesting such examination or reexamination shall pay to the Secretary of State the reasonable expenses of such examination; provided, however, that in the case of a request by ten or more electors the examination fee shall be $ 250.00. The Secretary of State may, at any time, in his or her discretion, reexamine any voting machine." GA CODE ANN. § 21-2-324 (2008).

Applicable Regulation(s): "Prior to submitting a voting system for certification by the State of Georgia, the proposed voting system's hardware, firmware, and software must have been issued Qualification Certificates from the EAC. These EAC Qualification Certificates must indicate that the proposed voting system has successfully completed the EAC Qualification testing administered by EAC approved ITAs. If for any reason, this level of testing is not available, the Qualification tests shall be conducted by an agency designated by the Secretary of State. In either event, the Qualification tests shall comply with the specifications of the *Voting Systems Standards* published by the EAC." GA. COMP. R. & RES. 590-8-1-.01 (2009).

State Certification Process: After the voting system has passed EAC Qualification testing, the vendor of the voting system submits a letter to the Office of the Secretary of State requesting certification for the voting system along with a technical data package to the certification agent. An evaluation proposal is created by the certification agent after a preliminary view of the Technical Data Package and sent to the vendor. Any additional EAC ITA testing identified in the evaluation proposal is arranged by the vendor and the certification agent will perform all other tests identified in the evaluation proposal. The certification agent submits a report of their findings to the Secretary of State. Based on these findings the Secretary of State will make a final determination on whether to certify the voting system. GA. COMP. R. & RES. 590-8-1-.01 (2009).

Fielded Voting Systems: *[After the EAC completes and issues the 2008 Election Administration and Voting Survey, information about fielded voting systems will be added to this document. In the meantime, readers may find information on the voting systems at the following website (if available)].* http://www.sos.georgia.gov/Elections/

15.

PENNSYVANIA

State Participation:	**Requires Testing by a Federally Accredited Laboratory.** PA requires that its voting systems are approved by a federally recognized independent testing laboratory as meeting federal voting system standards.
Applicable Statute(s):	"Any person or corporation owning, manufacturing or selling, or being interested in the manufacture or sale of, any electronic voting system, may request the Secretary of the Commonwealth to examine such system if the voting system has been examined and approved by a federally recognized independent testing authority and if it meets any voting system performance and test standards established by the Federal Government." 25 PA. CONS. STAT. ANN. Code § 3031.5 (West 2008).
Applicable Regulation(s):	PA does not have a regulation regarding the federal certification process.
State Certification Process:	The Secretary of State examines voting systems, upon request, once the voting systems have received approval by a federally recognized independent testing authority. The person(s) requesting the examination of the voting system are responsible for the cost of the examination. After the examination, the Secretary of State issues a report stating whether or not the voting systems are safe and compliant with state and federal requirements. If the voting systems are deemed safe and compliant by the Secretary of State then the systems may be adopted and approved for use in elections by each county through a majority vote of its qualified electors. 25 PA. CONS. STAT. ANN. Code §§ 3031.5, 3031.2 (West 2008).
Fielded Voting Systems:	*[After the EAC completes and issues the 2008 Election Administration and Voting Survey, information about fielded voting systems will be added to this document. In the meantime, readers may find information on the voting systems at the following website (if available)].* http://www.votespa.com/HowtoVote/tabid/74/language/en-US/Default.aspx

16.

ARIZONA

State Participation: **Requires Testing by a Federally Accredited Laboratory.** AZ requires that its voting systems are HAVA compliant and approved by a laboratory that is accredited pursuant to HAVA.

Applicable Statute(s): "On completion of acquisition of machines or devices that comply with HAVA, machines or devices used at any election for federal, state or county offices may only be certified for use in this state and may only be used in this state if they comply with HAVA and if those machines or devices have been tested and approved by a laboratory that is accredited pursuant to HAVA." ARIZ. REV. STAT. § 16-442(B) (2008).

Applicable Regulation(s): AZ does not have a regulation regarding the federal certification process.

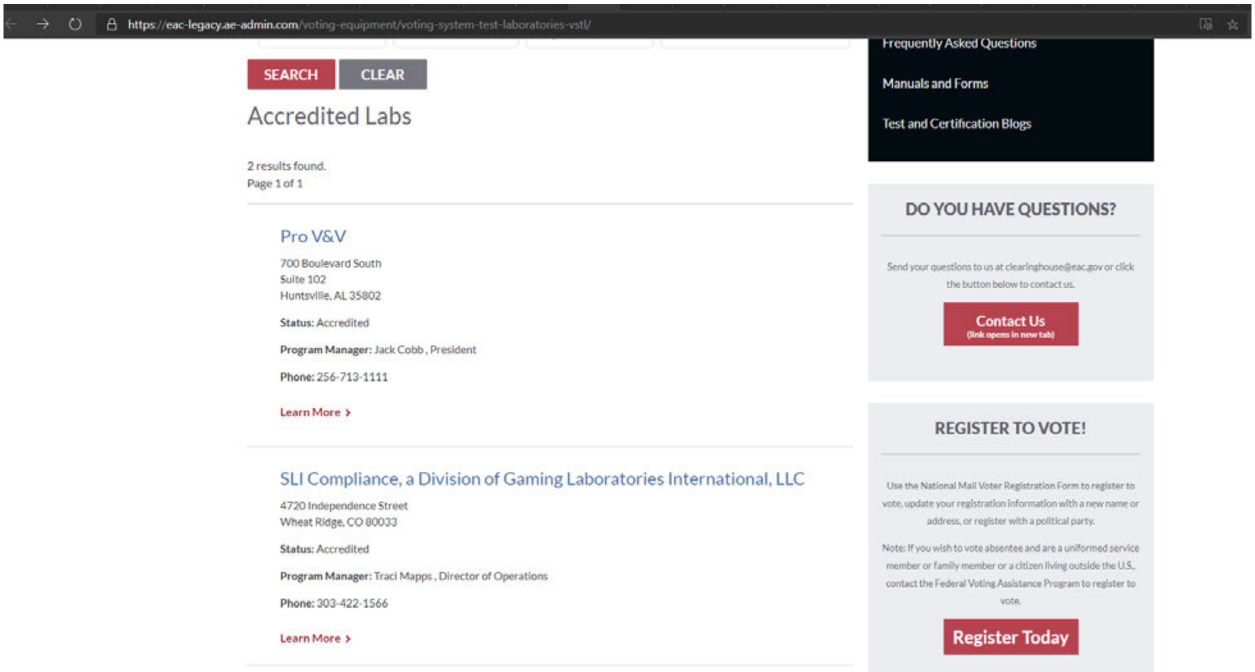
State Certification Process: The Secretary of State appoints a committee of three people that test different voting systems. This committee is required to submit their recommendations to the Secretary of State who then makes the final decision on which voting system(s) to adopt. ARIZ. REV. STAT. § 16-442(A) and (C) (2008).

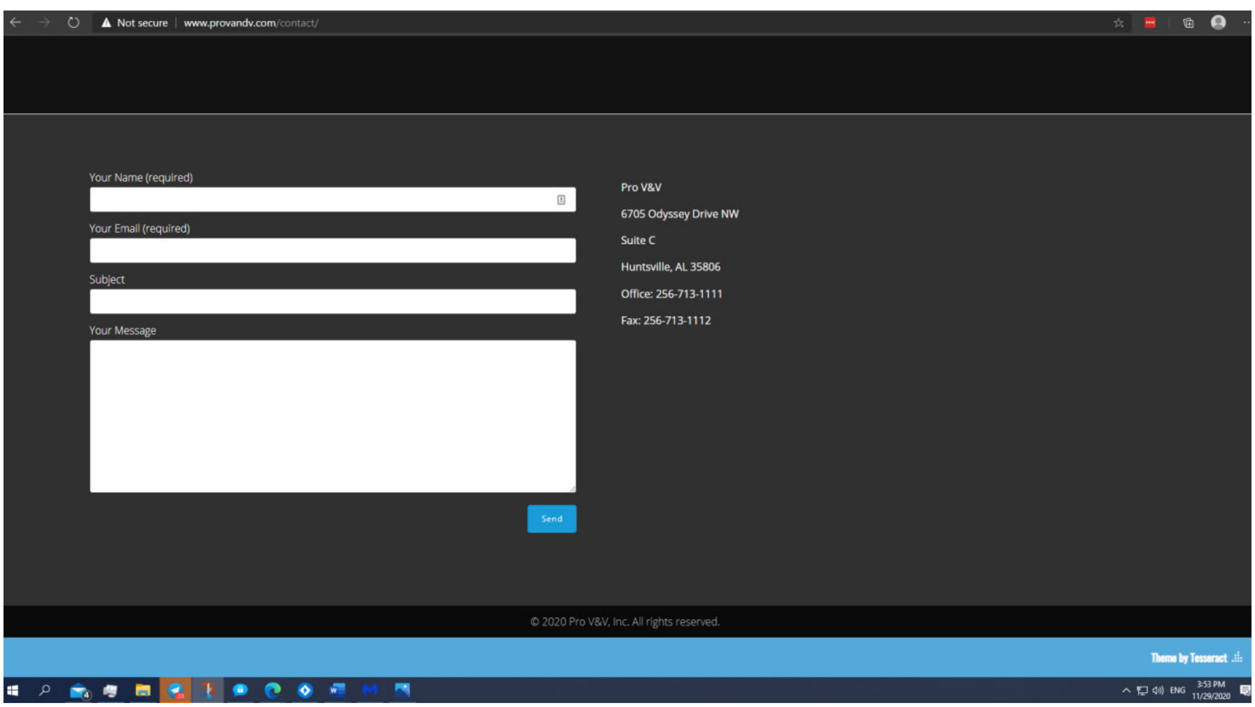
Fielded Voting Systems: *[After the EAC completes and issues the 2008 Election Administration and Voting Survey, information about fielded voting systems will be added to this document. In the meantime, readers may find information on the voting systems at the following website (if available)].* http://www.azsos.gov/election/equipment/default.htm

17.

18. **Pro V& V** and **SLI Gaming** both lack evidence of EAC Accreditation as per the Voting System Testing and Certification Manual.

19. **Pro V& V** is owned and Operated by Jack Cobb. Real name is Ryan Jackson Cobb. The company ProV&V was founded and run by Jack Cobb who formerly worked under the entity of Wyle Laboratories which is an AEROSPACE DEFENSE CONTRACTING ENTITY. The address information on the EAC, NIST and other entities for Pro V& V are different than that of what is on ProV&V website. The EAC and NIST (ISO CERT) issuers all have another address.





20. VSTLs are the most important component of the election machines as they examine the use of COTS (Commercial Off–The-Shelf)
21. "Wyle became involved with the testing of electronic voting systems in the early 1990's and has tested over 150 separate voting systems. Wyle was the first company to obtain accreditation by the National Association of State Election Directors (NASED). Wyle is accredited by the Election Assistance Commission (EAC) as a Voting System Testing Laboratory (VSTL). Our scope of accreditation as a VSTL encompasses all aspects of the hardware and software of a voting machine. Wyle also received NVLAP accreditation to ISO/IEC 17025:2005 from NIST." Testimony of Jack Cobb 2009
22. COTS are preferred by many because they have been tried and tested in the open market and are most economic and readily available. COTS are also the SOURCE of vulnerability therefore VSTLs are VERY important. COTS components by voting system machine manufacturers can be used as a "Black Box" and changes to their specs and hardware make up change continuously. Some changes can be simple upgrades to make them more efficient in operation, cost efficient for production, end of life (EOL) and even complete reworks to meet new standards. They key issue in this is that MOST of the COTS used by Election Machine Vendors like Dominion, ES&S, Hart Intercivic, Smartmatic and others is that such manufacturing for COTS have been outsourced to China which if implemented in our Election Machines make us vulnerable to BLACK BOX antics and backdoors due to hardware changes that can go undetected. This is why VSTL's are VERY important.
23. The proprietary voting system software is done so and created with cost efficiency in mind and therefore relies on 3rd party software that is AVAILABLE and HOUSED on the HARDWARE. This is a vulnerability. Exporting system reporting using software like Crystal Reports, or PDF software allows for vulnerabilities with their constant updates.
24. As per the COTS hardware components that are fixed, and origin may be cloaked under proprietary information a major vulnerability exists since once again third-party support software is dynamic and requires FREQUENT updates. The hardware components of the computer components, and election machines that are COTS may have slight updates that can be overlooked as they may be like those designed that support the other third -party software. COTS origin is important and the US Intelligence Community report in 2018 verifies that.
25. The Trump Administration made it clear that there is an absence of a major U.S. alternative to foreign suppliers of networking equipment. This highlights the growing dominance of

Chinese manufacturers like Huawei that are the world's LARGEST supplier of telecom and other equipment that endangers national security.

26. China, is not the only nation involved in COTS provided to election machines or the networking but so is Germany via a LAOS founded Chinese linked cloud service company that works with SCYTL named Akamai Technologies that have offices in China and are linked to the server that Dominion Software.

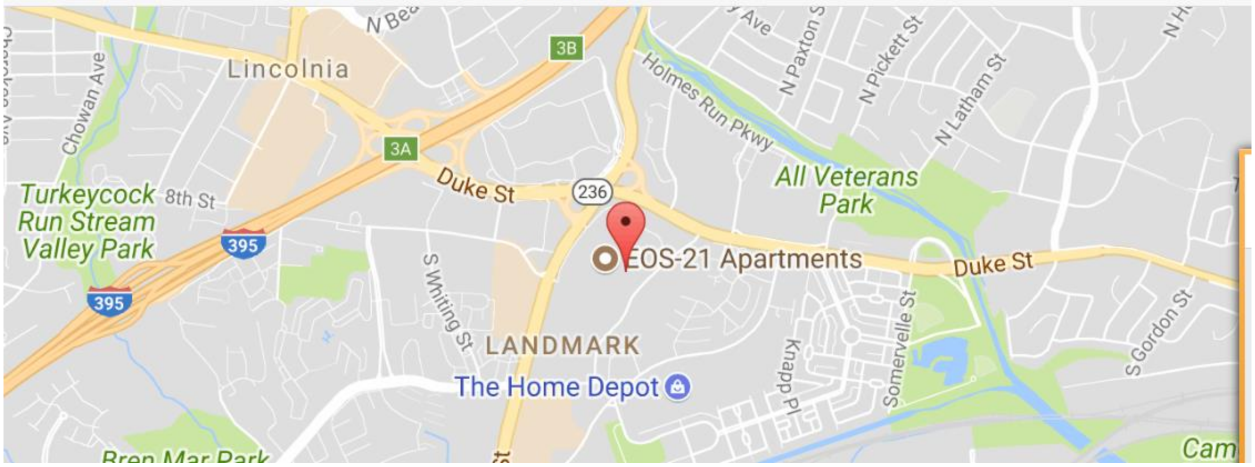
28 046 Madrid

Asian offices

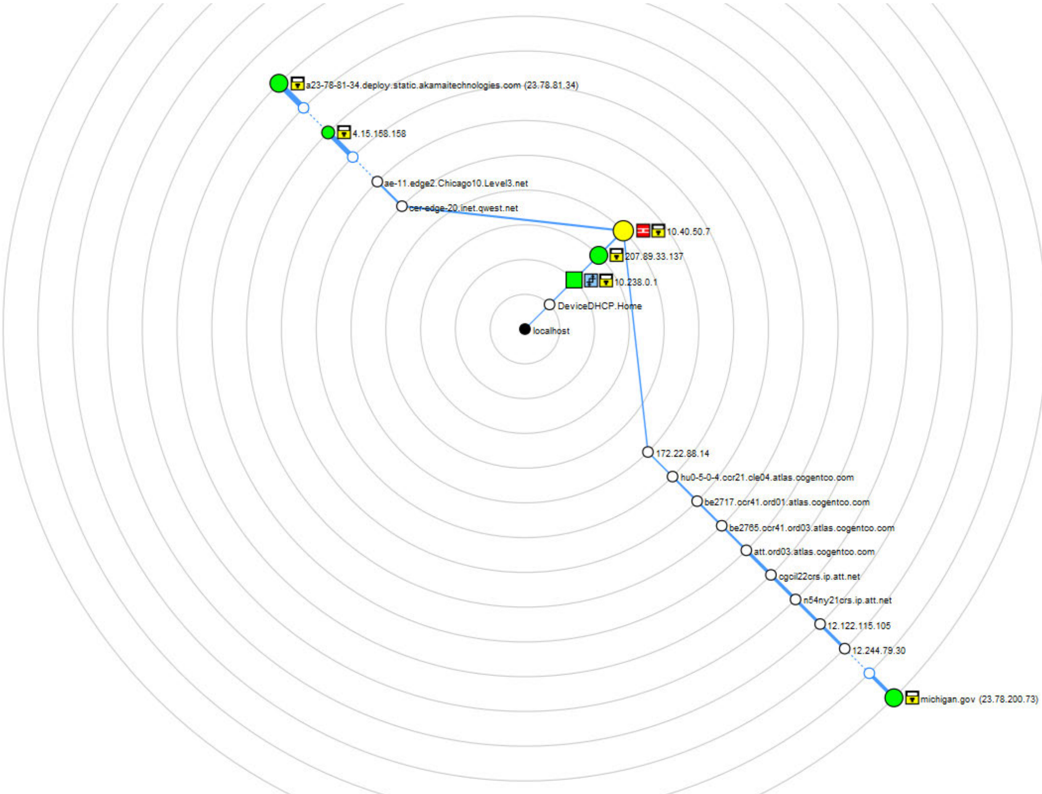
Akamai Technologies - India 111, Brigade Court Koramangala Industrial Area Bangalore 560 095, India	Telephone: Fax: Regional Manager:	91-80-575-99222 91-80-575-99209 Stuart Spiteri
Akamai Technologies - China Suite 1560, 15th Floor NCI Tower 12A Jianguomenwai Avenue Chaoyang District, Beijing 100022 China	Telephone: Fax: Regional Manager:	86-10-8523-3097 86-10-8523-3001 Stuart Spiteri
Akamai Japan K.K. The Executive Centre Japan K.K. 15F Tokyo Ginko Kyokai building 1-3-1 Marunouchi, Chiyoda-ku, Tokyo 100-0005	Telephone: Fax: Regional Manager:	81-3-3216-7200 (Centre) 81-3-3216-7300 (Akamai direct) 81-3-3216-7390 (Centre) Stuart Spiteri
Akamai Technologies - Singapore Akamai, Regus Centre, 36-01 UOB Plaza 1 80 Raffles Place Singapore 048624 Driving directions	Telephone: Fax: Regional Manager:	+65 6248 4614 +65 6248-4501 Stuart Spiteri
Akamai Technologies - Australia and New Zealand 201 Sussex St Tower 2, Level 20 Sydney, NSW 2000, Australia info@au.akamai.com	Telephone: Fax: Regional Manager:	61 2 9006 1325 61 2 9475 0343 Stuart Spiteri

ptt.gov resolves to 4.30.228.74. According to our data this IP address belongs to *Level 3 Communications* and is located in *Alexandria, Virginia, United States*. Please have a look at the information provided below for further details.

4.30.228.74	
ISP/Organization	Level 3 Communications
Location	Alexandria 22304, Virginia (VA), United States (US)
Latitude	38.8115 / 38°48′41″ N
Longitude	-77.1285 / 77°7′42″ W
Timezone	America/New_York
Local Time	Thu, 12 Jul 2018 19:27:40 -0400

27. 

28. L3 Level Communications is federal contractor that is partially owned by foreign lobbyist George Soros. An article that AP ran in 2010 – spoke out about the controversy of this that has been removed. (LINK) "As for the company's other political connections, it also appears that none other than George Soros, the billionaire funder of the country's liberal political infrastructure, owns 11,300 shares of OSI Systems Inc., the company that owns Rapiscan. Not surprisingly, OSI's stock has appreciated considerably over the course of the year. Soros certainly is a savvy investor." Washington Examiner re-write.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4.15.158.158
ae-11.edge2.Chicago10.Level3.net
cer-edge-20.inet.qwest.net
10.40.50.7
207.89.33.137
10.238.0.1
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be2717.ccr41.ord01.atlas.cogentco.com
be2765.ccr41.ord03.atlas.cogentco.com
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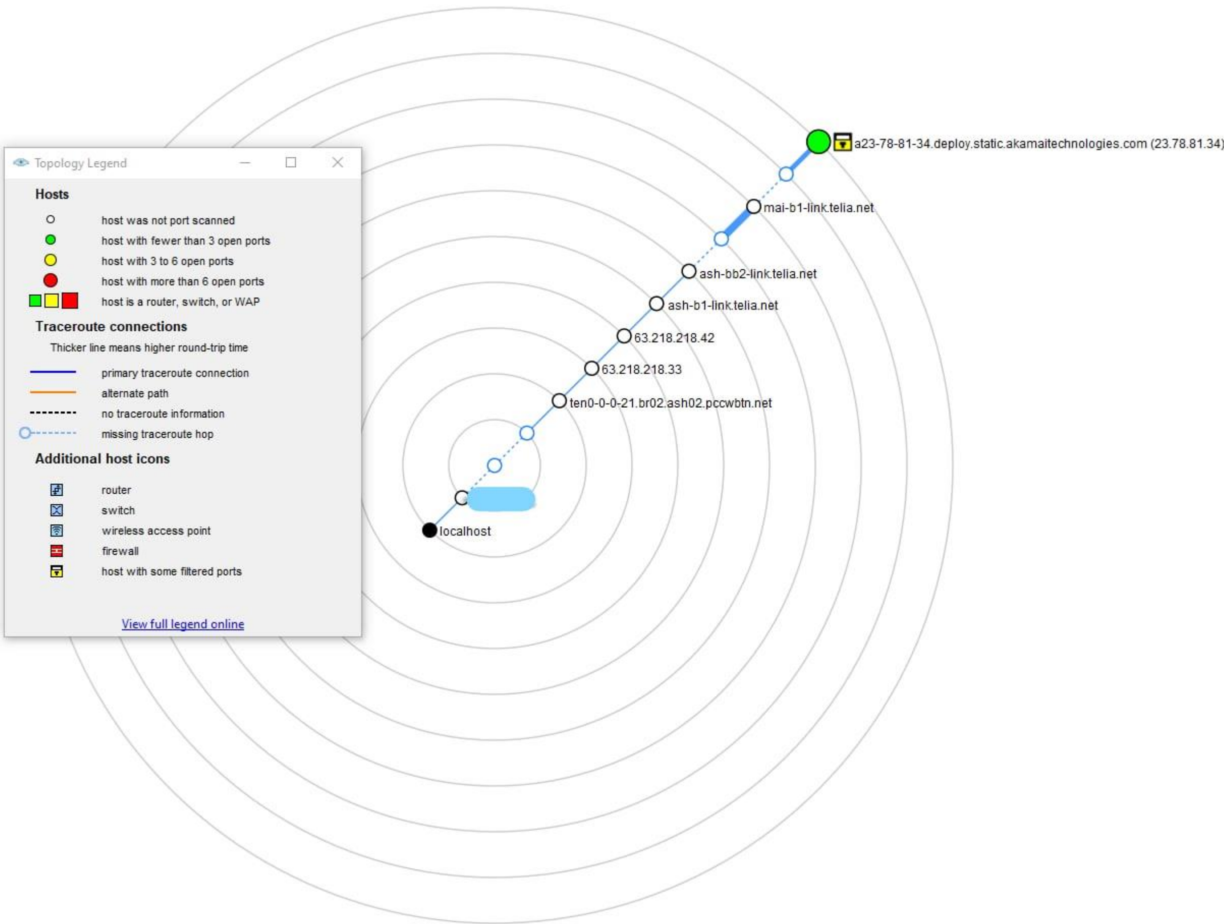
michigan.gov (23.78.200.73)

29.

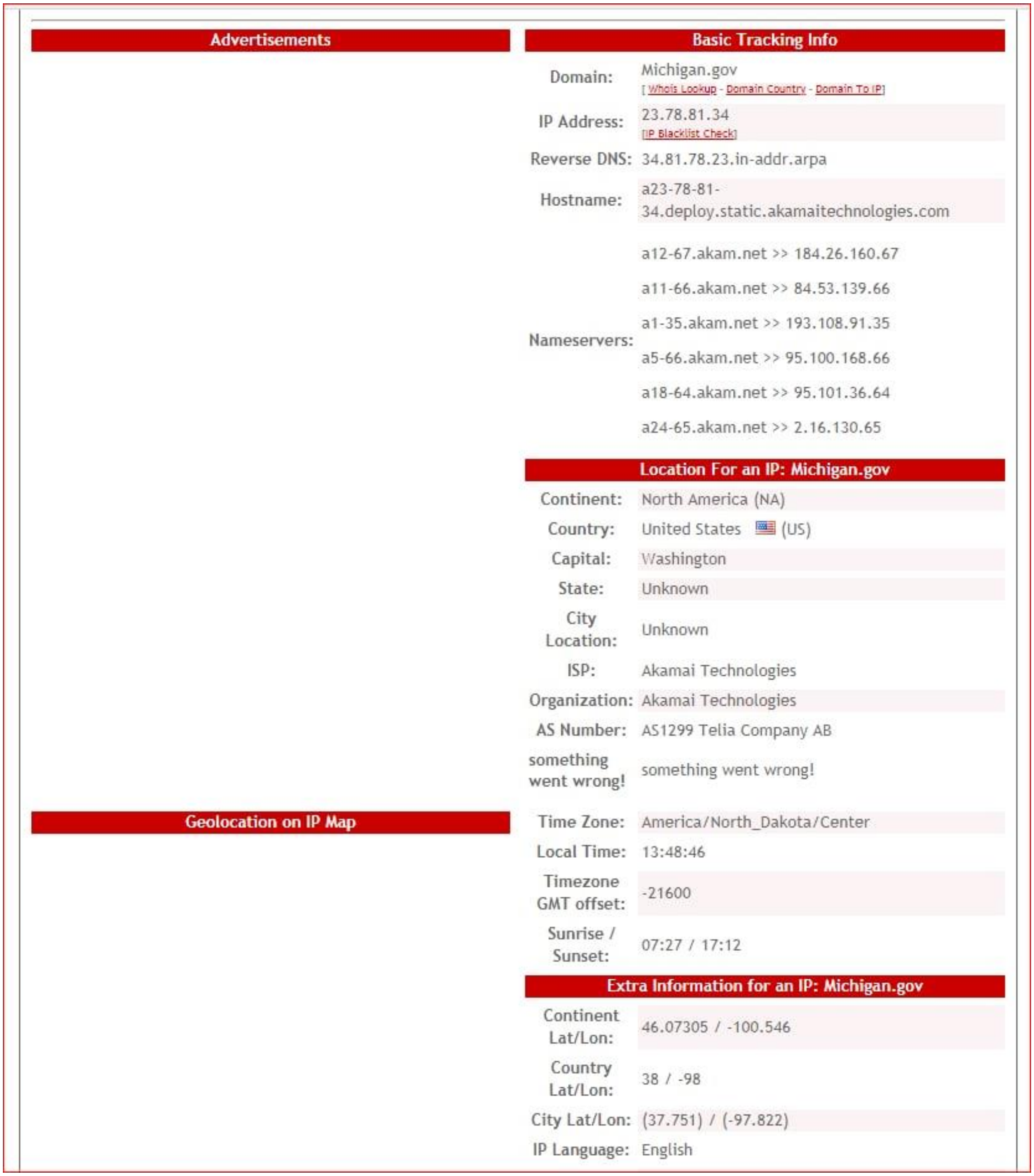


30.

31. **L-3 Communication** Systems-East designs, develops, produces and integrates communication systems and support equipment for space, air, ground, and naval applications, including C4I systems and products; integrated Navy communication systems; integrated space communications and RF payloads; recording systems; secure communications, and information security systems. In addition, their site claims that MARCOM is an integrated communications system and The Marcom® is the foundation of the Navy's newest digital integrated voice / data switching system for affordable command and control equipment supporting communications and radio room automation. The MarCom® uses the latest **COTS** digital technology and open systems standards to offer the command and control user a low cost, user friendly, solution to the complex voice, video and data communications needs of present and future joint / allied missions. Built in reliability, rugged construction, and fail-safe circuits ensure your call and messages will go through. Evidently a HUGE vulnerability.

32. Michigan's government site is thumped off Akamai Technologies servers which are housed on **TELIA AB** a foreign server located in Germany.
33. Scytl, who is contracted with AP that receives the results tallied BY Scytl on behalf of Dominion – During the elections the AP reporting site had a disclaimer.

AP – powered by SCYTL.



Advertisements

Basic Tracking Info

Domain:	Michigan.gov [Whois Lookup - Domain Country - Domain To IP]
IP Address:	23.78.81.34 [IP Blacklist Check]
Reverse DNS:	34.81.78.23.in-addr.arpa
Hostname:	a23-78-81-34.deploy.static.akamaitechnologies.com
Nameservers:	a12-67.akam.net >> 184.26.160.67 a11-66.akam.net >> 84.53.139.66 a1-35.akam.net >> 193.108.91.35 a5-66.akam.net >> 95.100.168.66 a18-64.akam.net >> 95.101.36.64 a24-65.akam.net >> 2.16.130.65

Location For an IP: Michigan.gov

Continent:	North America (NA)
Country:	United States (US)
Capital:	Washington
State:	Unknown
City Location:	Unknown
ISP:	Akamai Technologies
Organization:	Akamai Technologies
AS Number:	AS1299 Telia Company AB
something went wrong!	something went wrong!
Time Zone:	America/North_Dakota/Center
Local Time:	13:48:46
Timezone GMT offset:	-21600
Sunrise / Sunset:	07:27 / 17:12

Geolocation on IP Map

Extra Information for an IP: Michigan.gov

Continent Lat/Lon:	46.07305 / -100.546
Country Lat/Lon:	38 / -98
City Lat/Lon:	(37.751) / (-97.822)
IP Language:	English

34. “Scytl was selected by the Federal Voting Assistance Program of the U.S. Department of Defense to provide a secure online ballot delivery and onscreen marking systems under a program to support overseas military and civilian voters for the 2010 election cycle and beyond. Scytl was awarded 9 of the 20 States that agreed to participate in the program (New York, Washington, Missouri, Nebraska, Kansas, New Mexico, South Carolina, Mississippi and Indiana), making it the provider with the highest number of participating States.” PDF
35. According to DOMINION : 1.4.1Software and Firmware The software and firmware employed by Dominion D-Suite 5.5-Aconsists of 2 types, custom and commercial off the shelf (COTS). COTS applications were verified to be pristine or were subjected to source code review for analysis of any modifications and verification of meeting the pertinent standards.
36. The concern is the HARDWARE and the NON – ACCREDITED VSTLs as by their own admittance use COTS.
37. The purpose of VSTL’s being accredited and their importance in ensuring that there is no foreign interference/ bad actors accessing the tally data via backdoors in equipment software. The core software used by ALL SCYTL related Election Machine/Software manufacturers ensures “anonymity” .
38. Algorithms within the area of this “shuffling” to maintain anonymity allows for setting values to achieve a desired goal under the guise of “encryption” in the trap-door.
39. The actual use of trapdoor commitments in Bayer-Groth proofs demonstrate the implications for the verifiability factor. This means that no one can SEE what is going on during the process of the “shuffling” therefore even if you deploy an algorithms or manual scripts to fractionalize or distribute pooled votes to achieve the outcome you wish – you cannot prove they are doing it! See STUDY : “The use of trapdoor commitments in Bayer-Groth proofs and the implications for the verifiability of the Scytl-SwissPost Internet voting system”
40. **Key Terms**
41. **UNIVERSAL VERIFIABILITY**: Votes cast are the votes counted and integrity of the vote is verifiable (the vote was tallied for the candidate selected) . **SCYTL FAILS UNIVERSAL VERIFIABILITY** because no mathematical proofs can determine if any votes have been manipulated.
42. **INDIVIDUAL VERIFIABILITY**: Voter cannot verify if their ballot got correctly counted. Like, if they cast a vote for ABC they want to verify it was ABC. That notion clearly discounts the need for anonymity in the first place.

43. To understand what I observed during the 2020 I will walk you through the process of one ballot cast by a voter.

44. STEP 1 |Config Data | All non e-voting data is sent to Scytl (offshore) for configuration of data. All e-voting is sent to CONFIGURATION OF DATA then back to the e-voting machine and then to the next phase called CLEANSING. **CONCERNS**: Here we see an "OR PROOF" as coined by mathematicians – an "or proof" is that votes that have been pre-tallied parked in the system and the algorithm then goes back to set the outcome it is set for and seeks to make adjustments if there is a partial pivot present causing it to fail demanding manual changes such as block allocation and narrowing of parameters or self-adjusts to ensure the predetermined outcome is achieved.

45. STEP 2|CLEANSING | The Process is when all the votes come in from the software run by Dominion and get "cleansed" and put into 2 categories: invalid votes and valid votes.

46. STEP 3|Shuffling /Mixing | This step is the most nefarious and exactly where the issues arise and carry over into the decryption phase. Simply put, the software takes all the votes, literally mixes them a and then re-encrypts them. This is where if ONE had the commitment key- TRAPDOOR KEY – one would be able to see the parameters of the algorithm deployed as the votes go into this mixing phase, and how algorithm redistributes the votes.

47. This published PAPER FROM University College London depicts how this shuffle works. In essence, when this mixing/shuffling occurs, then one doesn't have the ability to know that vote coming out on the other end is actually their vote; therefore, ZERO integrity of the votes when mixed.

48.

Background - ElGamal encryption

- Setup: Group $\mathcal{G}$ of prime order q with generator g
- Public key: $\mathrm{pk} = \mathrm{y} = \mathrm{g}^{\mathrm{x}}$
- Encryption: $\mathcal{E}_{\mathrm{pk}}(\mathrm{m}; \mathrm{r}) = (\mathrm{g}^{\mathrm{r}}, \mathrm{y}^{\mathrm{r}}\mathrm{m})$
- Decryption: $\mathcal{D}_{\mathrm{x}}(\mathrm{u}, \mathrm{v}) = \mathrm{v}\mathrm{u}^{-\mathrm{x}}$
- Homomorphic:

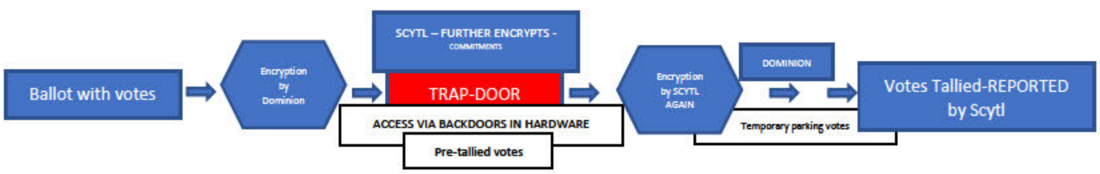
$$\mathcal{E}_{\mathrm{pk}}(\mathrm{m}; \mathrm{r}) \times \mathcal{E}_{\mathrm{pk}}(\mathrm{M}; \mathrm{R}) = \mathcal{E}_{\mathrm{pk}}(\mathrm{mM}; \mathrm{r} + \mathrm{R})$$

- Re-rencryption:

$$\mathcal{E}_{\mathrm{pk}}(\mathrm{m}; \mathrm{r}) \times \mathcal{E}_{\mathrm{pk}}(1; \mathrm{R}) = \mathcal{E}_{\mathrm{pk}}(\mathrm{m}; \mathrm{r} + \mathrm{R})$$

UCL

49. When this mixing/shuffling occurs, then one doesn't have the ability to know that vote coming out on the other end is actually their vote; therefore, ZERO integrity of the votes.
50. When the votes are sent to Scytl via Dominion Software EMS (Election Management System) the Trap Door is accessed by Scytl or TRAP DOOR keys (Commitment Parameters).

51. 

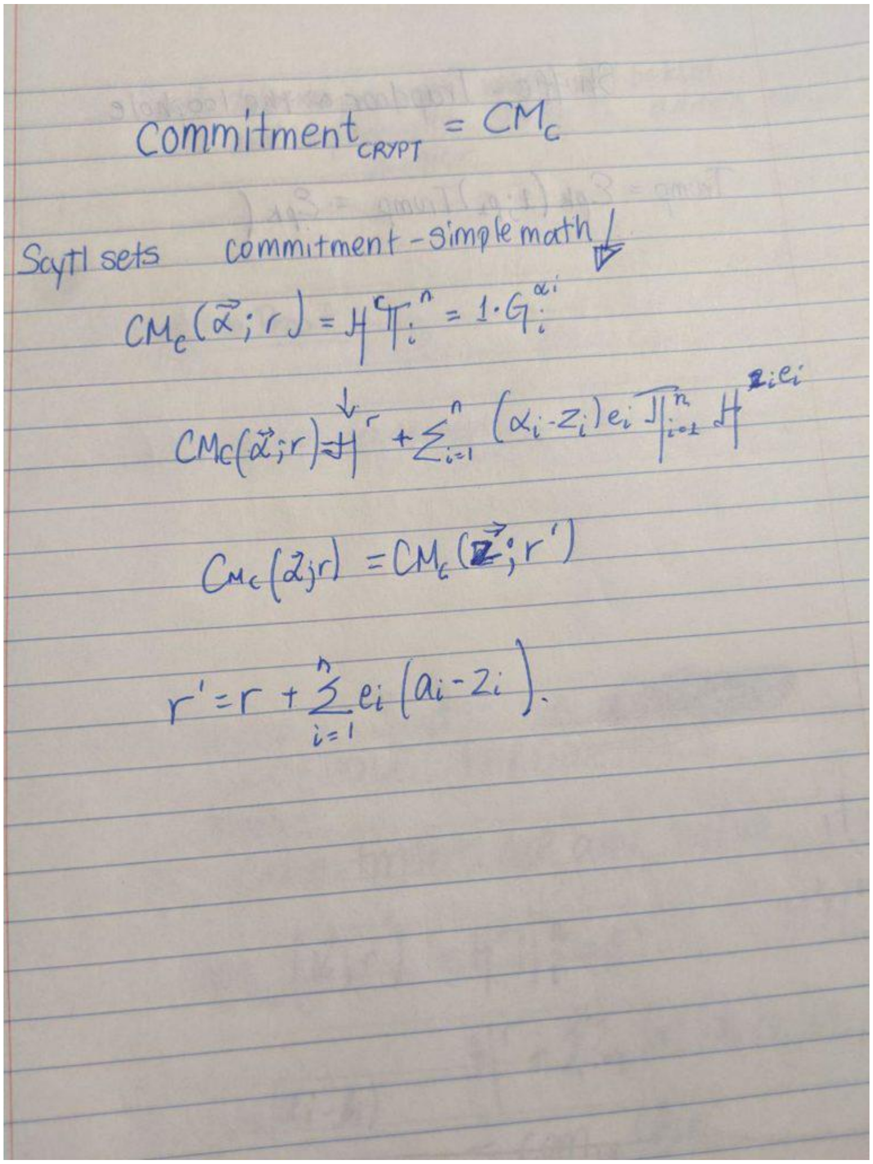
52. The encrypted data is shifted into Scytl's platform in the form of ciphertexts – this means it is encrypted and a key based on commitments is needed to read the data. The ballot data can only be read if the person has a key that is set on commitments.
53. A false sense of security is provided to both parties that votes are not being "REPLACED" during the mixing phase. Basically, Scytl re-encrypts the ballot data that comes in from Dominion (or any other voting software company) as ciphertexts. Scytl is supposed to prove that votes A, B, C are indeed X, Y, Z under their new re-encryption when sending back the votes that are tallied coding them respectively. This is done by Scytl and the Election Software company that agrees to certain

"Generators" and therefore together build "commitments."

```
public CommitmentParams(final ZpSubgroup group, final int n) {
    group = group;
    h = GroupTools.getRandomElement(group);
    commitmentlength = n;
    g = GroupTools.getVectorRandomElement(group,
this.commitmentlength);
    }

    // from getRandomElement(group)
Exponent randomExponent = ExponentTools.getRandomExponent(group.getQ());
return group.getGenerator().exponentiate(randomExponent);
```

54. Scytl and Dominion have an agreement – only the two would know the parameters. This means that access is able to occur through backdoors in hardware if the parameters of the commitments are known in order to alter the range of the algorithm deployed to satisfy the outcome sought in the case of algorithm failure.
55. Trapdoor is a cryptotech term that describes a state of a program that knows the commitment parameters and therefore is able change the value of the commitments however it likes. In other words, Scytl or anyone that knows the commitment parameters can take all the votes and give them to any one they want. If they have a total of 1000 votes an algorithm can distribute them among all races as it deems necessary to achieve the goals it wants. (Case Study: Estonia)

56. 

$\text{Commitment}_{CRYPT} = CM_c$

Scytl sets commitment - simple math

$CM_c(\vec{\alpha}; r) = H^{r} \prod_i^n = 1 \cdot G_i^{\alpha_i}$

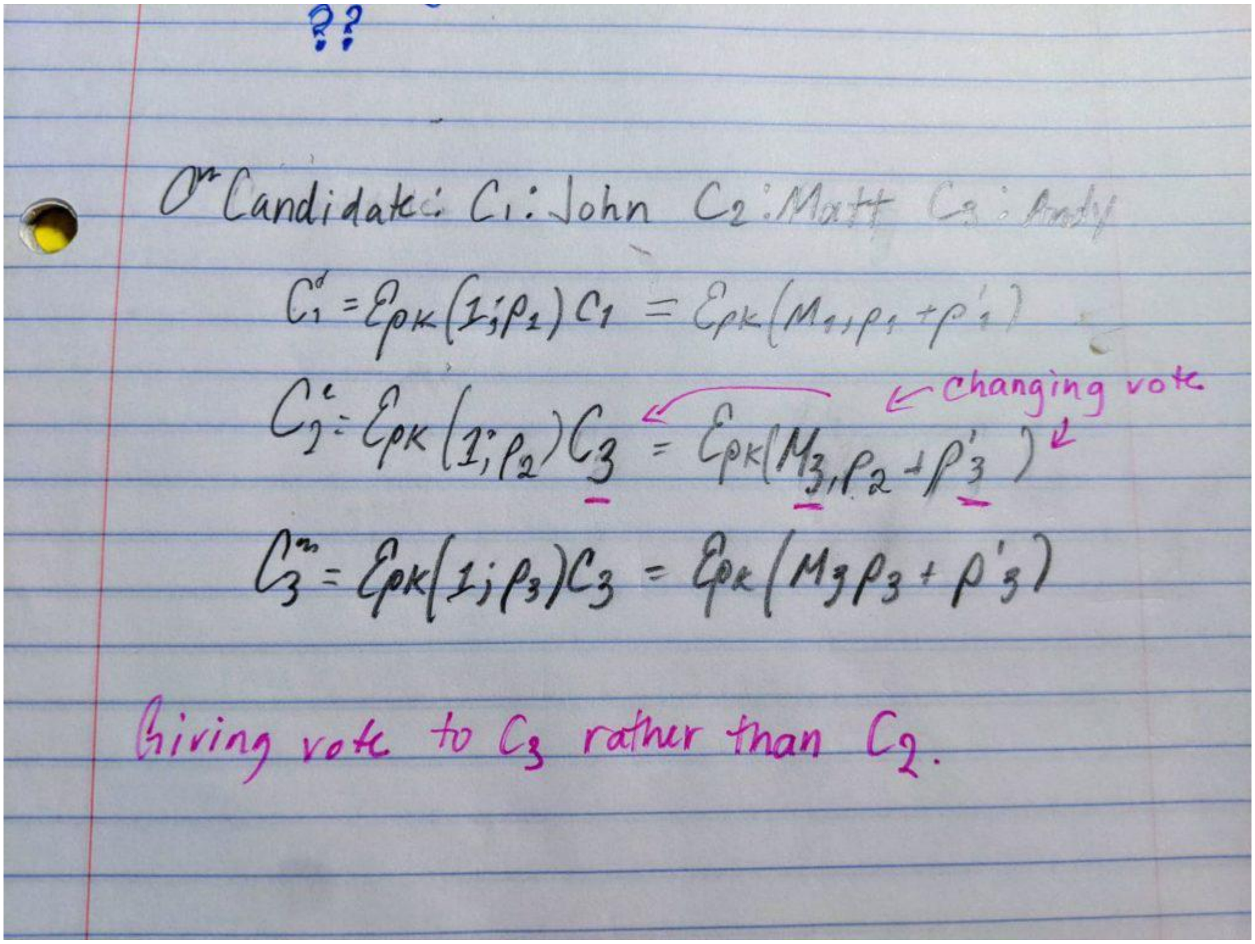
$CM_c(\vec{\alpha}; r) = H^{r} + \sum_{i=1}^{n} (\alpha_i - z_i) e_i \prod_{i=1}^{n} H^{z_i e_i}$

$CM_c(\alpha; r) = CM_c(\vec{z}; r')$

$r' = r + \sum_{i=1}^{n} e_i (a_i - z_i).$

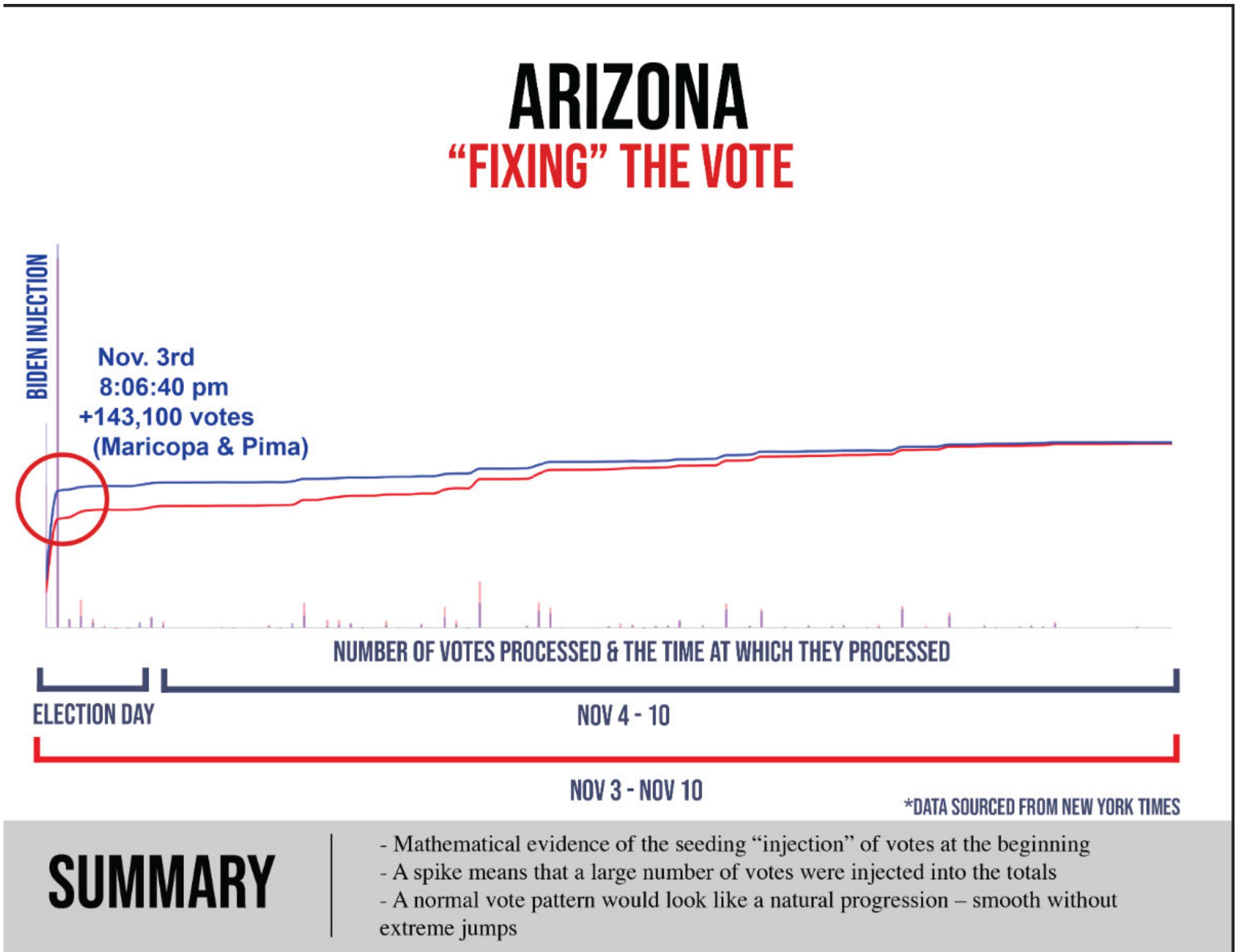
57. Within the trapdoor this is how the algorithm behaves to move the goal posts in elections without being detected by this proof . During the mixing phase this is the algorithm you would use to

"reallocate" votes via an algorithm to achieve the goal set.

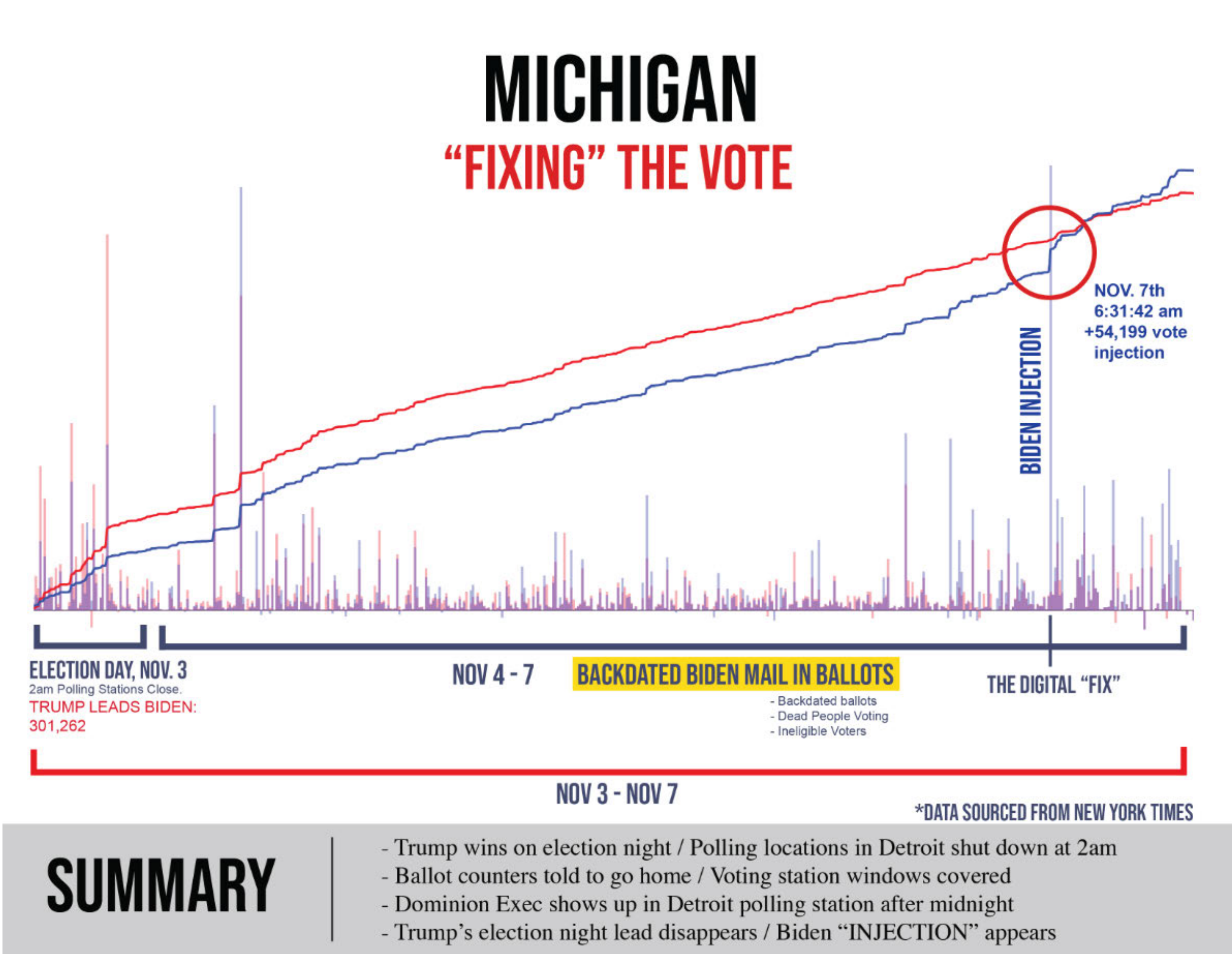


58. STEP 4|Decryption would be the decryption phase and temporary parking of vote tallies before reporting. In this final phase before public release the tallies are released from encrypted format into plain text. As previously explained, those that know the trapdoor can easily change any votes that the randomness is applied and used to generate the tally vote ciphertext. Thus in this case, Scytl who is the mixer can collude with their vote company clients or an agency (-------) to change votes and get away with it. This is because the receiver doesn't have the decryption key so they rely solely on Scytl to be ***honest*** or free from any foreign actors within their backdoor or the Election Company (like Dominion) that can have access to the key.
59. In fact, a study from the University of Bristol made claim that interference can be seen when there is a GREAT DELAY in reporting and finalizing numbers University of Bristol : [How not to Prove Yourself: Pitfalls of the Fiat-Shamir Heuristic and Applications to Helios]
60. "Zero-knowledge proofs of knowledge allow a prover to convince a verifier that she holds information satisfying some desirable properties without revealing anything else." David Bernhard, Olivier Pereira,and Bogdan Warinschi.

61. Hence, you can't prove anyone manipulated anything. The TRAP DOOR KEY HOLDERS can offer you enough to verify to you what you need to see without revealing anything and once again indicating the inability to detect manipulation. **ZERO PROOF of INTEGRITY OF THE VOTE.**
62. Therefore, if decryption is challenged, the administrator or software company that knows the trap door key can provide you proof that would be able to pass verification (blind). This was proven to be factually true in the case study by The University of Melbourne in March. White Hat Hackers purposely altered votes by knowing the parameters set in the commitments and there was no way to prove they did it – or any way to prove they didn't.
63. IT'S THE PERFECT THREE CARD MONTY. That's just how perfect it is. They fake a proof of ciphertexts with KNOWN "RANDOMNESS" .This rolls back to the integrity of the VOTE. The vote is not safe using these machines not only because of the method used for ballot "cleansing" to maintain anonymity but the EXPOSURE to foreign interference and possible domestic bad actors.
64. In many circumstances, manipulation of the algorithm is NOT possible in an undetectable fashion. This is because it is one point heavy. Observing the elections in 2020 confirm the deployment of an algorithm due to the BEHAVIOR which is indicative of an algorithm in play that had no pivoting parameters applied.
65. The behavior of the algorithm is that one point (B) is the greatest point within the allocated set. It is the greatest number within the A B points given. Point A would be the smallest. Any points outside the A B points are not necessarily factored in yet can still be applied.
66. The points outside the parameters can be utilized to a certain to degree such as in block allocation.
67. The algorithm geographically changed the parameters of the algorithm to force blue votes and ostracize red.
68. Post block allocation of votes the two points of the algorithm were narrowed ensuring a BIDEN win hence the observation of NO Trump Votes and some BIDEN votes for a period of time.

69. 
ARIZONA
"FIXING" THE VOTE
BIDEN INJECTION
Nov. 3rd
8:06:40 pm
+143,100 votes
(Maricopa & Pima)
NUMBER OF VOTES PROCESSED & THE TIME AT WHICH THEY PROCESSED
ELECTION DAY
NOV 4 - 10
NOV 3 - NOV 10
*DATA SOURCED FROM NEW YORK TIMES
SUMMARY
- Mathematical evidence of the seeding "injection" of votes at the beginning
- A spike means that a large number of votes were injected into the totals
- A normal vote pattern would look like a natural progression – smooth without extreme jumps

70. Gaussian Elimination without pivoting explains how the algorithm would behave and the election results and data from Michigan confirm FAILURE of algorithm.



71. The "Digital Fix" observed with an increased spike in VOTES for Joe Biden can be determined as evidence of a pivot. Normally it would be assumed that the algorithm had a Complete Pivot. Wilkinson's demonstrated the guarantee as :

$$\frac{\|U\|_\infty}{\|A\|_\infty} \leq n^{\frac{1}{2}\log(n)}$$

72.

73. Such a conjecture allows the growth factor the ability to be upper bound by values closer to n. Therefore, complete pivoting can't be observed because there would be too many floating points. Nor can partial as the partial pivoting would overwhelm after the "injection" of votes. Therefore, external factors were used which is evident from the "DIGITAL FIX"

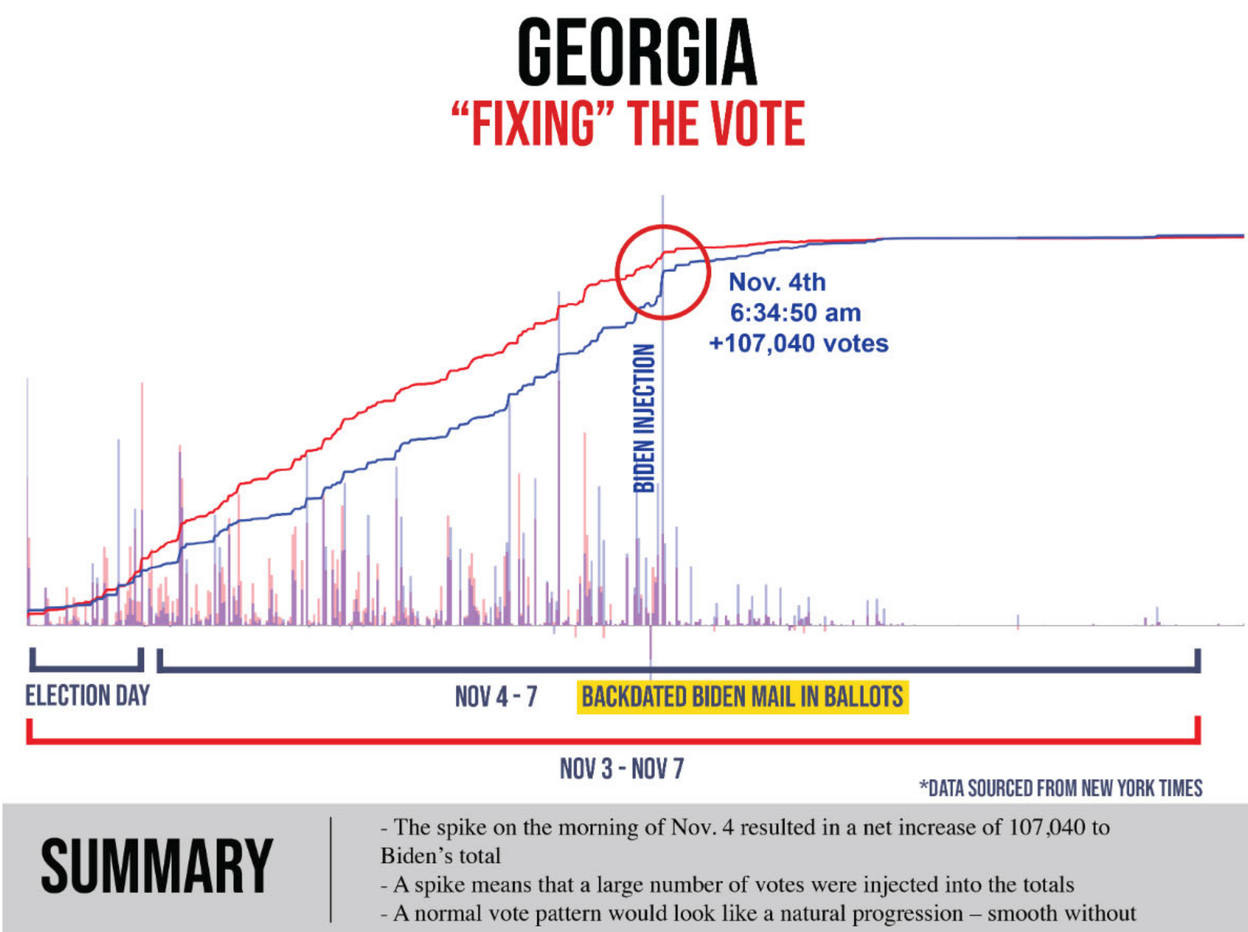
74. Observing the elections, after a review of Michigan's data a spike of 54,199 votes to Biden. Because it is pushing and pulling and keeping a short distance between the 2 candidates; but then a spike, which is how an algorithm presents; - and this spike means there was a pause and an insert was made, where they insert an algorithm. Block spikes in votes for JOE BIDEN were NOT paper

ballots being fed or THUMB DRIVES. The algorithm block adjusted itself and the PEOPLE were creating the evidence to BACK UP the block allocation.

75. I have witnessed the same behavior of the election software in countries outside of the United States and within the United States. In -------, the elections conducted behaved in the same manner by allocating BLOCK votes to the candidate “chosen” to win.

76. Observing the data of the contested states (and others) the algorithm deployed is identical to that which was deployed in 2012 providing Barack Hussein Obama a block allocation to win the 2012 Presidential Elections.

77. The algorithm looks to have been set to give Joe Biden a 52% win even with an initial 50K+ vote block allocation was provided initially as tallying began (as in case of Arizona too). In the am of November 4, 2020 the algorithm stopped working, therefore another “block allocation” to remedy the failure of the algorithm. This was done manually as ALL the SYSTEMS shut down NATIONWIDE to avoid detection.

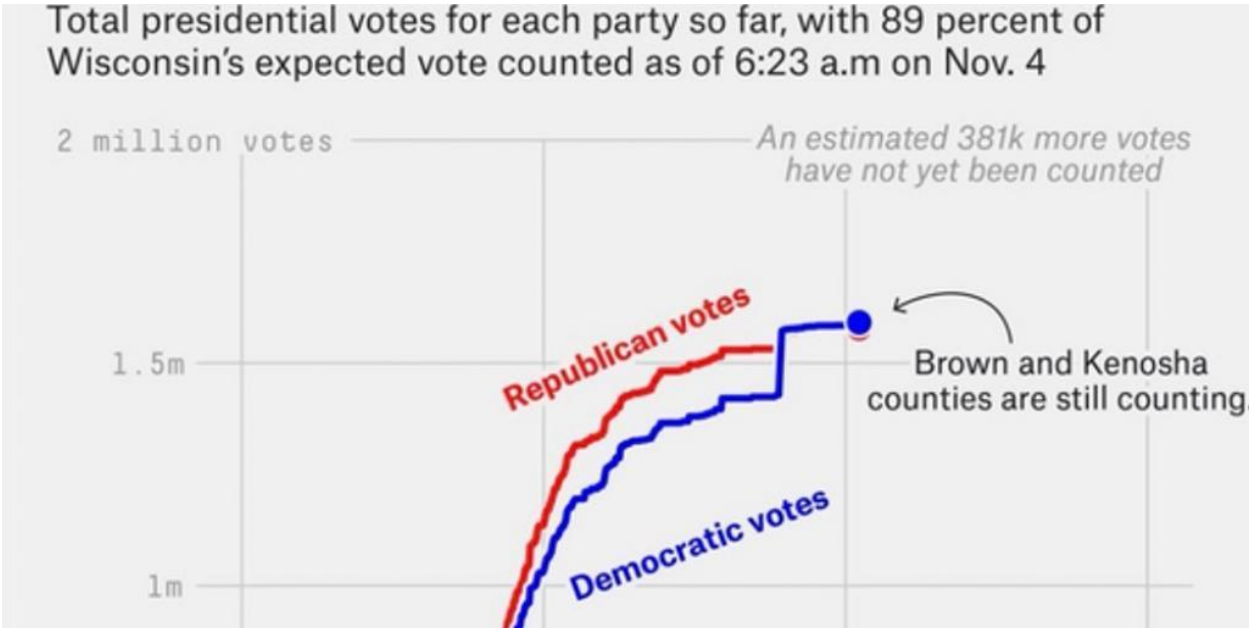


78.

79. In Georgia during the 2016 Presidential Elections a failed attempt to deploy the scripts to block allocate votes from a centralized location where the “trap-door” key lay an attempt by someone using

the DHS servers was detected by the state of GA. The GA leadership assumed that it was "Russians" but later they found out that the IP address was that of DHS.

80. In the state of Wisconsin, we observed a considerable BLOCK vote allocation by the algorithm at the SAME TIME it happened across the nation. All systems shut down at around the same time.

81. 

82. In Wisconsin there are also irregularities in respect to BALLOT requests. (names AND address Hidden for privacy)

83.

F	G	H	V	W	X	Y	AB	AC	AD	AG	AH	AI	AJ	AK	AL
Active	Registered	Military	Brown County	11/01/2020	Online	Military		Official	Active	Not Returned	Online	11/01/2020			
Active	Registered	Regular	Brown County	10/23/2020	Voted in Person	Regular		Official	Active	Returned	Voted In Person	10/23/2020	10/23/2020		
Active	Registered	Military	Brown County	11/01/2020	Online	Military		Official	Active	Not Returned	Online	11/01/2020			
Active	Registered	Regular	Brown County	11/01/2020	Online										
Active	Registered	Regular	Brown County	11/01/2020	Email	Regular		Official	Active	Returned	Mail	10/31/2020	11/02/2020		
Active	Registered	Regular	Brown County	11/01/2020	Email	Regular		Official	Active	Returned	Mail	10/31/2020	11/02/2020		
Active	Registered	Regular	Brown County	11/02/2020	Voted in Person	Regular		Official	Active	Returned	Voted In Person	11/02/2020	11/02/2020		
Active	Registered	Regular	Brown County	11/02/2020	Voted in Person	Regular		Official	Active	Returned	Voted In Person	11/02/2020	11/02/2020		
Active	Registered	Regular	Brown County	11/02/2020	Voted in Person	Regular		Official	Active	Returned	Voted In Person	11/02/2020	11/02/2020		
Active	Registered	Regular	Brown County	11/02/2020	Voted in Person	Regular		Official	Active	Returned	Voted In Person	11/02/2020	11/02/2020		
Active	Registered	Regular	Brown County	11/02/2020	Voted in Person	Regular		Official	Active	Returned	Voted In Person	11/02/2020	11/02/2020		
Active	Registered	Regular	Brown County	11/02/2020	Online										
Active	Registered	Regular	Brown County	11/02/2020	Received In Persor	Hospitaliz		Official	Active	Returned	Appointed Agent	11/02/2020	11/02/2020		
Active	Registered	Regular	Brown County	11/02/2020	Email	Hospitaliz		Official	Active	Returned	Appointed Agent	11/02/2020	11/02/2020		
Active	Registered	Military	Brown County	11/02/2020	Mail										
Active	Registered	Regular	Brown County	11/02/2020	Mail	Regular		Official	Active	Returned	Appointed Agent	11/02/2020	11/02/2020		
Active	Registered	Regular	Brown County	11/02/2020	Mail	Regular		Official	Active	Returned	Appointed Agent		11/02/2020		
Active	Registered	Military	Brown County	11/02/2020	Online	Military		Official	Active	Not Returned	Online	11/02/2020			
Active	Registered	Military	Brown County	11/02/2020	Online	Military		Official	Active	Not Returned	Online	11/02/2020			
Active	Registered	Regular	Brown County	11/02/2020	Online										
Active	Registered	Military	Brown County	11/02/2020	FPCA	Military		Official	Active	Not Returned	Mail	11/02/2020			
Active	Registered	Military	Brown County	11/02/2020	FPCA	Military		Official	Active	Returned	Email	11/02/2020	11/03/2020		
Active	Registered	Regular	Brown County	11/03/2020	Voted in Person	Regular		Official	Inactive	Voter Spoiled	Voted In Person	11/03/2020	11/03/2020		
Active	Registered	Military	Brown County	11/03/2020	Mail	Military	Certification insufficient	Federal Absent	Active	Returned, to be Rejected	Mail	11/03/2020	11/03/2020		
Active	Registered	Military	Brown County	11/03/2020	Mail	Military		Official	Active	Not Returned	Mail	11/03/2020			
Active	Registered	Military	Brown County	11/03/2020	Online										
Active	Registered	Regular	Brown County	11/03/2020	Online										
Active	Registered	Regular	Brown County	11/04/2020	Online										
Active	Registered	Regular	Brown County	11/04/2020	Online										
Active	Registered	Regular	Brown County	11/04/2020	Online										
Active	Registered	Regular	Brown County	11/04/2020	Online										
Active	Registered	Regular	Brown County	11/04/2020	Online										
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Active	Registered	Regular	Brown County	11/04/2020	Online										
Active	Registered	Regular	Brown County	11/04/2020	Online										
Active	Registered	Regular	Brown County	11/04/2020	Online										

84.

Active	Registered	Regular	Brown County	11/03/2020	Online
Active	Registered	Regular	Brown County	11/04/2020	Online
Active	Registered	Regular	Brown County	11/04/2020	Online
Active	Registered	Regular	Brown County	11/04/2020	Online
Active	Registered	Regular	Brown County	11/04/2020	Online
Active	Registered	Regular	Brown County	11/04/2020	Online
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Active	Registered	Regular	Brown County	11/04/2020	Online
Active	Registered	Regular	Brown County	11/05/2020	Online
Active	Registered	Regular	Brown County	11/05/2020	Online
Active	Registered	Regular	Brown County	11/05/2020	Online
Active	Registered	Regular	Brown County	11/05/2020	Online
Active	Registered	Regular	Brown County	11/05/2020	Online
Active	Registered	Regular	Brown County	11/05/2020	Online
Active	Registered	Regular	Brown County	11/05/2020	Online
Active	Registered	Regular	Brown County	11/05/2020	Online
Active	Registered	Regular	Brown County	11/05/2020	Online
Active	Registered	Regular	Brown County	11/06/2020	Online
Active	Registered	Regular	Brown County	11/06/2020	Online

85. I can personally attest that in 2013 discussions by the Obama / Biden administration were being had with various agencies in the deployment of such election software to be deployed in ----- in 2013.
86. On or about April 2013 a one year plan was set to fund and usher elections in -----.
87. Joe Biden was designated by Barack Hussein Obama to ensure the ----- accepted assistance.
88. John Owen Brennan and James (Jim) Clapper were responsible for the ushering of the intelligence surrounding the elections in -----.
89. Under the guise of Crisis support the US Federal Tax Payers funded the deployment of the election software and machines in ------ signing on with Scytl.

The White House

Office of the Press Secretary

For Immediate Release April 21, 2014

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FACT SHEET: U.S. Crisis Support Package for Ukraine

President Obama and Vice President Biden have made U.S. support for Ukraine an urgent priority as the Ukrainian government works to establish security and stability, pursue democratic elections and constitutional reform, revive its economy, and ensure government institutions are transparent and accountable to the Ukrainian people. Ukraine embarks on this reform path in the face of severe challenges to its sovereignty and territorial integrity, which we are working to address together with Ukraine and our partners in the international community. The United States is committed to ensuring that Ukrainians alone are able to determine their country's future without intimidation or coercion from outside forces. To support Ukraine, we are today announcing a new package of assistance totaling **$50 million** to help Ukraine pursue political and economic reform and strengthen the partnership between the United States and Ukraine.

90.

91. Right before the ----- elections it was alleged that CyberBerkut a pro-Russia group infiltrated --- central election computers and **deleted key files**. These actions supposedly rendered the vote-tallying system inoperable.
92. In fact, the KEY FILES were the Commitment keys to allow Scytl to tally the votes rather than the election machines. The group had disclosed emails and other documents proving that their election was rigged and that they tried to avoid a fixed election.
93. The elections were held on May 25, 2014 but in the early AM hours the election results were BLOCKED and the final tally was DELAYED flipping the election in favor of -----.
94. The claim was that there was a DDoS attack by Russians when in actual fact it was a mitigation of the algorithm to inject block votes as we observed was done for Joe Biden because the KEYS were unable to be deployed. In the case of -----, the trap-door key was "altered"/deleted/ rendered ineffective. In the case of the US elections, representatives of Dominion/ ES&S/ Smartmatic/ Hart Intercivic would have to manually deploy them since if the entry points into the systems seemed to have failed.
95. The vote tallying of all states NATIONWIDE stalled and hung for days – as in the case of Alaska that has about 300K registered voters but was stuck at 56% reporting for almost a week.
96. This "hanging" indicates a failed deployment of the scripts to block allocate remotely from one location as observed in ------ on May 26, 2014.
97. This would justify the presence of the election machine software representatives making physical appearances in the states where the election results are currently being contested.
98. A Dominion Executive appeared at the polling center in Detroit after midnight.
99. Considering that the hardware of the machines has NOT been examined in Michigan since 2017 by Pro V& V according to Michigan's own reporting. COTS are an avenue that hackers and bad actors seek to penetrate in order to control operations. Their software updates are the reason vulnerabilities to foreign interference in all operations exist.
100. The importance of VSTLs in underrated to protect up from foreign interference by way of open access via COTS software. Pro V& V who's EAC certification EXPIRED on 24 FEB 2017 was contracted with the state of WISCONSIN.
101. In the United States each state is tasked to conduct and IV& V (Independent Verification and Validation) to provide assurance of the integrity of the votes.
102. If the "accredited" non-federal entities have NOT received EAC accreditation this is a failure of the states to uphold their own states standards that are federally regulated.
103. In addition, if the entities had NIST certificates they are NOT sufficing according the HAVA ACT 2002 as the role of NIST is clear.
104. Curiously, both companies PRO V&V and SLI GAMING received NIST certifications OUTSIDE the 24 month scope.

105. PRO V& V received a NIST certification on 26MAR2020 for ONE YEAR. Normally the NIST certification is good for two years to align with that of EAC certification that is good for two years.

106. 

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200978-0

Pro V&V
Huntsville, AL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Voting System Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2020-03-26 through 2021-03-31
Effective Dates

DEPARTMENT OF COMMERCE • UNITED STATES OF AMERICA

For the National Voluntary Laboratory Accreditation Program

107. The last PRO V& V EAC accreditation certificate (Item 8) of this declaration expired in February 2017 which means that the IV & V conducted by Michigan claiming that they were accredited is false.

108. The significance of VSTLs being accredited and examining the HARDWARE is key. COTS software updates are the avenues of entry.

109. As per DOMINION’S own petition, the modems they use are COTS therefore failure to have an accredited VSTL examine the hardware for points of entry by their software is key.

*Compact Flash Cards	***SanDisk Ultra: SDCFHS-004G SDCFHS-008G RiData: CFC-14A RDF8G-233XMCB2-1 RDF16G-233XMCB2-1 RDF32G-233XMCB2-1 SanDisk Extreme: SDCFX-016G SDCFX-032G SanDisk: SDFAA-008G		Memory device for ICP and ICE tabulators.
*Modems	Verizon USB Modem Pantech UMW190NCD USB Modem MultiTech MT9234MU CellGo Cellular Modem E-Device 3GPUSUS AT&T USB Modem MultiTech GSM MTD-H5 Fax Modem US Robotics 56K V.92.		Analog and wireless modems for transmitting unofficial election night results.

110.

111. For example and update of Verizon USB Modem Pantech undergoes multiple software updates a year for it's hardware. That is most likely the point of entry into the systems.

112. During the 2014 elections in ---- it was the modems that gave access to the systems where the commitment keys were deleted.

113. SLI Gaming is the other VSTL "accredited" by the EAC BUT there is no record of their accreditation. In fact, SLI was NIST ISO Certified 27 days before the election which means that PA IV&V was conducted without NIST cert for SLI being valid.

114. 
United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200733-0

SLI Compliance
Wheat Ridge, CO

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Voting System Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2020-10-07 through 2020-12-31
Effective Dates

DEPARTMENT OF COMMERCE · UNITED STATES OF AMERICA

For the National Voluntary Laboratory Accreditation Program

115. In fact SLI was NIST ISO Certified for less than 90 days.

116. I can personally attest that high-level officials of the Obama/Biden administration and large private contracting firms met with a software company called GEMS which is ultimately the software ALL election machines run now running under the flag of DOMINION.

117. GEMS was manifested from SOE software purchased by SCYTL developers and US Federally Funded persons to develop it.

118. The only way GEMS can be deployed across ALL machines is IF all counties across the nation are housed under the same server networks.

119. GEMS was tasked in 2009 to a contractor in Tampa, Fl.

120. GEMS was also fine-tuned in Latvia, Belarus, Serbia and Spain to be localized for EU deployment as observed during the Swissport election debacle.

121. John McCain's campaign assisted in FUNDING the development of GEMS web monitoring via WEB Services with 3EDC and Dynology.

Image# 13941014755

SCHEDULE B–P
ITEMIZED DISBURSEMENTS

Use separate schedule(s) for each category of the Detailed Summary Page

FOR LINE NUMBER: (check only one)
[X] 23 [ ] 24 [ ] 25 [ ] 26 [ ] 27a
[ ] 27b [ ] 28a [ ] 28b [ ] 28c [ ] 29

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NAME OF COMMITTEE (In Full)
JOHN MCCAIN 2008, INC.

A. Full Name (Last, First, Middle Initial): 3EDC LLC
Mailing Address: 211 NORTH UNION ST STE 200
City: ALEXANDRIA State: VA Zip Code: 22314
Purpose of Disbursement: WEB SERVICE
Candidate Name:
Category/Type:
Office Sought: [ ] House [ ] Senate [ ] President
State: District:
Disbursement For: 2008 [X] Primary [ ] General [ ] Other (specify)
Date of Disbursement: 03 / 17 / 2008
Transaction ID : SB23.10515
Amount of Each Disbursement this Period: 399916.09

B. Full Name (Last, First, Middle Initial): A FARE EXTRAORDINAIRE
Mailing Address: 2035 MARSHALL
City: HOUSTON State: TX Zip Code: 77098
Purpose of Disbursement: FACILITY RENTAL/CATERING
Candidate Name:
Category/Type:
Office Sought: [ ] House [ ] Senate [ ] President
State: District:
Disbursement For: 2008 [X] Primary [ ] General [ ] Other (specify)
Date of Disbursement: 03 / 17 / 2008
Transaction ID : SB23.10049
Amount of Each Disbursement this Period: 23697.69

C. Full Name (Last, First, Middle Initial): ADMINISTAFF
Mailing Address: PO BOX 203332
City: HOUSTON State: TX Zip Code: 77216
Purpose of Disbursement: INSURANCE
Candidate Name:
Category/Type:
Office Sought: [ ] House [ ] Senate [ ] President
State: District:
Disbursement For: 2008 [X] Primary [ ] General [ ] Other (specify)
Date of Disbursement: 03 / 05 / 2008
Transaction ID : SB23.10117
Amount of Each Disbursement this Period: 483.68

Subtotal Of Receipts This Page (optional) 424097.46

Total This Period (last page this line number only)) ....

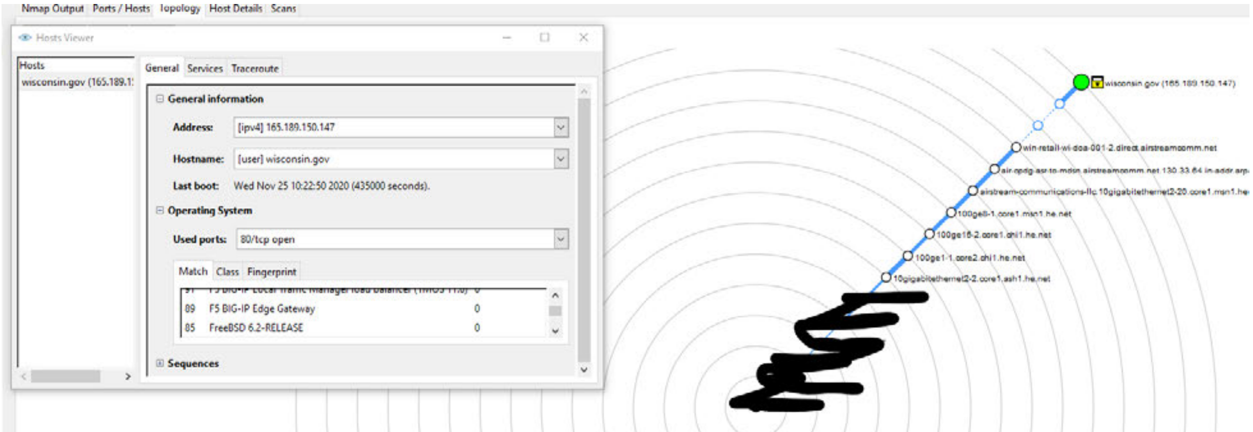
122.

123.

124. AKAMAI Technologies services SCYTL.

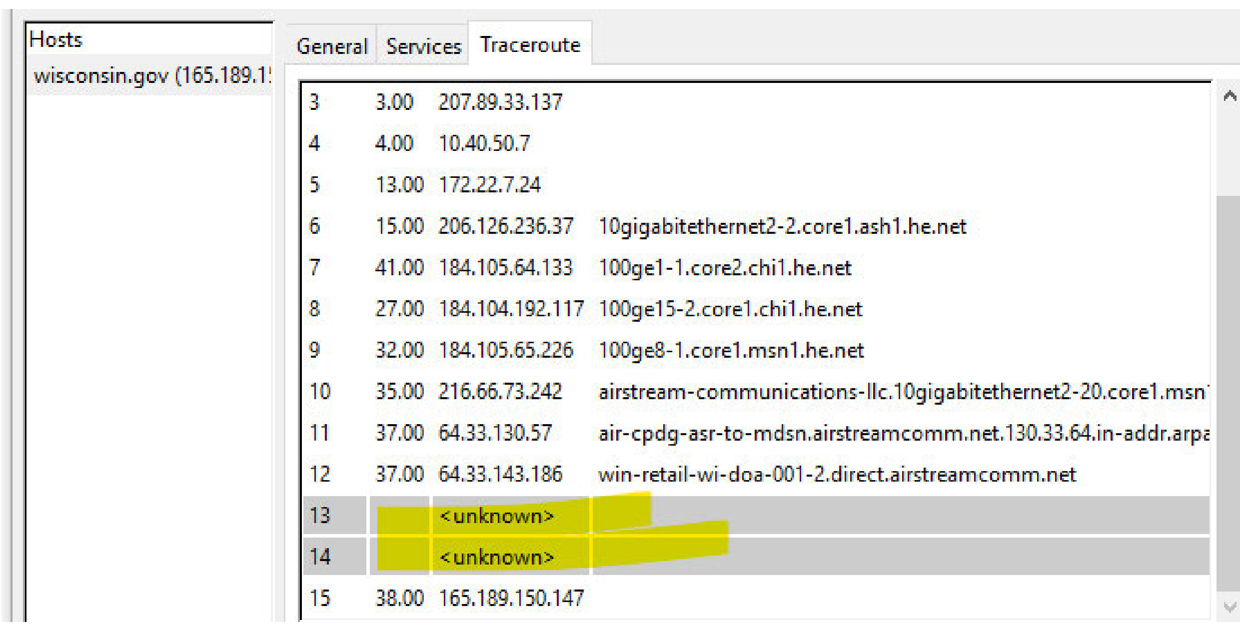
125. AKAMAI Technologies Houses ALL foreign government sites. (Please see White Paper by Akamai.)

126. AKAMAI Technologies houses ALL .gov state sites. (ref Item 123 Wisconsin.gov Example)

127. 

128. Wisconsin has EDGE GATEWAY port which is AKAMAI TECHNOLOGIES based out of GERMANY.

129. Using AKAMAI Technologies is allowing .gov sites to obfuscate and mask their systems by way of HURRICANE ELECTRIC (he.net) Kicking it to anonymous (AKAMAI Technologies) offshore servers.

130. 

131. AKAMAI Technologies has locations around the world.

132. AKAMAI Technologies has locations in China (ref item 22)

133. AKAMAI Technologies has locations in Iran as of 2019.

134. AKAMAI Technologies merged with UNICOM (CHINESE TELECOMM) in 2018.

135. AKAMAI Technologies house all state .gov information in GERMANY via TELIA AB.

136. In my professional opinion, this affidavit presents unambiguous evidence:

137. That there was Foreign interference, complicit behavior by the previous administrations from 1999 up until today to hinder the voice of the people and US persons knowingly and willingly colluding with foreign powers to steer our 2020 elections that can be named in a classified setting.

138. Foreign interference is present in the 2020 election in various means namely,

139. Foreign nationals assisted in the creation of GEMS (Dominion Software Foundation)

140. Akamai Technologies merged with a Chinese company that makes the COTS components of the election machines providing access to our electronic voting machines.

141. Foreign investments and interests in the creation of the GEMS software.

142. US persons holding an office and private individuals knowingly and willingly oversaw fail safes to secure our elections.

143. The EAC failed to abide by standards set in HAVA ACT 2002.

144. The IG of the EAC failed to address complaints since their appointment regarding vote integrity

145. Christy McCormick of the EAC failed to ensure that EAC conducted their duties as set forth by HAVA ACT 2002

146. Both Patricia Layfield (IG of EAC) and Christy McCormick (Chairwoman of EAC) were appointed by Barack Hussein Obama and have maintained their positions since then.

147. The EAC failed to have a quorum for over a calendar year leading to the inability to meet the standards of the EAC.

148. AKAMAI Technologies and Hurricane Electric raise serious concerns for NATSEC due to their ties with foreign hostile nations.

149. For all the reasons above a complete failure of duty to provide safe and just elections are observed.

150. For the people of the United States to have confidence in their elections our cybersecurity standards should not be in the hands of foreign nations.

151. Those responsible within the Intelligence Community directly and indirectly by way of procurement of services should be held accountable for assisting in the development, implementation and promotion of GEMS.

152. GEMS ------- General Hayden.

153. In my opinion and from the data and events I have observed -------------------- with the assistance of SHADOWNET under the guise of L3-Communications which is MPRI. This is also confirmed by us.army.mil making the statement that shadownet has been deployed to 30 states which all

happen to be using Dominion Machines.

FAIRFAX, Va. -The Virginia National Guard's Bowling Green-based 91st Cyber Brigade completed the nationwide rollout of its ShadowNet enterprise solution July 19, 2019, with the integration of the 125th Cyber Protection Battalion into the solution's virtual private network. ShadowNet is a custom-built private cloud-based out of the brigade's data center in Fairfax, Virginia, that uses VPN connectivity to provide its aligned units with 24-hour, seven-days-a-week remote access to critical cyber training at both the collective and individual levels. The brigade successfully integrated its three other cyber protection battalions - the 123rd, 124th, and 126th Cyber Protection Battalions - into the ShadowNet platform last January.

"I'm extremely proud to announce that the Soldiers of the 91st Cyber Brigade have completed the construction and rollout of ShadowNet, a world-class enterprise solution designed to propel operational innovation in the field of cyber training," said Col. Adam C. Volant, commander of the 91st Cyber Brigade. "ShadowNet will allow us to leverage the expertise of cyber professionals across our four cyber protection battalions to build Soldier-centric programs and collective training environments that deliver breakthroughs in exercise complexity and cost-efficiency. Its robust

OCTOBER 26, 2020
U.S. Army STAND-TO! | Army Readines Training

SEPTEMBER 12, 2019
September 2017 Nominative Sergeants Major Assignments

SEPTEMBER 12, 2019
DA ANNOUNCES ROTATIONAL DEPLOYMENTS

154. Based on my research of voter data – it appears that there are approximately 23,000 residents of a Department of Corrections Prison with requests for absentee ballot in Wisconsin. We are currently reviewing and verifying the data and will supplement.

	23230	Gutierrez	Mary	Jane		(262)994-9050	
23231	23231	Hansen	Luann	M		(262)994-9050	
23232	23232	Neberman	John	C		(262)994-9050	
23233	23233	Reynolds	Devi	J		(262)994-9050	
23234	23234	Rieckhoff	Kathryn	Susan		(262)994-9050	
23235	23235	Edwards	Mark	Landon		(262)994-9050	
23236	23236	Pfeiffer	Joseph	Patrick		(262)994-9050	
23237	23237	Hines	Dianna	K		(262)994-9050	
23238	23238	Beachem	Janice	F		(262)994-9050	
23239	23239	Blackstone	Thomas	Wayne		(262)994-9050	
23240	23240	Braun	Patricia	Ann		(262)994-9050	
23241	23241	Smith	Raymond	L		(262)994-9050	
23242	23242	Meyer	Steven	R		(262)994-9050	
23243	23243	Vincent	Herbert			(262)994-9050	
23244	23244	Guajardo	Juan	P		(262)994-9050	
23245	23245	Wallace	Kirk	R		(262)994-9050	
23246	23246	Kaplan	Bernard	L		(262)994-9050	
23247	23247	Bahrs	Michelle	M		(262)994-9050	
23248	23248	Shattuck	Elizabeth	L		(262)994-9050	
23249	23249	Munoz	Rosalio	S	JR	(262)994-9050	
23250	23250	Strunk	Amy	C		(262)994-9050	
23251	23251	Schendel	Michael	P	JR	(262)994-9050	
23252	23252	Mack	Kimberly	N		(262)994-9050	
23253	23253	Spikes	Debra	A		(262)994-9050	
23254	23254	Busarow	Suzanne	M		(262)994-9050	
23255	23255	Oliver	Timmy			(262)994-9050	
23256	23256	Wember	Jimmy	Dean		(262)994-9050	
23257	23257	Kosterman	Michael	Richard		(262)994-9050	
23258	23258	Szaradowski	Paul	M		(262)994-9050	
23259	23259	Oliver	Dale			(262)994-9050	
23260	23260	Derango	Nancy			(262)994-9050	
23261	23261	Smith	Arthur	J		(262)994-9050	SMITH24.3059@YAHOO
23262	23262	Brown	Michael	Edward		(262)994-9050	

155.

I declare under penalty of perjury that the forgoing is true and correct to the best of my knowledge.
Executed this November 29th, 2020.

[redacted]

[redacted]

DECLARATION OF RONALD WATKINS

I, Ronald Watkins, hereby state the following:

1. My name is Ronald Watkins. I am a United States citizen currently residing in Japan.

2. I am an adult of sound mind. All statements in this declaration are based on my personal knowledge and are true and correct. I am making this statement voluntarily and on my own initiative. I have not been promised, nor do I expect to receive, anything in exchange for my testimony and giving this statement. I have no expectation of any profit or reward and understand that there are those who may seek to harm me for what I say in this statement.

3. I make this declaration because I want to alert the public and let the world know the truth about the insecurity of actual voting tabulation software used in various states for administering the 2020 Presidential and other elections. The software is designed, whether with malicious intent or through plain incompetence, in such a way so as to facilitate digital ballot stuffing via simple vote result manipulation and abuse of the digital adjudication manual review system. Specifically, the Dominion Democracy Suite both enables voter fraud by unethical officials out to undermine the will of the people and facilitates tabulation errors by honest officials making simple, nearly untraceable mistakes.

4. I believe voting is a fundamental manifestation of our right to self-government, including our right to free speech. Under no circumstance should we allow a conspiracy of people and companies to subvert and destroy our most sacred rights.

5. I am a network and information security expert with nine years of experience as a network and information defense analyst and a network security engineer. In my nine years of network and information security experience, I have successfully defended large websites and complex networks against powerful cyberattacks. I have engaged in extensive training and education and learned through experience how to secure websites and networks.

6. In preparation for making this declaration, I have reviewed extensive technical materials relating to the Dominion Voting Democracy Suite, including those cited herein.

7. The Dominion Voting Systems ImageCast Central system is a software and hardware workstation system designed to work with just a common "Windows 10 Pro"[1][2] computer

[1] Dominion Voting, *Democracy Suite®ImageCast® Central User Guide*, p3, [online document], https://www.sos.state.co.us/pubs/elections/VotingSystems/DVS-documentation/UG-ICC-UserGuide-5-11-CO.pdf (Accessed November 23, 2020) https://web.archive.org/web/20201019175854/https://www.sos.state.co.us/pubs/elections/VotingSystems/DVS-DemocracySuite511/documentation/UG-ICC-UserGuide- 5-11-CO.pdf [archive]

[2] Georgia State Certification Testing, Dominion Voting Systems D-Suite 5.5-A Voting System, p5, table 2-1, [online document] https://sos.ga.gov/admin/uploads/Dominion_Test_Cert_Report.pdf (accessed November, 23,

paired via data cable[3] to an off- the-shelf document scanner[4] "for high speed scanning and counting of paper ballots."[5]

8. When bulk ballot scanning and tabulation begins, the "ImageCast Central" workstation operator will load a batch of ballots into the scanner feed tray and then start the scanning procedure within the software menu.[6] The scanner then begins to scan the ballots which were loaded into the feed tray while the "ImageCast Central" software application

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2020), https://web.archive.org/web/20201106055006/https://sos.ga.gov/admin/uploads/Dominion_Test_Cert_Report.pdf [archive].

[3] Dominion Voting, *Democracy Suite®ImageCast® Central User Guide*, p2, s2.1, [online document, https://www.sos.state.co.us/pubs/elections/VotingSystems/DVS-DemocracySuite511/documentation/UG-ICC-UserGuide-5-11-CO.pdf (Accessed November 23, 2020) https://web.archive.org/web/20201019175854/https://www.sos.state.co.us/pubs/elections/VotingSystems/DVS-DemocracySuite511/documentation/UG-ICC-UserGuide- 5-11-CO.pdf [archive].

[4] Michigan.gov, DOMINION VOTING SYSTEMS CONTRACT No. 071B7700117, p6, 1.1.E.1, [online document], https://www.michigan.gov/documents/sos/071B7700117_Dominion_Exhibit_2_to_Sch_A_Tech_Req_555357_7.pdf (accessed November 23, 2020), https://web.archive.org/web/20201115084004/https://www.michigan.gov/documents/sos/071B7700117_Dominion_Exhibit_2_to_Sch_A_Tech_Req_555357_7.pdf [archive]

[5] Commonwealth of Pennsylvania Department of State, Report Concerning the Examination Results of Dominion Voting Systems Democracy Suite 5.5A p6, s2.4, [online document], https://www.dos.pa.gov/VotingElections/Documents/Voting%20Systems/Dominion%20Democracy%20Suite%205.5-A/Dominion%20Democracy%20Suite%20Final%20Report%20scanned%20with%20signature%20011819.pdf (accessed November 23, 2020), https://web.archive.org/web/20201016161321/https://www.dos.pa.gov/VotingElections/Documents/Voting%20Systems/Dominion%20Democracy%20Suite%205.5-A/Dominion%20Democracy%20Suite%20Final%20Report%20scanned%20with%20signature%20011819.pdf [archive]

[6] Dominion Voting, ImageCast Central, p2, [online document], https://www.edcgov.us/Government/Elections/Documents/ImageCast%20Central%20Brochure%202018%20FINAL.pdf (accessed November 23, 2020) https://web.archive.org/web/20201017175507/https://www.edcgov.us/Government/Elections/Documents/ImageCast%20Central%20Brochure%202018%20FINAL.pdf [archive]

tabulates votes in real-time. Information about scanned ballots can be tracked inside the "ImageCast Central" software application.[7]

9. After all of the ballots loaded into the scanner's feed tray have been through the scanner, the "ImageCast Central" operator will remove the ballots from the tray and then will have the option to "Accept Batch" on the scanning menu.[8] Accepting the batch saves the results into the local file system within the "Windows 10 Pro" machine.[9] Any "problem ballots" that may need to be examined or adjudicated at a later time can be found as ballot scans saved as image files into a standard Windows folder named "NotCastImages".[10] These "problem ballots" are automatically detected during the scanning phase and digitally set aside for manual review based on exception criteria.[11] Examples of exceptions may include: overvotes, undervotes, blank contests, blank ballots, write-in selections, and marginal

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[7] Dominion Voting, Democracy Suite®ImageCast® Central User Guide, p25, s4.1.2, [online document], https://www.sos.state.co.us/pubs/elections/VotingSystems/DVS-DemocracySuite511/documentation/UG-ICC-UserGuide-5-11-CO.pdf (Accessed November 23, 2020), https://web.archive.org/web/20201019175854/https://www.sos.state.co.us/pubs/elections/VotingSystems/DVS-DemocracySuite511/documentation/UG-ICC-UserGuide- 5-11-CO.pdf [archive].

[8] Dominion Voting, ImageCast Central, [website], https://www.dominionvoting.com/imagecast-central/ (Accessed November 23, 2020) https://web.archive.org/web/20201101203418/https://www.dominionvoting.com/imagecast-central/ [archive].

[9] Dominion Voting, Democracy Suite®ImageCast® Central User Guide, p25, s4.1.2, [online document], https://www.sos.state.co.us/pubs/elections/VotingSystems/DVS-DemocracySuite511/documentation/UG-ICC-UserGuide-5-11-CO.pdf (Accessed November 23, 2020), https://web.archive.org/web/20201019175854/https://www.sos.state.co.us/pubs/elections/VotingSystems/DVS-DemocracySuite511/documentation/UG-ICC-UserGuide- 5-11-CO.pdf [archive].

[10] Dominion Voting, Democracy Suite®ImageCast® Central User Guide, p25, s4.1.2, [online document], https://www.sos.state.co.us/pubs/elections/VotingSystems/DVS-DemocracySuite511/documentation/UG-ICC-UserGuide-5-11-CO.pdf (Accessed November 23, 2020), https://web.archive.org/web/20201019175854/https://www.sos.state.co.us/pubs/elections/VotingSystems/DVS-DemocracySuite511/documentation/UG-ICC-UserGuide- 5-11-CO.pdf [archive].

[11] Michigan.gov, DOMINION VOTING SYSTEMS CONTRACT No. 071B7700117, p21, 1.3.B.6, [online document], https://www.michigan.gov/documents/sos/071B7700117_Dominion_Exhibit_2_to_Sch_A_Tech_Req_555357_7.pdf (accessed November 23, 2020), https://web.archive.org/web/20201115084004/https://www.michigan.gov/documents/sos/071B7700117_Dominion_Exhibit_2_to_Sch_A_Tech_Req_555357_7.pdf [archive].

marks."[12] Customizable outstack conditions and marginal mark detection lets [Dominion's Customers] decide which ballots are sent for Adjudication.[13]

10. During the ballot scanning process, the "ImageCast Central" software will detect how much of a percent coverage of the oval was filled in by the voter.[14] The Dominion customer determines the thresholds of which the oval needs to be covered by a mark in order to qualify as a valid vote.[15][16] If a ballot has a marginal mark which did not meet the specific thresholds set by the customer, then the ballot is considered a "problem ballot" and may be set aside into a folder named "NotCastImages."[17] "The ImageCast Central's advanced

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[12] [11] MASTER SOLUTION PURCHASE AND SERVICES AGREEMENT BY AND BETWEEN DOMINION VOTING SYSTEMS, INC. as Contractor, and SECRETARY OF STATE OF THE STATE OF GEORGIA as State, p52, s1.3, [online document], https://georgiaelections.weebly.com/uploads/1/0/8/5/108591015/contract.pdf (Accessed November 23, 2020), https://web.archive.org/web/20201122213728/https://georgiaelections.weebly.com/uploads/1/0/8/5/108591015/contract.pdf [archive].

[13] Dominion Voting, ImageCast Central, [website], https://www.dominionvoting.com/imagecast-central/ (Accessed November 23, 2020) https://web.archive.org/web/20201101203418/https://www.dominionvoting.com/imagecast-central/ [archive].

[14] Michigan.gov, DOMINION VOTING SYSTEMS CONTRACT No. 071B7700117, p3, 1.1.A.22, [online document], https://www.michigan.gov/documents/sos/071B7700117_Dominion_Exhibit_2_to_Sch_A_Tech_Req_555357_7.pdf (accessed November 23, 2020), https://web.archive.org/web/20201115084004/https://www.michigan.gov/documents/sos/071B7700117_Dominion_Exhibit_2_to_Sch_A_Tech_Req_555357_7.pdf [archive].

[15] Calhoun County, MI, ImageCast Central (ICC) 5.5 Operations, p19, [online document], https://cms5.revize.com/revize/calhouncountymi/Clerk%20&%20Register%20of%20Deeds/local%20clerk%20resources/5_5_icc_operations_manual.pdf (accessed November 23, 2020), https://web.archive.org/web/20200802003507/https://cms5.revize.com/revize/calhouncountymi/Clerk%20&%20Register%20of%20Deeds/local%20clerk%20resources/5_5_icc_operations_manual.pdf [archive].

[16] IMAGECAST® CENTRAL Brochure, [website], https://www.edcgov.us/Government/Elections/Documents/ImageCast%20Central%20Brochure%202018%20FINAL.pdf (accessed November 23, 2020), https://web.archive.org/web/20201017175507/https://www.edcgov.us/Government/Elections/Documents/ImageCast%20Central%20Brochure%202018%20FINAL.pdf [archive].

[17] Dominion Voting, Democracy Suite®ImageCast® Central User Guide, p25, s4.1.2, [online document], https://www.sos.state.co.us/pubs/elections/VotingSystems/DVS-DemocracySuite511/documentation/UG-ICC-UserGuide-5-11-CO.pdf (Accessed November 23, 2020), https://web.archive.org/web/20201019175854/https://www.sos.state.co.us/pubs/

settings allow for adjustment of the scanning properties to "[set] the clarity levels at which the ballot should be scanned at." Levels can be set as a combination of brightness and contrast values, or as a gamma value."[18]

11. Based on my review of these materials, I conclude the system is designed in such a way that it allows a dishonest or otherwise unethical election administrator to creatively tweak the oval coverage threshold settings and advanced settings on the ImageCast Central scanners to set thresholds in such a way that a non-trivial amount of properly-marked ballots are marked as "problem ballots" and sent to the "NotCastImages" folder.

12. The administrator of the ImageCast Central work-station may view all images of scanned ballots which were deemed "problem ballots" by simply navigating via the standard "Windows File Explorer" to the folder named "NotCastImages" which holds ballot scans of "problem ballots."[19][20] Under this system, it is possible for an administrator of the "ImageCast Central" workstation to view and delete any individual ballot scans from the "NotCastImages" folder by simply using the standard Windows delete and recycle bin functions provided by the Windows 10 Pro operating system. Adjudication is "the process of examining voted ballots to determine, and, in the judicial sense, adjudicate voter intent."[21]

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elections/VotingSystems/DVS-DemocracySuite511/documentation/UG-ICC-UserGuide- 5-11-CO.pdf [archive].

[18] Dominion Voting, Democracy Suite®ImageCast® Central User Guide, pp20-21, s3.22, [online document], https://www.sos.state.co.us/pubs/elections/VotingSystems/DVS-DemocracySuite511/documentation/UG-ICC-UserGuide-5-11-CO.pdf (Accessed November 23, 2020), https://web.archive.org/web/20201019175854/https://www.sos.state.co.us/pubs/elections/VotingSystems/DVS-DemocracySuite511/documentation/UG-ICC-UserGuide- 5-11-CO.pdf [archive].

[19] Dominion Voting, Democracy Suite® Use Procedures, p433, F.3.11, [online document] https://votingsystems.cdn.sos.ca.gov/vendors/dominion/ds510-use-proc-jan.pdf (Accessed November 23, 2020),
https://web.archive.org/web/20201101173723/https://votingsystems.cdn.sos.ca.gov/vendors/dominion/ds510-use-proc-jan.pdf [archive].

[20] Calhoun County, MI, ImageCast Central (ICC) 5.5 Operations, p27, [online document], https://cms5.revize.com/revize/calhouncountymi/Clerk%20&%20Register%20of%20Deeds/local%20clerk%20resources/5_5_icc_operations_manual.pdf (accessed November 23, 2020), https://web.archive.org/web/20200802003507/https://cms5.revize.com/revize/calhouncountymi/Clerk%20&%20Register%20of%20Deeds/local%20clerk%20resources/5_5_icc_operations_manual.pdf [archive].

[21] Dominion Voting, Democracy Suite® Use Procedures, p9, [online document] https://votingsystems.cdn.sos.ca.gov/vendors/dominion/ds510-use-proc-jan.pdf (Accessed November 23, 2020),

13. Based on my review of these materials, I conclude that a biased poll worker without sufficient and honest oversight could abuse the adjudication system to fraudulently switch votes for a specific candidate.

14. After the tabulation process, the ImageCast Central software saves a copy of the tabulation results locally to the “Windows 10 Pro” machine's internal storage. The results data is located in an easy-to-find path which is designed to easily facilitate the uploading of tabulation results to flash memory cards. The upload process is just a simple copying of a “Results” folder containing vote tallies to a flash memory card connected to the “Windows 10 Pro” machine. The copy process uses the standard drag-and-drop or copy/paste mechanisms within “Windows File Explorer.”[22] It is my conclusion that while this is a simple procedure, the report results process is subject to user errors and is very vulnerable to corrupt manipulation by a malicious administrator. It is my conclusion that, before delivering final tabulation results to the county, it is possible for an administrator to mistakenly copy the wrong “Results” folder or even maliciously copy a false “Results” folder, which could contain a manipulated data set, to the flash memory card and deliver those false “Results” as the outcome of the election.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed in Japan on November 24, 2020.

Ronald Watkins

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https://web.archive.org/web/20201101173723/https://votingsystems.cdn.sos.ca.gov/vendors/dominion/ds510-use-proc-jan.pdf [archive].

[22] Calhoun County, MI, ImageCast Central (ICC) 5.5 Operations, pp25-28, [online document], https://cms5.revize.com/revize/calhouncountymi/Clerk%20&%20Register%20of%20Deeds/local%20clerk%20resources/5_5_icc_operations_manual.pdf (accessed November 23, 2020),https://web.archive.org/web/20200802003507/https://cms5.revize.com/revize/calhouncountymi/Clerk%20&%20Register%20of%20Deeds/local%20clerk%20resources/5_5_icc_operations_manual.pdf [archive].

Congress of the United States

Washington, DC 20515

October 6, 2006

Henry M. Paulson, Jr.
Secretary
Department of the Treasury
1500 Pennsylvania Ave., N.W.
Washington, D.C. 20220

Dear Mr. Secretary:

I am writing to follow up on my letter of May 4, 2006, to Secretary Snow, seeking review by the Committee on Foreign Investment in the United States of the acquisition of Sequoia Voting Systems by Smartmatic, a foreign-owned company. I believe this transaction raises exactly the sort of foreign ownership issues that CFIUS is best positioned to examine for national security concerns. As discussed below, publicly reported information about Smartmatic's ownership and about the vulnerability of electronic voting machines to tampering raises serious concerns. I strongly urge CFIUS to independently verify the information provided to American officials and the public by Sequoia/Smartmatic, and to take all appropriate measures to safeguard our national security.

It is undisputed that Smartmatic is foreign-owned and it has acquired Sequoia, one of the three major voting machine companies doing business in the U.S. According to a Sequoia press release in May 2006 (copy attached) Sequoia voting machines were used to record over 125 million votes during the 2004 Presidential election in the United States. As we confront another election, Americans deserve to know that the Administration has made sure that any foreign ownership of voting machines poses no national security threat.

Although many press reports have tried, it appears that it is not possible to discern the true owners of Smartmatic from information available to the public. Smartmatic now acknowledges that Antonio Mugica, a Venezuelan businessman, has a controlling interest in Smartmatic, but the company has not revealed who all the other Smartmatic owners are. According to the press, Smartmatic's owners are hidden through a web of off-shore private entities. (See attached articles.)

The opaque nature of Smartmatic's ownership is particularly troubling since Smartmatic has been associated by the press with the Venezuelan government led by Hugo Chavez, which is openly hostile to the United States. According to press reports, Smartmatic shared a founder, officers, directors and a principal place of business with Bizta, a company in which, according to Smartmatic, the Venezuelan government previously held a 28% stake. Mugica is also a director of Bizta.

According to Smartmatic press releases, (copies attached) Smartmatic and Bizta were part of the consortium that received the government contract to provide the voting machines for the 2004 referendum election to recall Chavez as Venezuela's president, and have since been awarded other contracts by the Venezuelan government.

Smartmatic's possible connection to the Venezuelan government poses a potential national security concern in the context of its acquisition of Sequoia because electronic voting machines are susceptible to tampering and insiders are in the best position to engage in such tampering. The 2005 Government Accountability Office Report on electronic voting, GAO-05-956, and other private sector studies consistently support this conclusion. Thus, the reports that Sequoia brought Venezuelan nationals to the United States to work on the Chicago 2006 primary election raises questions about whether these individuals are subject to direction from a foreign interest that might pose a threat to the integrity of the election. Similarly, the use of Smartmatic software and machines developed in Venezuela, such as the HAAT software that was at issue in Chicago, raises questions as to whether this software is susceptible to manipulation by its unknown creators. Reportedly, Smartmatic may soon be introducing into the United States the type of electronic voting machines that were used (with Bizta software) in the controversial 2004 Venezuelan recall election, under the label AVC Edge II Plus.

In reviewing the Smartmatic acquisition of Sequoia, it is important that CFIUS understand the products and services that are of Venezuelan origin and evaluate Smartmatic's ownership to determine who could have influence and control over these and other Sequoia products and services that are in use or intended for use in U.S. elections. In light of Smartmatic's failure fully to answer these questions to date, this issue demands the most thorough independent investigation by CFIUS.

Thank you for your consideration of this letter.

Sincerely,

Carolyn B. Maloney

Carolyn B. Maloney
Member of Congress

Attachments

Congress of the United States
Washington, DC 20510

December 6, 2019

Sami Mnaymneh
Founder and Co-Chief Executive Officer
H.I.G. Capital, LLC
[redacted]

Tony Tamer
Founder and Co-Chief Executive Officer
H.I.G. Capital, LLC
[redacted]

Dear Messrs. Mnaymneh and Tamer:

We are writing to request information regarding H.I.G. Capital's (H.I.G.) investment in Hart InterCivic Inc. (Hart InterCivic) one of three election technology vendors responsible for developing, manufacturing and maintaining the vast majority of voting machines and software in the United States, and to request information about your firm's structure and finances as it relates to this company.

Some private equity funds operate under a model where they purchase controlling interests in companies and implement drastic cost-cutting measures at the expense of consumers, workers, communities, and taxpayers. Recent examples include Toys "R" Us and Shopko.[1] For that reason, we have concerns about the spread and effect of private equity investment in many sectors of the economy, including the election technology industry—an integral part of our nation's democratic process. We are particularly concerned that secretive and "trouble-plagued companies,"[2] owned by private equity firms and responsible for manufacturing and maintaining voting machines and other election administration equipment, "have long skimped on security in favor of convenience," leaving voting systems across the country "prone to security problems."[3] In light of these concerns, we request that you provide information about your firm, the portfolio

[1] Atlantic, "The Demise of Toys 'R' Us Is a Warning," Bryce Covert, July/August 2018 issue, https://www.theatlantic.com/magazine/archive/2018/07/toys-r-us-bankruptcy-private-equity/561758/; Axios, "How workers suffered from Shopko's bankruptcy while Sun Capital made money," Dan Primack, "How workers suffered from Shopko's bankruptcy while Sun Capital made money," June 11, 2019, https://www.axios.com/shopko-bankruptcy-sun-capital-547b97ba-901c-4201-92cc-6d3168357fa3.html.

[2] ProPublica, "The Market for Voting Machines Is Broken. This Company Has Thrived in It.," Jessica Huseman, October 28, 2019, https://www.propublica.org/article/the-market-for-voting-machines-is-broken-this-company-has-thrived-in-it.

[3] Associated Press News, "US Election Integrity Depends on Security-Challenged Firms," Frank Bajak, October 28, 2019, https://apnews.com/f6876669cb6b4e4c9850844f8e015b4c.

companies in which it has invested, the performance of those investments, and the ownership and financial structure of your funds.

Over the last two decades, the election technology industry has become highly concentrated, with a handful of consolidated vendors controlling the vast majority of the market. In the early 2000s, almost twenty vendors competed in the election technology market.[4] Today, three large vendors—Election Systems & Software, Dominion Voting Systems, and Hart InterCivic—collectively provide voting machines and software that facilitate voting for over 90% of all eligible voters in the United States.[5] Private equity firms reportedly own or control each of these vendors, with very limited "information available in the public domain about their operations and financial performance."[6] While experts estimate that the total revenue for election technology vendors is about $300 million, there is no publicly available information on how much those vendors dedicate to research and development, maintenance of voting systems, or profits and executive compensation.[7]

Concentration in the election technology market and the fact that vendors are often "more seasoned in voting machine and technical services contract negotiations" than local election officials, give these companies incredible power in their negotiations with local and state governments. As a result, jurisdictions are often caught in expensive agreements in which the same vendor both sells or leases, and repairs and maintains voting systems–leaving local officials dependent on the vendor, and the vendor with little incentive to substantially overhaul and improve its products.[8] In fact, the Election Assistance Commission (EAC), the primary federal body responsible for developing voluntary guidance on voting technology standards, advises state and local officials to consider "the cost to purchase or lease, operate, and maintain a voting system over its life span … [and to] know how the vendor(s) plan to be profitable" when signing contracts, because vendors typically make their profits by ensuring "that they will be around to maintain it after the sale." The EAC has warned election officials that "[i]f you do not manage the vendors, they will manage you."[9]

Election security experts have noted for years that our nation's election systems and infrastructure are under serious threat. In January 2017, the U.S. Department of Homeland Security designated the United States' election infrastructure as "critical infrastructure" in order to prioritize the protection of our elections and to more effectively assist state and local election

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[4] Bloomberg, "Private Equity Controls the Gatekeepers of American Democracy," Anders Melin and Reade Pickert, November 3, 2018, https://www.bloomberg.com/news/articles/2018-11-03/private-equity-controls-the-gatekeepers-of-american-democracy.

[5] Penn Wharton Public Policy Initiative, "The Business of Voting," July 2018, https://publicpolicy.wharton.upenn.edu/live/files/270-the-business-of-voting.

[6] Id.

[7] Id.

[8] Brennan Center for Justice, "America's Voting Machines at Risk," Lawrence Norden and Christopher Famighetti, 2015, https://www.brennancenter.org/sites/default/files/publications/Americas_Voting_Machines_At_Risk.pdf; Penn Wharton Public Policy Initiative, "The Business of Voting," July 2018, https://publicpolicy.wharton.upenn.edu/live/files/270-the-business-of-voting.

[9] U.S. Election Assistance Commission, "Ten Things to Know About Selecting a Voting System," October 14, 2017, https://www.eac.gov/documents/2017/10/14/ten-things-to-know-about-selecting-a-voting-system-cybersecurity-voting-systems-voting-technology/.

officials in addressing these risks.[10] However, voting machines are reportedly falling apart across the country, as vendors neglect to innovate and improve important voting systems, putting our elections at avoidable and increased risk.[11] In 2015, election officials in at least 31 states, representing approximately 40 million registered voters, reported that their voting machines needed to be updated, with almost every state "using some machines that are no longer manufactured."[12] Moreover, even when state and local officials work on replacing antiquated machines, many continue to "run on old software that will soon be outdated and more vulnerable to hackers."[13]

In 2018 alone "voters in South Carolina [were] reporting machines that switched their votes after they'd inputted them, scanners [were] rejecting paper ballots in Missouri, and busted machines [were] causing long lines in Indiana."[14] In addition, researchers recently uncovered previously undisclosed vulnerabilities in "nearly three dozen backend election systems in 10 states."[15] And, just this year, after the Democratic candidate's electronic tally showed he received an improbable 164 votes out of 55,000 cast in a Pennsylvania state judicial election in 2019, the county's Republican Chairwoman said, "[n]othing went right on Election Day. Everything went wrong. That's a problem."[16] These problems threaten the integrity of our elections and demonstrate the importance of election systems that are strong, durable, and not vulnerable to attack.

H.I.G. reportedly owns or has had investments in Hart InterCivic, a major election technology vendor. In order to help us understand your firm's role in this sector, we ask that you provide answers to the following questions no later than December 20, 2019.

1. Please provide the disclosure documents and information enumerated in Sections 501 and 503 of the *Stop Wall Street Looting Act*.[17]

2. Which election technology companies, including all affiliates or related entities, does H.I.G. have a stake in or own? Please provide the name of and a brief description of the services each company provides.

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[10] Department of Homeland Security, "Statement by Secretary Jeh Johnson on the Designation of Election Infrastructure as a Critical Infrastructure Subsector," January 6, 2017, https://www.dhs.gov/news/2017/01/06/statement-secretary-johnson-designation-election-infrastructure-critical.

[11] AP News, "US election integrity depends on security-challenged firms," Frank Bajak, October 29, 2018, https://apnews.com/f6876669cb6b4e4c9850844f8e015b4c; Penn Wharton Public Policy Initiative, "The Business of Voting," July 2018, https://publicpolicy.wharton.upenn.edu/live/files/270-the-business-of-voting.

[12] Brennan Center for Justice, "America's Voting Machines at Risk," Lawrence Norden and Christopher Famighetti, 2015, https://www.brennancenter.org/sites/default/files/publications/Americas_Voting_Machines_At_Risk.pdf.

[13] Associated Press, "AP Exclusive: New election systems use vulnerable software," Tami Abdollah, July 13, 2019, https://apnews.com/e5e070c31f3c497fa9e6875f426ccde1.

[14] Vice, "Here's Why All the Voting Machines Are Broken and the Lines Are Extremely Long," Jason Koebler and Matthew Gault, November 6, 2018, https://www.vice.com/en_us/article/59vzgn/heres-why-all-the-voting-machines-are-broken-and-the-lines-are-extremely-long.

[15] Vice, "Exclusive: Critical U.S. Election Systems Have Been Left Exposed Online Despite Official Denials," Kim Zetter, August 8, 2019, https://www.vice.com/en_us/article/3kxzk9/exclusive-critical-us-election-systems-have-been-left-exposed-online-despite-official-denials.

[16] New York Times, "A Pennsylvania Country's Election Day Nightmare Underscores Voting Machine Concerns," Nick Corasaniti, November 30, 2019, https://www.nytimes.com/2019/11/30/us/politics/pennsylvania-voting-machines.html.

[17] Stop Wall Street Looting Act, S.2155, https://www.congress.gov/bill/116th-congress/senate-bill/2155.

a. Which election technology companies, including all affiliates or related entities, has H.I.G. had a stake in or owned in the past twenty years? Please provide the name of and a brief description of the services each company provides or provided.

b. For each election technology company H.I.G. had a stake in or owned in the past twenty years, including all affiliates or related entities, please provide the following information for each year that the firm has had a stake in or owned this company and the five years preceding the firm's investment.
   i. The name of the company
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   vi. Total number of employees
   vii. A list of all state and local jurisdictions with which the company has a contract to provide election related products or services
   viii. Other private-equity firms that own a stake in the company

3. Has any election technology company, including all affiliates or related entities, in which H.I.G. has an ownership stake or has had an ownership stake in the last twenty years, been found to have been in noncompliance with the EAC's Voluntary Voting System Guidelines? If so, please provide a copy of each EAC noncompliance notice received by the company and a description of what steps the company took to resolve each issue.

4. Has any election technology company, including all affiliates or related entities, in which H.I.G. has an ownership stake or has had an ownership stake in the last twenty years, been found to have been in noncompliance with any state or local voting system guidelines or practices? If so, please provide a list of all such instances and a description of what steps the company took to resolve each issue.

5. Has any election technology company, including all affiliates or related entities, in which H.I.G. has an ownership stake or has had an ownership stake in the last twenty years, been found to have violated any federal or state laws or regulations? If so, please provide a complete list, including the date and description, of all such violations.

6. Has any election technology company, including all affiliates or related entities, in which H.I.G. has an ownership stake or has had an ownership stake in the last twenty years, reached a settlement with any federal or state law enforcement entity related to a potential violation of any federal or state laws or regulations? If so, please provide a complete list, including the date and description, of all such settlements.

7. Has any election technology company, including all affiliates or related entities, in which H.I.G. has an ownership stake or has had an ownership stake in the past twenty years, reached a settlement with any state or local jurisdiction related to a potential violation of or breach of contract? If so, please provide a complete list, including the date and description, of all such settlements.

Thank you for your attention to this matter.

Sincerely,

Elizabeth Warren
United States Senator

Amy Klobuchar
United States Senator

Ron Wyden
United States Senator

Mark Pocan
Member of Congress

Congress of the United States
Washington, DC 20510

December 6, 2019

Michael McCarthy
Chairman
McCarthy Group, LLC
[redacted]

Dear Mr. McCarthy:

We are writing to request information regarding McCarthy Group, LLC's (McCarthy Group) investment in Election Systems & Software (ES&S), one of three election technology vendors responsible for developing, manufacturing and maintaining the vast majority of voting machines and software in the United States, and to request information about your firm's structure and finances as it relates to this company.

Some private equity funds operate under a model where they purchase controlling interests in companies and implement drastic cost-cutting measures at the expense of consumers, workers, communities, and taxpayers. Recent examples include Toys "R" Us and Shopko.[1] For that reason, we have concerns about the spread and effect of private equity investment in many sectors of the economy, including the election technology industry—an integral part of our nation's democratic process. We are particularly concerned that secretive and "trouble-plagued companies,"[2] owned by private equity firms and responsible for manufacturing and maintaining voting machines and other election administration equipment, "have long skimped on security in favor of convenience," leaving voting systems across the country "prone to security problems."[3] In light of these concerns, we request that you provide information about your firm, the portfolio companies in which it has invested, the performance of those investments, and the ownership and financial structure of your funds.

Over the last two decades, the election technology industry has become highly concentrated, with a handful of consolidated vendors controlling the vast majority of the market. In the early

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[1] Atlantic, "The Demise of Toys 'R' Us Is a Warning," Bryce Covert, July/August 2018 issue, https://www.theatlantic.com/magazine/archive/2018/07/toys-r-us-bankruptcy-private-equity/561758/; Axios, "How workers suffered from Shopko's bankruptcy while Sun Capital made money," Dan Primack, "How workers suffered from Shopko's bankruptcy while Sun Capital made money," June 11, 2019, https://www.axios.com/shopko-bankruptcy-sun-capital-547b97ba-901c-4201-92cc-6d3168357fa3.html.

[2] ProPublica, "The Market for Voting Machines Is Broken. This Company Has Thrived in It.," Jessica Huseman, October 28, 2019, https://www.propublica.org/article/the-market-for-voting-machines-is-broken-this-company-has-thrived-in-it.

[3] Associated Press News, "US Election Integrity Depends on Security-Challenged Firms," Frank Bajak, October 28, 2019, https://apnews.com/f6876669cb6b4e4c9850844f8e015b4c.

2000s, almost twenty vendors competed in the election technology market.[4] Today, three large vendors—ES&S, Dominion Voting Systems, and Hart InterCivic—collectively provide voting machines and software that facilitate voting for over 90% of all eligible voters in the United States.[5] Private equity firms reportedly own or control each of these vendors, with very limited "information available in the public domain about their operations and financial performance."[6] While experts estimate that the total revenue for election technology vendors is about $300 million, there is no publicly available information on how much those vendors dedicate to research and development, maintenance of voting systems, or profits and executive compensation.[7]

Concentration in the election technology market and the fact that vendors are often "more seasoned in voting machine and technical services contract negotiations" than local election officials, give these companies incredible power in their negotiations with local and state governments. As a result, jurisdictions are often caught in expensive agreements in which the same vendor both sells or leases, and repairs and maintains voting systems–leaving local officials dependent on the vendor, and the vendor with little incentive to substantially overhaul and improve its products.[8] In fact, the Election Assistance Commission (EAC), the primary federal body responsible for developing voluntary guidance on voting technology standards, advises state and local officials to consider "the cost to purchase or lease, operate, and maintain a voting system over its life span … [and to] know how the vendor(s) plan to be profitable" when signing contracts, because vendors typically make their profits by ensuring "that they will be around to maintain it after the sale." The EAC has warned election officials that "[i]f you do not manage the vendors, they will manage you." [9]

Election security experts have noted for years that our nation's election systems and infrastructure are under serious threat. In January 2017, the U.S. Department of Homeland Security designated the United States' election infrastructure as "critical infrastructure" in order to prioritize the protection of our elections and to more effectively assist state and local election officials in addressing these risks.[10] However, voting machines are reportedly falling apart across the country, as vendors neglect to innovate and improve important voting systems, putting our

[4] Bloomberg, "Private Equity Controls the Gatekeepers of American Democracy," Anders Melin and Reade Pickert, November 3, 2018, https://www.bloomberg.com/news/articles/2018-11-03/private-equity-controls-the-gatekeepers-of-american-democracy.

[5] Penn Wharton Public Policy Initiative, "The Business of Voting," July 2018, https://publicpolicy.wharton.upenn.edu/live/files/270-the-business-of-voting.

[6] Id.

[7] Id.

[8] Brennan Center for Justice, "America's Voting Machines at Risk," Lawrence Norden and Christopher Famighetti, 2015, https://www.brennancenter.org/sites/default/files/publications/Americas_Voting_Machines_At_Risk.pdf; Penn Wharton Public Policy Initiative, "The Business of Voting," July 2018, https://publicpolicy.wharton.upenn.edu/live/files/270-the-business-of-voting.

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elections at avoidable and increased risk.[11] In 2015, election officials in at least 31 states, representing approximately 40 million registered voters, reported that their voting machines needed to be updated, with almost every state "using some machines that are no longer manufactured."[12] Moreover, even when state and local officials work on replacing antiquated machines, many continue to "run on old software that will soon be outdated and more vulnerable to hackers."[13]

In 2018 alone "voters in South Carolina [were] reporting machines that switched their votes after they'd inputted them, scanners [were] rejecting paper ballots in Missouri, and busted machines [were] causing long lines in Indiana."[14] In addition, researchers recently uncovered previously undisclosed vulnerabilities in "nearly three dozen backend election systems in 10 states."[15] And, just this year, after the Democratic candidate's electronic tally showed he received an improbable 164 votes out of 55,000 cast in a Pennsylvania state judicial election in 2019, the county's Republican Chairwoman said, "[n]othing went right on Election Day. Everything went wrong. That's a problem."[16] These problems threaten the integrity of our elections and demonstrate the importance of election systems that are strong, durable, and not vulnerable to attack.

McCarthy Group reportedly owns or has had investments in ES&S, a major election technology vendor. In order to help us understand your firm's role in this sector, we ask that you provide answers to the following questions no later than December 20, 2019.

1. Please provide the disclosure documents and information enumerated in Sections 501 and 503 of the *Stop Wall Street Looting Act*.[17]

2. Which election technology companies, including all affiliates or related entities, does McCarthy Group have a stake in or own? Please provide the name of and a brief description of the services each company provides.

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Sincerely,

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United States Senator

Amy Klobuchar
United States Senator

Ron Wyden
United States Senator

Mark Pocan
Member of Congress

Congress of the United States

Washington, DC 20510

December 6, 2019

Stephen D. Owens
Managing Director
Staple Street Capital Group, LLC
[redacted]

Hootan Yaghoobzadeh
Managing Director
Staple Street Capital Group, LLC
[redacted]

Dear Messrs. Owens and Yaghoobzadeh:

We are writing to request information regarding Staple Street Capital Group, LLC's (Staple Street) investment in Dominion Voting System (Dominion) one of three election technology vendors responsible for developing, manufacturing and maintaining the vast majority of voting machines and software in the United States, and to request information about your firm's structure and finances as it relates to this company.

Some private equity funds operate under a model where they purchase controlling interests in companies and implement drastic cost-cutting measures at the expense of consumers, workers, communities, and taxpayers. Recent examples include Toys "R" Us and Shopko.[1] For that reason, we have concerns about the spread and effect of private equity investment in many sectors of the economy, including the election technology industry—an integral part of our nation's democratic process. We are particularly concerned that secretive and "trouble-plagued companies,"[2] owned by private equity firms and responsible for manufacturing and maintaining voting machines and other election administration equipment, "have long skimped on security in favor of convenience," leaving voting systems across the country "prone to security problems."[3] In light of these concerns, we request that you provide information about your firm, the portfolio

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companies in which it has invested, the performance of those investments, and the ownership and financial structure of your funds.

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Election security experts have noted for years that our nation's election systems and infrastructure are under serious threat. In January 2017, the U.S. Department of Homeland Security designated the United States' election infrastructure as "critical infrastructure" in order to prioritize the protection of our elections and to more effectively assist state and local election

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Staple Street reportedly owns or has had investments in Dominion, a major election technology vendor. In order to help us understand your firm's role in this sector, we ask that you provide answers to the following questions no later than December 20, 2019.

1. Please provide the disclosure documents and information enumerated in Sections 501 and 503 of the *Stop Wall Street Looting Act*.[17]

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Thank you for your attention to this matter.

Sincerely,

Elizabeth Warren
United States Senator

Amy Klobuchar
United States Senator

Ron Wyden
United States Senator

Mark Pocan
Member of Congress

Declaration of Russell James Ramsland, Jr.

1. My name is Russell James Ramsland, Jr., and I am a resident of Dallas County, Texas. I make this declaration pursuant to 28 USC sec 1746. I am over 18 years of age. I hold an MBA from Harvard University, and a political science degree from Duke University. I have worked with the National Aeronautics and Space Administration (NASA) and the Massachusetts Institute of Technology (MIT), among other organizations, and have run businesses all over the world, many of which are highly technical in nature. I have served on technical government panels.

2. I am part of the management team of Allied Security Operations Group, LLC, (ASOG). ASOG is a group of globally engaged professionals who come from various disciplines to include Department of Defense, Secret Service, Department of Homeland Security, and the Central Intelligence Agency. It provides a range of security services, but has a particular emphasis on cybersecurity, open source investigation and penetration testing of networks. We employ a wide variety of cyber and cyber forensic analysts. We have patents pending in a variety of applications from novel network security applications to SCADA (Supervisory Control and Data Acquisition) protection and safe browsing solutions for the dark and deep web. For this report, I have relied on these experts and resources.

3. In November 2018, ASOG analyzed audit logs for the central tabulation server of the ES&S Election Management System (EMS) for the Dallas, Texas, General Election of 2018. Our team was surprised at the enormous number of error messages that should not have been there. They numbered in the thousands, and the operator ignored and overrode all of them. This led to various legal challenges in that election, and we provided evidence and analysis in some of them.

4. As a result, ASOG initiated an 18-month study into the major EMS providers in the United States, among which is Election Systems and Software ("ES&S") that provides EMS services for Wisconsin. We did thorough background research of the literature and discovered there is confirmed evidence from both Democrat and Republican stakeholders in the vulnerability of ES&S. Next, we began doing passive penetration testing into the vulnerabilities described in the literature and confirmed for ourselves that in many cases, past vulnerabilities already identified were still left open to exploit in the November 2020 elections. We also noticed a striking similarity between the approach to software and EMS systems of ES&S and Dominion. This was logical since they share a common ancestry in the Diebold voting system.

5. Over the past three decades, almost all of the states have shifted from a relatively low-technology format to a high-technology format that relies heavily on a handful of private services companies. These private companies supply the hardware and software, often handle voter registrations, hold the voter records, partially manage the elections, program counting the votes and report the outcomes. Wisconsin is one of those states.

6. These systems contain a large number of known vulnerabilities to hacking and tampering, both when voters express their voting intention by marking an electronic ballot using ballot marking devices (BMDs), and at the back end where the votes are stored, tabulated, and reported by election officials. These vulnerabilities are well known, and experts in the field have written extensively about them.. This is not surprising as there are no federal standards for security in voting system software. EAC 2.0 was to be written to address this issue, but was never done.

7. Below is a screenshot from the ES&S Security Test Report Electionware 5.2.1.0 – 8/28/17 – Freeman, Craft, McGregor Group. It shows an incredible number of vulnerabilities in the system by which inside and external threats can manipulate the outcomes in a variety of ways.

Electionware Servers

Missing Operating System Patches	
Critical	17
Important	49
Moderate	2
Unrated	8

SCAP Misconfigurations	
Windows 2008 R2 STIG[3]	46
Firewall STIG Configuration	3
.NET Framework 4 STIG Configuration	2
Internet Explorer 9 STIG Configuration	13

Electionware Clients

Missing Operating System Patches	
Critical	24
Important	51
Moderate	1
Unrated	9

SCAP Misconfigurations	
Windows 7 STIG	51
Firewall STIG Configuration	3
.NET Framework 4 STIG Configuration	2
Internet Explorer 9 STIG Configuration	3
Windows 7 USGCB[4] Configuration	45
Firewall USGCB Configuration	8

Screenshot

Recently ES&S moved many of its systems into the cloud behind cloudfare, but ASOG determined that this protection can still be easily circumvented by gaining access through its FTP site ESSVotes.

7. Election Systems and Software ("ES&S") is a privately held company that provides election technologies and services to government jurisdictions. Almost all the counties of Wisconsin use the ES&S Election Management System with the exception of Sheboygan County. ES&S systems have options to be an electronic, paperless voting system with no permanent record of the voter's choices, or a paper ballot-based system or hybrid of those two.

9. The overwhelming vulnerabilities of the ES&S system were on full display in Dallas County where ES&S is used, during the 2020 General Election. Data has been provided by the Dallas County Election Department. The Voter Registration Database was received October 13, 2020 following an Open Records Request by The Dallas Examiner. The Mail-In and Early Voting Rosters were downloaded daily from the County's computers. All Texas counties are required by law to publish daily voting rosters.

10. In that election, the voter records during early voting were captured each day for those voters who cast ballots either in person or by mail-in and catalogued using the hash totals to provide an absolute unique identifier. As required by state law, the Dallas County Elections Department published the Daily Vote Roster for all voters who cast ballots during Absentee and In-Person Early Voting. The Roster contained the VoterID, name, address, type of vote, and various dates associated with every Early-Voting vote cast.

Dallas County claims its source of roster data was the In-Person Electronic Poll Books, and the Absentee Ballot scanners. Dallas County has claimed that entry into the Vote Roster can only be done by a registered Dallas County voter who either appeared In-Person or by Absentee Ballot. The computer that generated the roster was apparently hacked between October 7 and October 30. During that period tens of thousands of vote records were purged, added, or edited from the ES&S generated Vote Roster.

Specifically, over this period, 56,974 voter records had their hash identifier changed, meaning the vote was tampered with after it was cast and recorded in the system. In most cases, this tampering took the form of purging the vote, and then re-constituting it in some form or fashion, but with a change in the hash total meaning the vote was somehow changed. Currently it appears 5,690 votes disappeared completely after voting in person. All in all, this translates into approximately 107,000 hacked votes in Dallas County alone for ES&S. Ten blocks of voters on Westminster Street in Highland Park had their votes purged and then some of them were selectively re-instated at a later date with changes. People who double voted were catalogued as well as dead people who voted, people with no VUID voted (approximately 800 of them), unregistered university students voted, and *people living abroad who claim a Dallas Residence for voting purposes, but who, in a spot check are unknown to the residences they list* in the ES&S system. A short list of them includes:

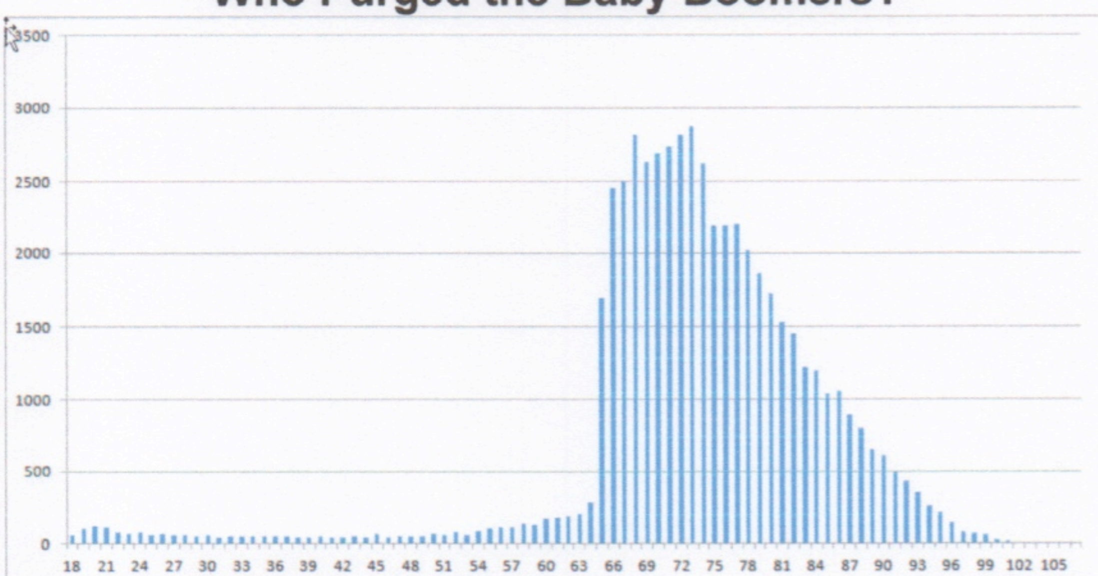
Country	Voters Who Voted
Mexico	118
Guatemala	9
Nicaragua	4
Kenya	18
Canada	154
Ireland	34
China	62
Australia	105

In plain English, at the instant before a voter casts a ballot there is a one-to-one relationship between the voter and their ballot as well as a one-to-one association between the voter and their votes.

At the instant that ballot is cast, the one-to-one relationship between the voter and ballot still exist, but the relationship between the voter and their votes is gone. No one can know how they voted. The key security check on voting integrity is the absolute match between the number of voters in the Vote Roster and the number of ballots counted in that voting district or precinct. If these numbers do not match, either physical ballots were added or removed from the Ballot Counter or "voters" were added or removed from the Vote Roster. In either case, the election has been compromised and the election is nothing more than a lottery. With tens of thousands of Vote Roster entries purged and other tens of thousand of entries apparently created out of thin air, using the ES&S EMS system, Dallas County Elections Department is definitely in the lottery business.

11. Equally troubling with the ES&S System is the apparent ease of targeting within the system of certain groups for purging. In Dallas, over 92% of PURGED In-Person and Absentee voters were over 65. This is statistically impossible and makes clear the system is easily manipulated by inside or outside actors.

Who Purged the Baby Boomers?



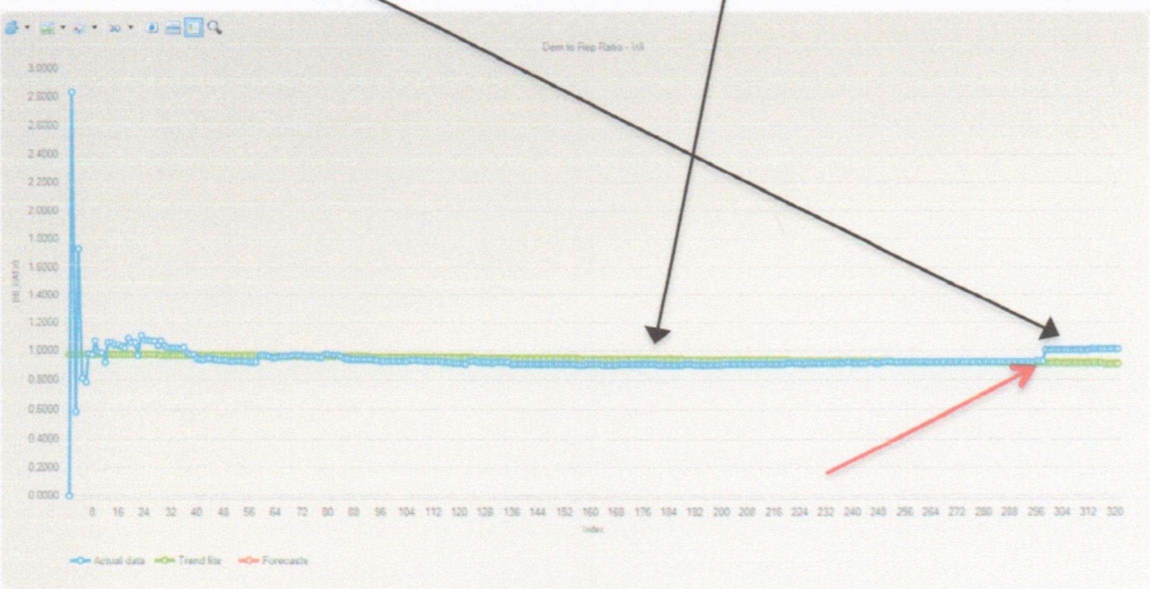
Purged Voters by Age *Source: Dallas County Election Department Vote Rosters Oct 7-Oct 30*

12. My colleagues and I at ASOG have studied the information that is publicly available concerning the November 3, 2020, election results from Wisconsin. Based on the significant anomalies and red flags that we have observed, I believe to a reasonable degree of professional certainty that election results have been

manipulated within the ES&S system in Wisconsin. We list below a few of the red flags that our team has uncovered.

13. Where ES&S is concerned, a statistically unlikely event (red arrow) occurred in the Wisconsin General Election at 09:42:30 Z (3:42 AM local) on 11/4/2020 according to Edison data reported to the NYT. For this analysis we focused on the key ratio of the cumulative Democrat (Biden) votes divided by the cumulative Republican (Trump) votes.

1. A ratio greater than 1.00 is an indicator of Democrat victory
2. A ratio less than 1.00 is an indicator of Republican victory
3. The time series plot shows the trend over time of the cumulative votes.
4. The trend analysis shows the time series but adds a statistically estimated trend line (in green)
5. Where anomalies are observed, the record is pulled out and a proportion test included that tests the probability that that batch of votes was drawn at random from the population of that state, based on the final counts.
6. Randomization is a reasonable assumption because the mail system acts as a randomizer as it mixes the ballots, and the later votes are the mail ballots.
7. The event outline below shifted what had been a settled, unarguable D/R ratio (cumulative to this point) of .912. Suddenly, this event occurs and is of such magnitude it shifts the entire election ratio to 1.0123.



Preview Record

	RECNUM	STATE	TIMESTAMP	VOTES	EEVP	TRUMPD	BIDENJ	TRUMP_CUM	BIDEN_CUM	DATE	TIME	DR_RATIO	D_VOTES	R_VOTES	LOG_D	LOG_R
1	8721	wisconsin	2020-11-04T09:42:20Z	3186598	89	0.490	0.493	1561433	1570993	2020-11-04	09:42:20	1.0061	143379	25163	5.1565	4.4008

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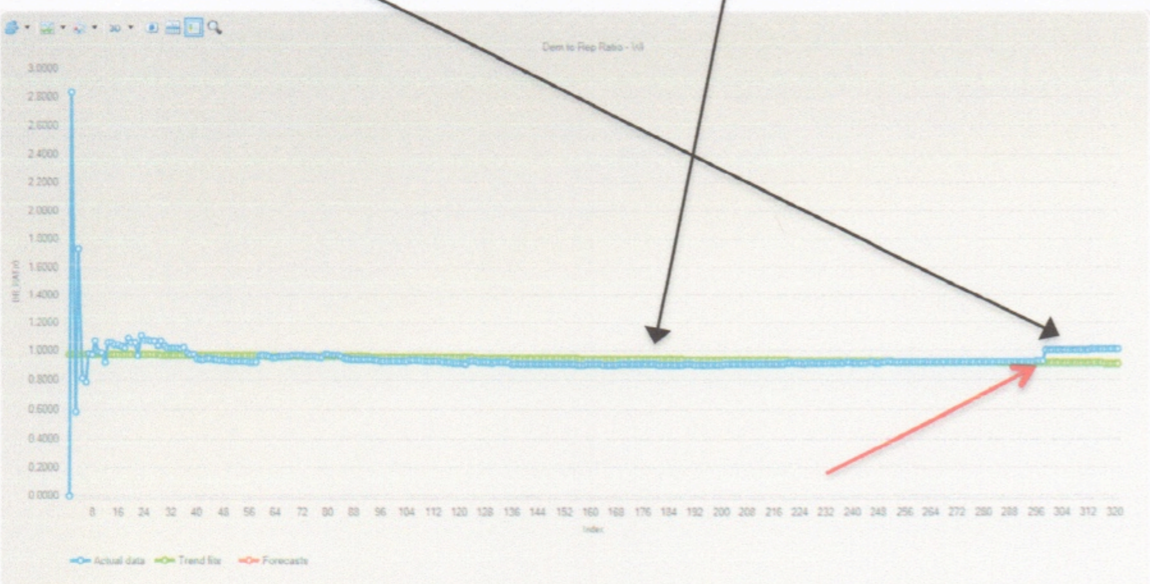
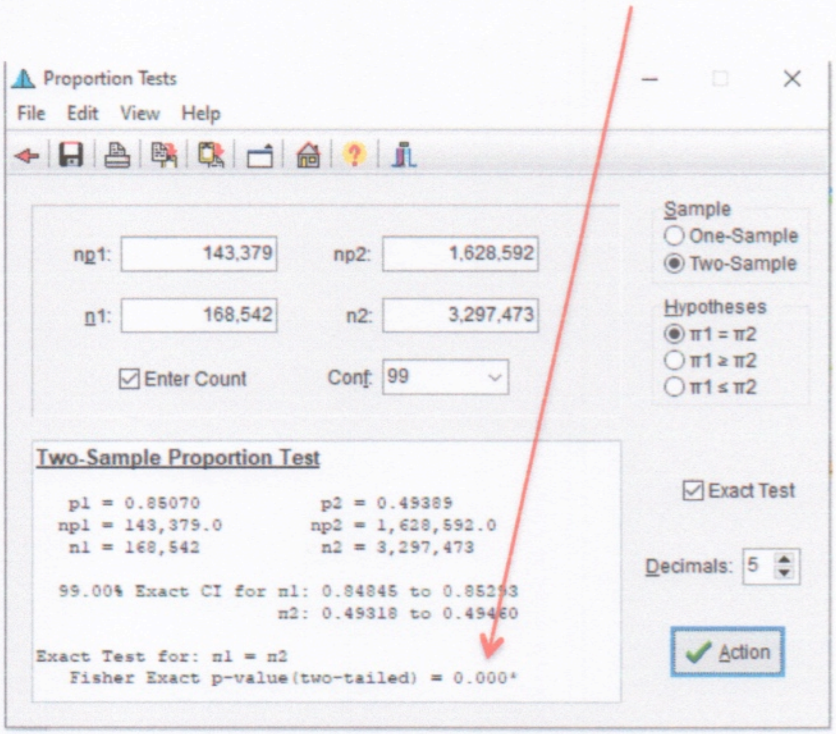


Preview Record

	RECNUM	STATE	TIMESTAMP	VOTES	EEVP	TRUMPD	BIDENJ	TRUMP_CUM	BIDEN_CUM	DATE	TIME	DR_RATIO	D_VOTES	R_VOTES	LOG_D	LOG_R
1	8721	wisconsin	2020-11-04T09:42:20Z	3186598	89	0.490	0.493	1561433	1570993	2020-11-04	09:42:20	1.0061	143379	25163	5.1565	4.4008

P-Test (two-sample proportion test) shows that there is a 0.0% probability that this vote drop came from a random population of Wisconsin votes as shown in the outcome screenshot below. As shown above, Biden suddenly gets 143,379 votes out of 168,542 or 85%, which itself is outside any percentage before or after.



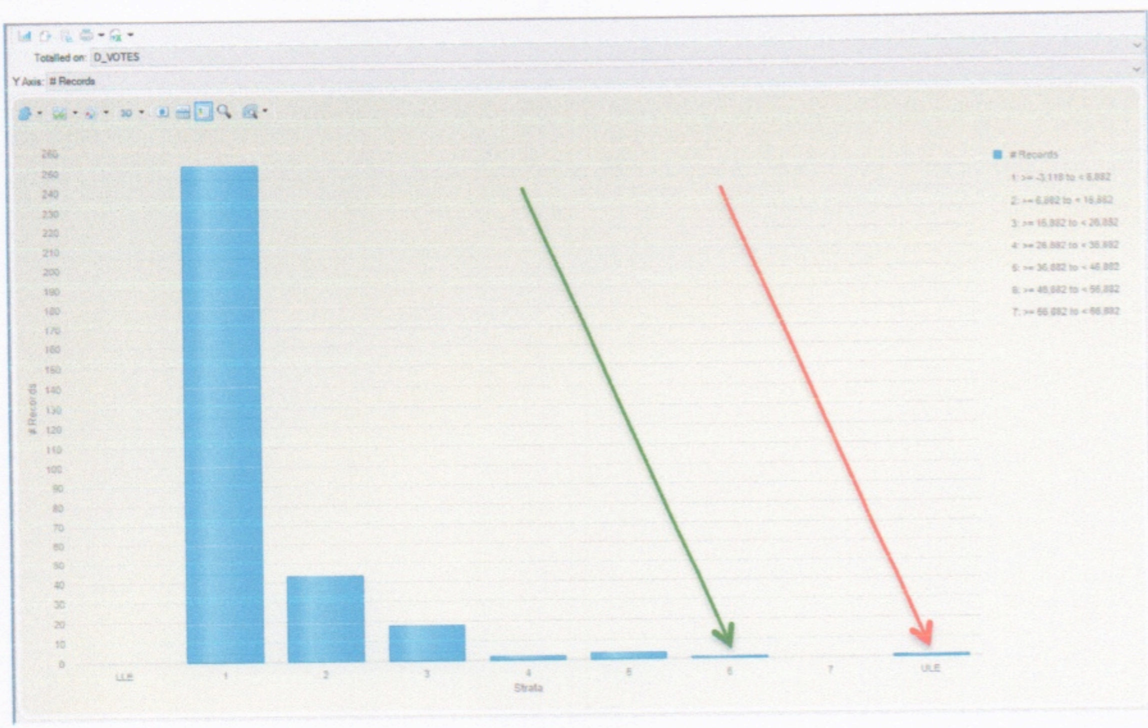
This event changed the final outcome. If this statistically impossible event were removed, the final outcome would be:

Biden: 1,485,573
Trump: 1,584,004

This reveals a shift of approximately 119,430 votes from Biden to Trump would be expected were the election not tampered with.

14. A further red flag is raised when an analysis is done by voting batch. Here we can clearly see the magnitude of the Wisconsin batch dropped at 09:42:30Z on 11/4/2020 vastly exceeds every other Democrat vote total.

This batch shows up as an upper limit exception, meaning it is outside the realm of any expected outcome. A stratification bar chart (below) will indicate visually where the probabilities lie relevant to this event. At 6 standard deviations the chart shows very little chance of this occurring (green arrow). However, in this case, the event occurs at 12.93 standard deviations from the mean (red arrow), showing the probability even smaller at less than 3 in 1,000. Any fraud examiner would instantly flag this for a fraud audit and our Internal Auditor contractor did so immediately.



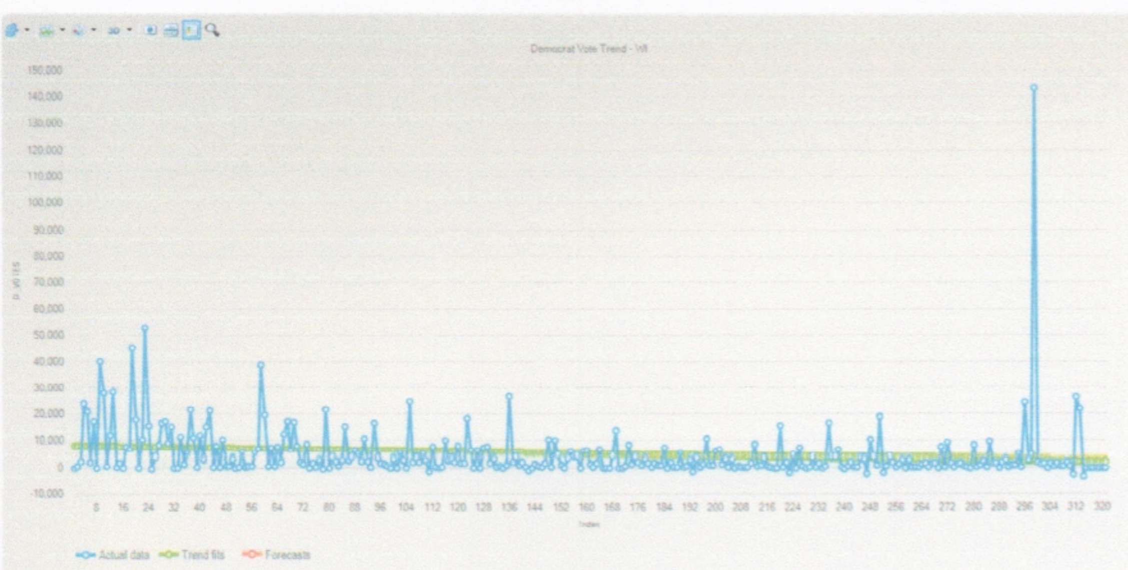
All of these are clear indications of fraud.

15. Another key red flag appears after inspecting voter turnout figures by county. Out of 72 counties, 69 of them exhibited voter turnout figures higher than 80%, a threshold generally considered to be the maximum expected. An amazing 59 of them were above 90%. When the public data votes were normalized to 80% turnout, the excess votes are at least 384,085 over the maximum that could be expected. A sample of this is shown in the table below.

County	Turnout %
Sheboygan County	270%
Shawano County	195%
Taylor County	95%
Marquette County	95%
Price County	94%
Juneau County	94%
Burnett County	94%
Rusk County	94%
Pepin County	94%
Waushara County	94%
Oconto County	94%
Washington County	93%
Kewaunee County	93%
Fond du Lac County	93%
Calumet County	93%
Buffalo County	93%
Lafayette County	93%
Green County	93%
Waupaca County	93%
Polk County	93%
Crawford County	93%
Green Lake County	93%
Dodge County	92%
Chippewa County	92%
Grant County	92%
Clark County	92%
Adams County	92%
Iowa County	92%
Ozaukee County	92%
Bayfield County	92%
Door County	92%
Richland County	92%
Monroe County	92%
Oneida County	92%
Manitowoc County	92%
Washburn County	92%

Trempealeau County	92%
Columbia County	92%
Lincoln County	92%
Waukesha County	92%
Florence County	92%
Barron County	92%
Vernon County	92%
Jefferson County	92%
Langlade County	92%
Outagamie County	91%
Wood County	91%
Marathon County	91%
Iron County	91%
Dunn County	91%
Jackson County	90%
Walworth County	90%
Douglas County	90%
Portage County	90%
Winnebago County	90%
Vilas County	90%
Pierce County	90%
Marinette County	90%
Ashland County	90%

15. Returning to the spike chart presented earlier, a time series crossed with a location specific analysis would determine whether the equipment on hand at any location would have even been capable of processing this many votes in the time represented. In Michigan, we have already observed this phenomenon and the analysis made clear it was physically impossible for the equipment on hand to process this many votes in the time represented.

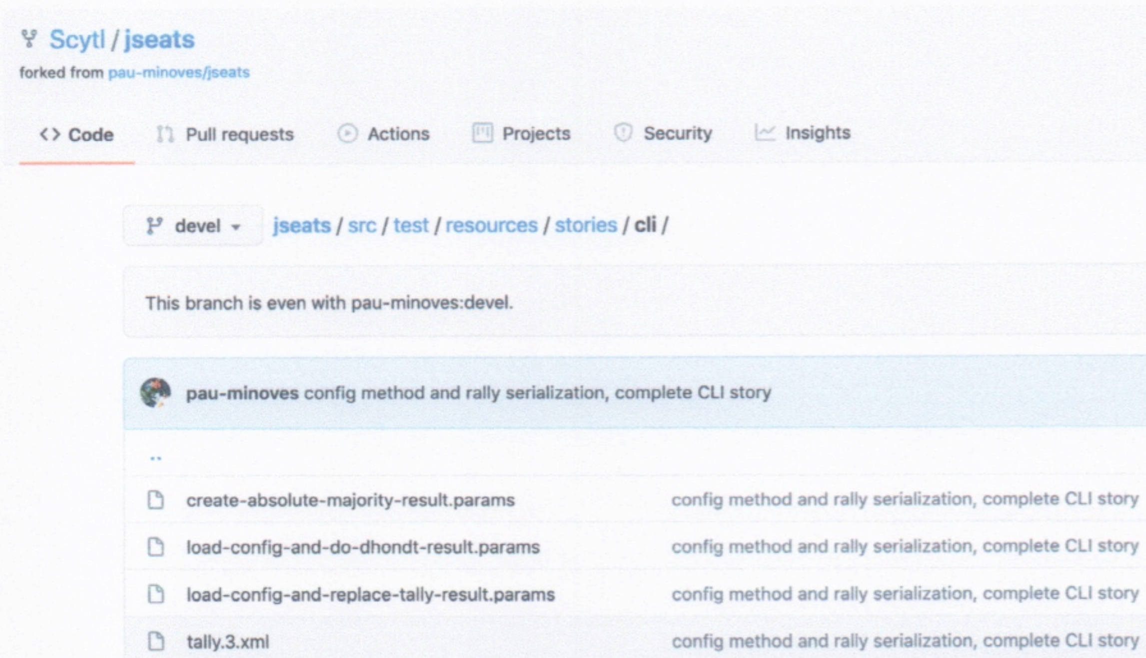


Preview Record

	RECNUM	STATE	TIMESTAMP	VOTES	EEVP	TRUMPD	BIDENJ	TRUMP_CUM	BIDEN_CUM	DATE	TIME	DR_RATIO	D_VOTES	R_VOTES	LOG_D	LOG_R
1	8721	wisconsin	2020-11-04T09:42:20Z	3186598	89	0.490	0.493	1561433	1570993	2020-11-04	09:42:20	1.0061	143379	25163	5.1565	4.4008

This spike, cast largely for Biden, (143,379-Biden, 25,163-Trump) could easily be produced in the ES&S EMS control system by pre-loading batches of blank ballots in files such as Write-Ins or other adjudication-type files then casting them almost all for Biden using the Override Procedure (to cast Write-In, Blank, or Error ballots) that is available to the operator of the system.

16. ES&S uses Scytl via Clarity Elections to accomplish the actual tabulation. Scytl has in its source code the ability to use a common, additive electoral seat allocation algorithm (JSeats) in order to award points based on percentages that are input into the system by the operator in order to determine (or appoint) a winner, as opposed to simply counting votes. Various parameters, weighting percentages, etc. can be set up. Thus, the winner is selected based on "points" that the algorithm computes, not actual voter votes. Below is a screenshot



The fact that we observed raw vote data coming directly that includes decimal places establishes selection by an algorithm, and not individual voter's choice. Otherwise, votes would be solely represented as whole numbers (votes cannot possibly be added up and have decimal places reported). Below is an excerpt from the direct feed to news outlets showing actual calculated votes with decimals.

state	timestamp	eevp	trump	biden	TV	BV
wisconsin	2020-11-04T03:22:01Z	32	0.511	0.472	593876.535	548551.32
wisconsin	2020-11-04T03:24:08Z	33	0.511	0.472	601617.163	555701.176
wisconsin	2020-11-04T03:27:32Z	34	0.5	0.483	615621.5	594690.369

wisconsin	2020-11-04T03:28:57Z	35	0.5	0.483	635870.5	614250.903
wisconsin	2020-11-04T03:30:09Z	35	0.5	0.483	636620.5	614975.403
wisconsin	2020-11-04T03:30:28Z	36	0.502	0.481	649562.9	622389.95
wisconsin	2020-11-04T03:30:52Z	36	0.503	0.481	651861.844	623350.988
wisconsin	2020-11-04T03:35:25Z	37	0.503	0.48	661114.026	630884.16

14. Based on the foregoing, I believe these statistical anomalies and impossibilities compels the conclusion to a reasonable degree of professional certainty that the vote count in Wisconsin, in particular for candidates for President, contain at least 119,430 (Para. 13) up to 384,085 (Para. 15) illegal votes that must be disregarded. In my opinion, it is not possible at this time to determine the true results of the Wisconsin vote for President of the United States.

I declare, under the penalty of perjury, that the forgoing is correct.

Russell James Ramsland, Jr. 11/30/2020
Russell James Ramsland, Jr. Date

October 30, 2020

Iranian Advanced Persistent Threat Actor Identified Obtaining Voter Registration Data

SUMMARY

This advisory uses the MITRE Adversarial Tactics, Techniques, and Common Knowledge (ATT&CK®) framework. See the ATT&CK for Enterprise framework for all referenced threat actor techniques.

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r d d r r r r — d
d r r r d r
d d d r d d r
d r R r M d d r
r r d d d r
r d r r r d

TECHNICAL DETAILS

d d r d d
r d r r r
Active Scanning: Vulnerability Scanning d d d
r d r r r r r r d
r r d r r r r r r r r
ddr r d d d r d d r r r

dd d r d r
r r r d r d r *Exploit Public-Facing*

M d d M d d
d r (hereinafter, " propaganda video") r d r r r
d r d d d d r d r
r d d r r r d r r r
r r r

To report suspicious or criminal activity related to information found in this Joint Cybersecurity Advisory, contact your local FBI field office at www.fbi.gov/contact-us/field, or the FBI's 24/7 Cyber Watch (CyWatch) at (855) 292-3937 or by e-mail at CyWatch@fbi.gov. When available, please include the following information regarding the incident: date, time, and location of the incident; type of activity; number of people affected; type of equipment used for the activity; the name of the submitting company or organization; and a designated point of contact. To request incident response resources or technical assistance related to these threats, contact CISA at Central@cisa.dhs.gov.

Exhibit 18

Application d d r d r r r r
r r d r d d r

d r r d r r r d
r r r d r d
r d r d r R r r r r rd
r r rd r d d d r r d
r d d

d d d d
r r d r d r d r r
r r's d d targeting of U.S. elections' infrastructure (*Compromise Infrastructure* r r ddr d r – d
r r r r r d – rr r r
Gather Victim Host Information d r r

Reconnaissance

r d r d r d D d r
r d d r r *Search Open Websites and Domains* .
r d r d r D d URLs with the words "vote" or "voter" and "registration" d d r R r r d

r d r r r d r d
r r r r r d

- R
- M d r r
- D r
-

Acunetix Scanning

's analysis d d r
r r d r *Active Scanning: Vulnerability Scanning*

r d r r d
`/registration/registration/details` d r

```
/registration/registration/details?addresscity=-1 or 3*2<(0+5+513-513) --
&addressstreet1=xxxxx&btnbeginregistration=begin voter
registration&btnnextelectionworkerinfo=next&btnnextpersonalinfo=next&btnnextresde
tails=next&btnnextvoterinformation=next&btnsubmit=submit&chkageverno=on&chkagever
yes=on&chkcitizenno=on&chkcitizenyes=on&chkdisabledvoter=on&chkelectionworker=on&
chkresprivate=1&chkstatecancel=on&dlnumber=1&dob=xxxx/x/x&email=sample@email.tst&
```

Exhibit 18

```
firstname=xxxxx&gender=radio&hdnaddresscity=&hdngender=&last4ssn=xxxxx&lastname=x
xxxxinjjeuee&mailaddresscountry=sample@xxx.xxx&mailaddressline1=sample@email.tst&
mailaddressline2=sample@xxx.xxx&mailaddressline3=sample@xxx.xxx&mailaddressstate=
aa&mailaddresszip=sample@xxxx.xxx&mailaddresszipex=sample@xxx.xxx&middlename=xxxx
x&overseas=1&partycode=a&phoneno1=xxx-xxx-xxxx&phoneno2=xxx-xxx-
xxxx&radio=consent&statecancelcity=xxxxxxx&statecancelcountry=usa&statecancelstat
e=XXaa&statecancelzip=xxxxx&statecancelzipext=xxxxx&suffixname=esq&txtmailaddress
city=sample@xxx.xxx
```

Requests

r d r d

```
2020-09-26 13:12:56 x.x.x.x GET /x/x v[$acunetix]=1 443 - x.x.x.x
Mozilla/5.0+(Windows+NT+6.1;+WOW64)+AppleWebKit/537.21+(KHTML,+like+Gecko)+Chrome/41.
0.2228.0+Safari/537.21 - 200 0 0 0
```

```
2020-09-26 13:13:19 X.X.x.x GET /x/x voterid[$acunetix]=1 443 - x.x.x.x
Mozilla/5.0+(Windows+NT+6.1;+WOW64)+AppleWebKit/537.21+(KHTML,+like+Gecko)+Chrome/41.
0.2228.0+Safari/537.21 - 200 0 0 1375
```

```
2020-09-26 13:13:18 .X.x.x GET /x/x voterid=;print(md5(acunetix_wvs_security_test));
443 - X.X.x.x
```

User Agents Observed

d r d r d

```
Mozilla/5.0+(Windows+NT+6.1;+WOW64)+AppleWebKit/537.21+(KHTML,+like+Gecko)+Chrome
/41.0.2228.0+Safari/537.21 - 500 0 0 0
```

```
Mozilla/5.0+(X11;+U;+Linux+x86_64;+en-
US;+rv:1.9b4)+Gecko/2008031318+Firefox/3.0b4
```

```
Mozilla/5.0+(X11;+U;+Linux+i686;+en-
US;+rv:1.8.1.17)+Gecko/20080922+Ubuntu/7.10+(gutsy)+Firefox/2.0.0.17
```

Exfiltration

Obtaining Voter Registration Data

r r r rd d
R d DM r d r r r d
r r r d rr d r d r
d r d d r dr d d r r r r

Exhibit 18

d d r r r r *Gather Victim Identity Information* ______ r rd d d r r r d r d d

Requests

r d r

```
2020-10-17 13:07:51 x.x.x.x GET /x/x voterid=XXXX1 443 - x.x.x.x curl/7.55.1 -
200 0 0 1406
```

```
2020-10-17 13:07:55 x.x.x.x GET /x/x voterid=XXXX2 443 - x.x.x.x curl/7.55.1 - 200 0
0 1390
```

```
2020-10-17 13:07:58 x.x.x.x GET /x/x voterid=XXXX3 443 - x.x.x.x curl/7.55.1 - 200 0
0 1625
```

```
2020-10-17 13:08:00 x.x.x.x GET /x/x voterid=XXXX4 443 - x.x.x.x curl/7.55.1 - 200 0
0 1390
```

Note r `voterid` `cs_uri_query field`

User Agents

d r d r

```
FDM+3.x
```

```
curl/7.55.1
```

```
Mozilla/5.0+(Windows+NT+6.1;+WOW64)+AppleWebKit/537.21+(KHTML,+like+Gecko)+Chrome
/41.0.2228.0+Safari/537.21 - 500 0 0 0
Mozilla/5.0+(X11;+U;+Linux+x86_64;+en-US;+rv:1.9b4)+Gecko/2008031318+Firefox/3.0b4
```

r r timeline of the actor’s

Exhibit 18

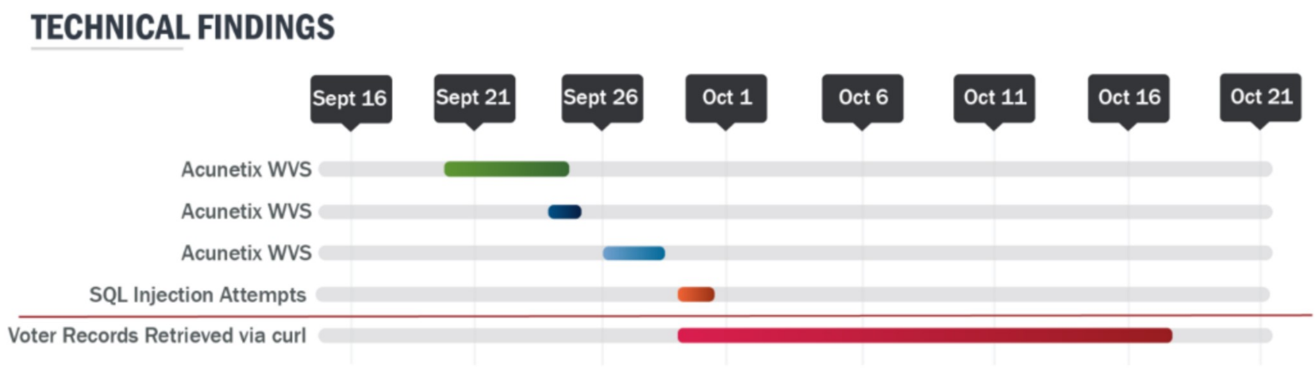

Figure 1: Overview of malicious activity

MITIGATIONS

Detection

Acunetix Scanning

r d rd
r r

- `$acunetix`
- `acunetix_wvs_security_test`

Indicators of Compromise

r d d

Disclaimer *Many of the IP addresses included below likely correspond to publicly available VPN services, which can be used by individuals all over the world. Although this creates the potential for false positives, any activity listed should warrant further investigation. The actor likely uses various IP addresses and VPN services.*

d

-
- d R r
-
-
- R r
- R r
- R r
- R r
- R r
- R r
- R r

Exhibit 18

- R r
- R r
- R r
- R r
- R r d DM r D d M r
  r r
- R r

d r r d r d r
ddr d d r d r

- r d r d r
- r d r
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Recommendations

r d r d d r r r
d d d r r r

- d d r d d r
  d r d r r d

Exhibit 18

r r r d
d r r d d

- d r r r R D r RD d r r
r D r r d r r
r d r r d r r
r
- r d d r d d RD
r r d d RD r d r
d r r r r r
- r rd r r d d d r
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General Mitigations

Keep applications and systems updated and patched

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a patch. These "N day" exploits can be as damaging as zero d r d
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d r , threat actors can operate inside a defender's patch cycle.

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Scan web applications for SQL injection and other common web vulnerabilities

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Deploy a web application firewall

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Deploy techniques to protect against web shells

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Use multi-factor authentication for administrator accounts

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Remediate critical web application security risks

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How do I respond to unauthorized access to election-related systems?

Implement your security incident response and business continuity plan

It may take time for your organization's IT professionals to isolate and remove threats to your systems d r r normal operations. In the meantime, take steps to maintain your organization's essential rd r r d d r r d r r r d r r d r

Contact CISA or law enforcement immediately

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r r r through a local field office or the FBI's Cyber D r

RESOURCES

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NSA "Building Web Applications – Security for Developers" r r r d r d r r d r r r

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Declaration of [redacted] Ph.D

November 30, 2020

Pursuant to 28 U.S.C Section 1746, I, [redacted], make the following declaration.

1. I am over the age of 21 years and I am under no legal disability, which would prevent me from giving this declaration.
2. [redacted] has a Ph.D in Electrical Engineering from the University of California at Davis and a Masters degree in Mathematics from the University of California at Berkeley. I have been employed, for over 28 years, in the signal processing and wireless signal processing domain, with an emphasis on statistical signal processing. I have published numerous journal and conference articles. Additionally, I have held Top Secret and SAP clearances and I am an inventor of nearly 30 patents, one of which has over 1000 citations in the field of MIMO communications (Multiple Input Multiple Output).
3. I reside at [redacted], [redacted].
4. Given the data sources referenced in this document, I assert that in Georgia, Pennsylvania and the city of Milwaukee, a simple statistical model of vote fraud is a better fit to the sudden jump in Biden vote percentages among absentee ballots received later in the counting process of the 2020 presidential election. It is also a better fit when constrained to a single large Metropolitan area such as Milwaukee..
5. Given the same data sources, I also assert that Milwaukee precincts exhibit statistical anomalies that are not normally present in fair elections.. The fraud model hypothesis in Milwaukee has a posterior probability of 100% to machine precision. This model predicts 105,639 fraudulent Biden ballots in Milwaukee.
6. I assert that the data suggests aberrant statistical anomalies in the vote counts in Michigan, when observed as a function of time.

Signature:

Exhibit 19

Supporting evidence for the assertions in (4) and 5 is provided in the following pages.

1 Impact of Fraud on the Election

In the analysis that follows, it is possible to obtain rough estimates on how vote fraud could possibly have effected the election. In Georgia, there is evidence that votes were actually switched from Trump to Biden. As many as 51,110 Biden votes were fraudulent and as many as 51,110 votes could be added to Trump. An audit to determine vote switching will be more difficult, since it is likely the Trump ballots have been destroyed in Georgia, based on reports of ballots being shredded there. If instead we presume that Bidens fraudulent votes were simply added to the totals, then we estimate that 104,107 ballots should be removed from Biden's totals.

In Pennsylvania, from just one batch of absentee ballots, approximately 72668 of them are estimated to be fraudulent Biden votes. Our analysis of Milwaukee shows that 105,639 Biden ballots could be fraudulent. Moreover there is evidence of vote switching here, which might give as many as 42365 additional ballots to Trump, and remove the same from Biden.

Michigan yields an estimate of 237,140 fraudulent Biden votes added to the total, using conservative estimates of the Biden percentage among the new ballots.

2 Statistical Model

The simplest statistical model for computing the probabilities for an election outcome is a binomial distribution, which assigns a probability p for a given person within the population to select a candidate. If we assume that each person chooses their candidate independently, then we obtain the Binomial distribution in the form,

$$P(k|N) \equiv {}_N C_k p^k (1-p)^{N-k}, \tag{1}$$

where $P(k|N)$ is the probability that you observe k votes for a candidate in a population of N voters, and where ${}_N C_k$ is the number of ways to choose k people out of a group of N people.

For larger N, the binomial distribution can be approximated by a Gaussian distribution, which is used in the election fraud analysis in [1]. The chief reason for this is the difficulty of computing $P(k|N)$ for large N and k. However this problem can be overcome by computing the probabilities in the log domain and using the log beta function to compute ${}_N C_k$.

For this analysis it is more useful to compute the probabilities as a function of f the observed fraction of the candidate's votes. In this formulation we have $k = Nf$, and $N - k = N(1-f)$, and therefore we define the fractional probability as,

$$B_N(f) \equiv {}_N C_{Nf}\, p^{Nf} (1-p)^{N(1-f)}. \tag{2}$$

2.1 Fraud Model

To model voting fraud we assume a fixed fraction α of votes are given to the cheater. The pool of available voters who actually voted is now $N(1-\alpha)$. The fraction who actually voted for the cheater is given by $f-\alpha$. The probability that the fraction f voters reported for the cheater, with the fraction α stolen, can therefore be written as,

$$C_{N,\alpha}(f) \equiv B_{N(1-\alpha)}(f-\alpha). \tag{3}$$

This is similar to the fraud model used in the election fraud analysis given in [1]. We use the Binomial distribution directly, rather than the Gaussian distribution, since it should be more accurate for small N, k or f.

2.2 Posterior Probability of Fraud Model

A hypothesis test can now be set up between the standard voting statistics of (2) vs the statistics of the fraud model (3). If we use Bayesian inference we can compute an estimate of the posterior probability of the fraud model. This can be written as,

$$P(F|f) = \frac{C_{N,\alpha}(f)p_F}{C_{N,\alpha}(f)p_F + B_N(f)(1-p_F)},$$

where p_F is the prior probability of fraud. In our investigation we assume fraud is unlikely and set $p_F = 0.01$.

3 Analysis of Absentee Ballots in the 2020 Election

For this analysis we extracted data from the all_states_timeseries.csv file, which can be found at the internet url: https://wiki.audittheelection.com/index.php/Datasets. We look at the absentee ballot results near the beginning of the time series and then compare it to the end or the middle of the period, after a sufficient enough ballots were added.

For the models in Section 2 we assign the probability p of a Biden vote using the final data. This assumption is actually more favorable to the cheater. As mentioned earlier we set the prior probability of fraud to $p_F = 0.01$, and the cheating fraction, α, is set to $\alpha = f - p$, where f is the observed Biden fraction in the newly added ballots. This isolates the statistics of the added ballots from the final observed statistics.

We focus on the absentee ballots, because they are dominated by large democratic cities and there is no obvious reason why those statistics should change appreciably over time. Furthermore it should be noted that the start time for this data, mid day Nov. 4., was well after some of the larger absentee ballot dumps occured.

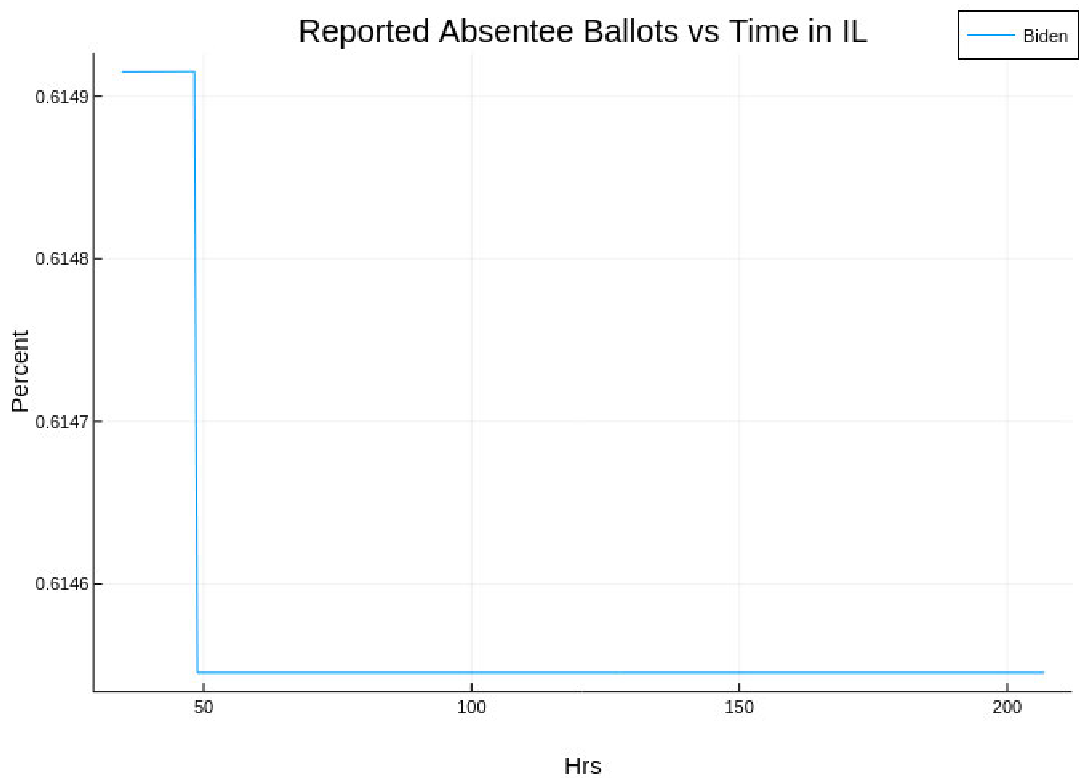

Figure 1: Reported Biden Fraction In Illinois vs Time

3.1 Control Case Illinois

We choose Illinois as a control case, since it has a significant number of absentee ballots that were counted later and provides a fairly clean baseline. The reported Biden fraction vs time is given in Figure 1.

As we can see there is not much change in the Biden statistics from the initial 601,714 absentee ballots when compared with the 54,117 ballots that were added. This is further shown by the bar chart in Figure 2.

Using our formula for the posterior probability of fraud in (3) we obtain the probability that the fraud model is correct of 6.5%. This lends good support to the idea that the Illinois absentee ballots were counted fairly.

3.2 Analysis of Georgia Absentee Ballots

The Georgia absentee ballot count started at 3,701,005 and 303,988 ballots were added. The Biden fraction among absentee ballots as a function of time is shown in Figure (3). This plot shows a statistical abnormality in that the

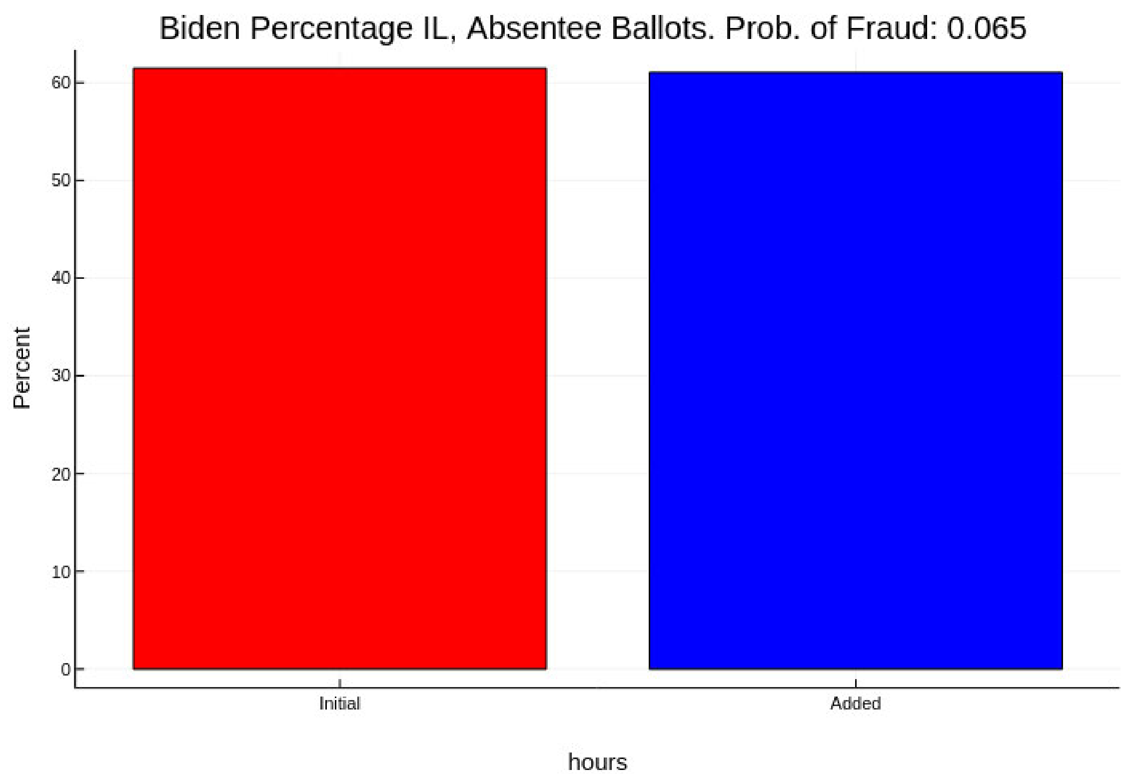

Figure 2: Before and Added Biden Fraction

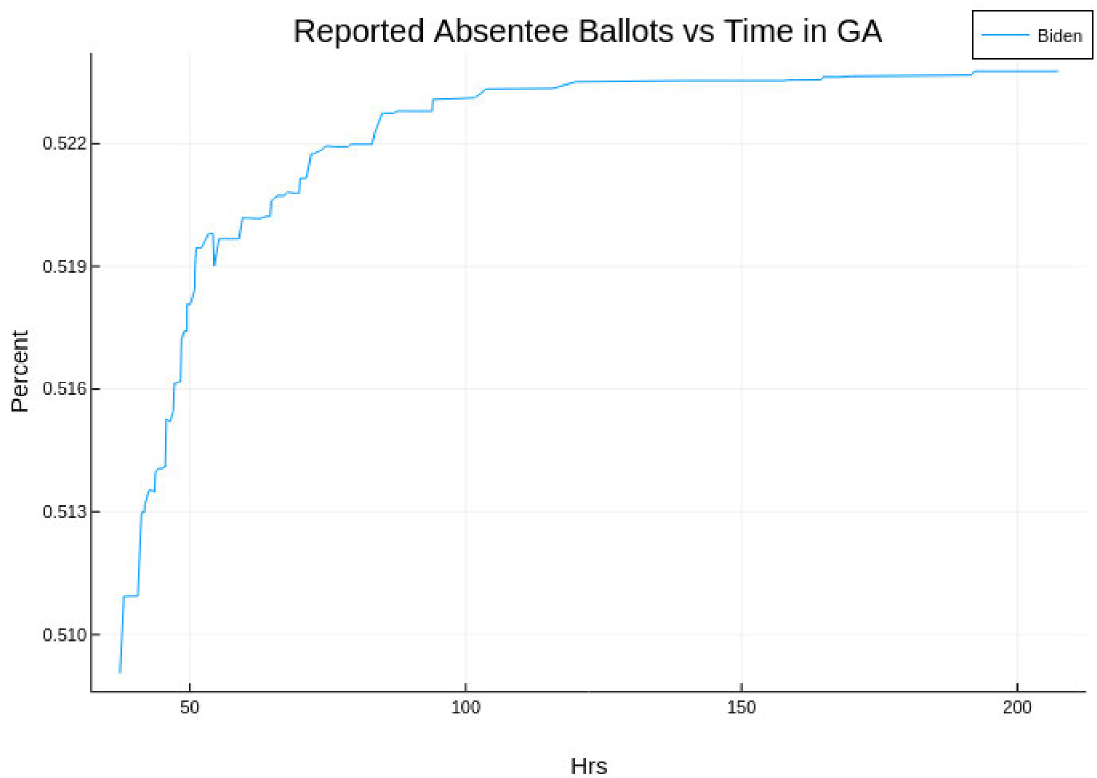

Figure 3: Georgia Absentee Ballots vs Time: (Biden Fraction)

Biden fraction appears to always be increasing. This is statistically unlikely and is not typically seen in fair elections. Normally you would see a mixture of votes of Biden and his opponents, and would see random deviation around the asymptote.

We investigate this phenomenon more fully in Figure (4). The added ballots have a Biden percentage of around 70%, while the initial statitics were at 50%. This is a very large jump for such a large sample size and seems very unlikely. Indeed the probability that the fraud model is correct is 100%, up to the precision of double floating point arithmetic.

Assuming that the prior absentee ballot distribution is the correct one, we can form a simple prediction for how many of Biden's ballots were fraudulent. Let $N_1 = 303,988$, the number of ballots added, and let $B = 189,497$ be the number of Biden votes in this new batch. If the fraction of Biden votes should actually be $f = 0.509$. Let x be the proposed number of fraudulent Biden votes,

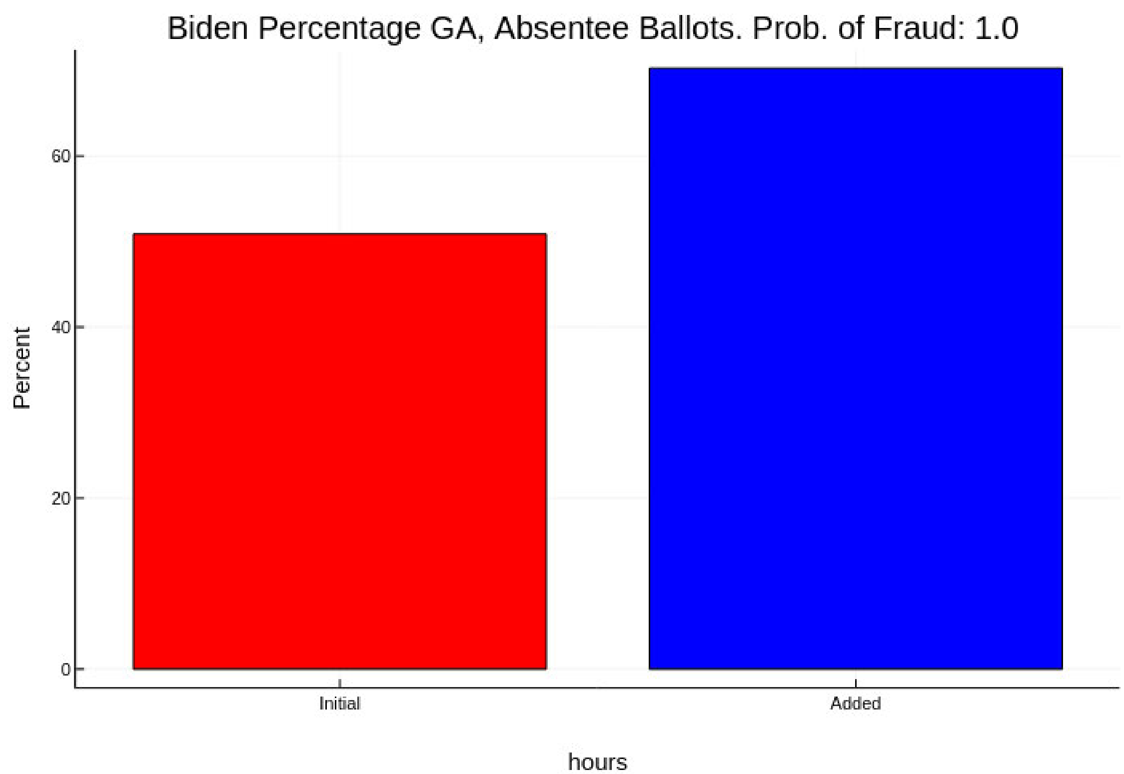

Figure 4: Before and After Biden Fraction in Georgia

then we have,

$$\frac{B-x}{N_1-x} = f$$
$$x = \frac{B-N_1 f}{1-f}. \tag{4}$$

In the case that votes were actually switched from Trump to Biden, then the formula becomes,

$$\frac{B-x}{N_1} = f$$
$$x = B - N_1 f$$

This would suggest that 104,107 ballots were fraudulently manufactured for Biden. If we presume that actually those ballots were switched from Trump to Biden then as many as 19% of the new absentee ballots for Biden were fraudulent, which totals around 51,110 ballots that should be removed from Biden's totals and added to Trump. We shall see in Section 6, that there is substantial evidence that some Trump votes were actually switched to Biden votes.

3.3 Analysis of Pennsylvania Absentee Ballots

The Pennsylvania absentee ballot count started at 785,473 and 319,741 ballots were added at 39 hours after the start of the data record. The Biden fraction among absentee ballots as a function of time is shown in Figure (5). This plot shows some oddities in that the Biden fraction fluctuates with large deviations.

In Figure (6) we see the initial Biden percentage compared with the Biden percentage of the added ballots over the first 39 hours. The added ballots have a Biden percentage of around 83%, while the initial statistics were at 78%. This is a very large jump for such a large sample size and seems very unlikely. Indeed the probability that the fraud model is correct is 100%, up to the precision of double floating point arithmetic.

If we just examine the initial large batch of votes among the absentee ballots, we see an unexplained jump of 5% for Biden. Although it is likely that most of the fraud, if any, occurred earlier in the vote count, just this batch of ballots suggests that approximately 72668 Biden ballots are fraudulent. If we presume that the votes were stolen from Trumps votes, then 15987 Biden ballots are fraudulent and should be added to Trump's total.

4 Analysis of Milwaukee County in Wisconsin

We now switch our analysis to a data set that contains precinct data for Milwaukee county. The data was obtained from the twitter acount of @shylockh, who derived his sources from the New York Times and in some cases from

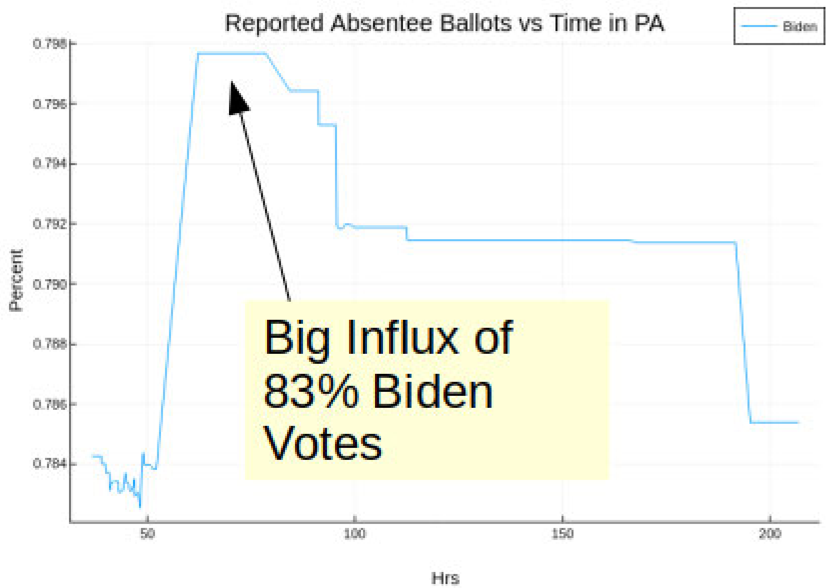

Figure 5: Pennsylvania Absentee Ballots vs Time: (Biden Fraction)

the unofficial precinct reports from the Wisconsin elections commision website. We examine vote percentages for ballots added between Wednesday morning, 11/04/2020 and Thursday night 11/05/2020.

This data set gives the total vote count by party affiliation. Because the data set is confined to Milwaukee, we can assume that the statistics should not be time varying. The voting pool here is highly partisan in favor of democrats and we don't expect any significant difference in the voting percentage, especially since a large number of absentee ballots were already counted by Wednesday morning.

4.1 Analysis of Milwaukee County Democrat results

The percentage of democrat voters increases by 15% among the ballots added on Wednesday and Thursday. On Wednesday morning Milwaukee had received 165,776 ballots. By Thursday evening 458,935 ballots were received, adding 293,159 ballots.

In Figure 7 we see the large deviation in democrat percentage between the Wednesday morning and those added by Thursday evening. This too causes the posterior probability of the fraud model to be 100% to machine precision.

Assuming that there was fraud, we estimate that 105,639 fraudulent Biden ballots were added between Wednesday and Thursday of 11/05/2020 in Milwaukee alone. However as we shall see below, many of these votes may well have been switched from Trump to Biden, which would also give Trump an additional

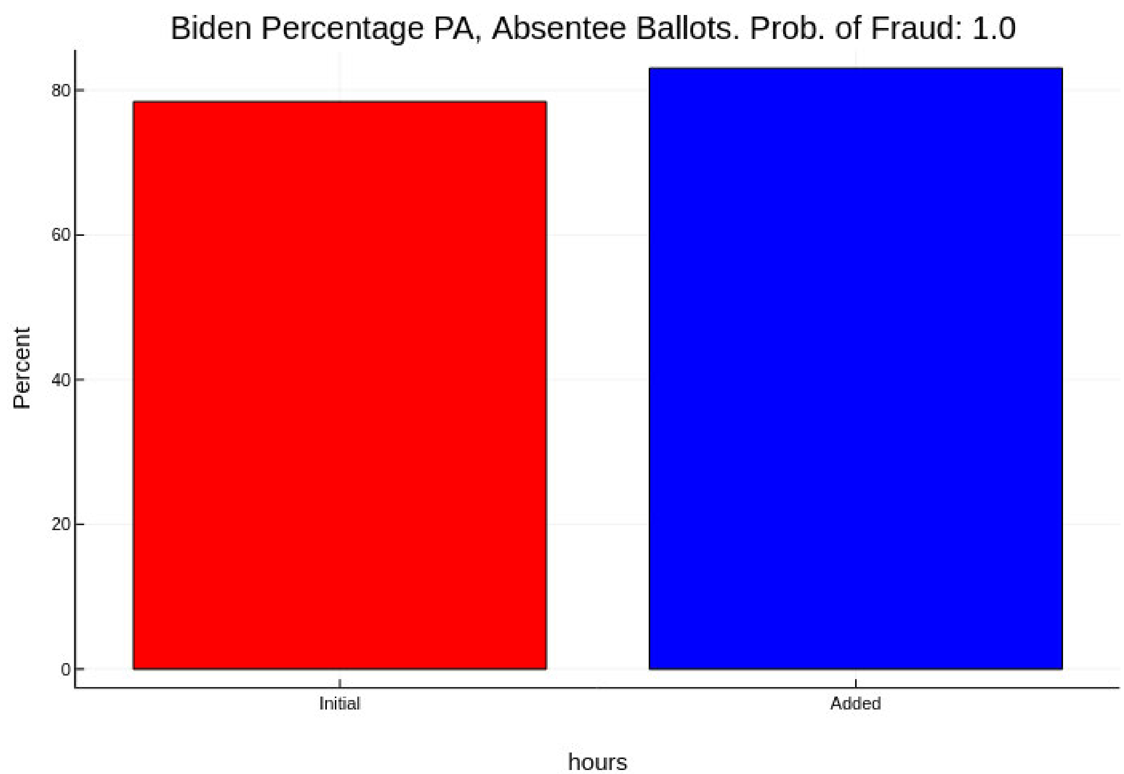

Figure 6: Before and After Biden Fraction in Pennsylvania

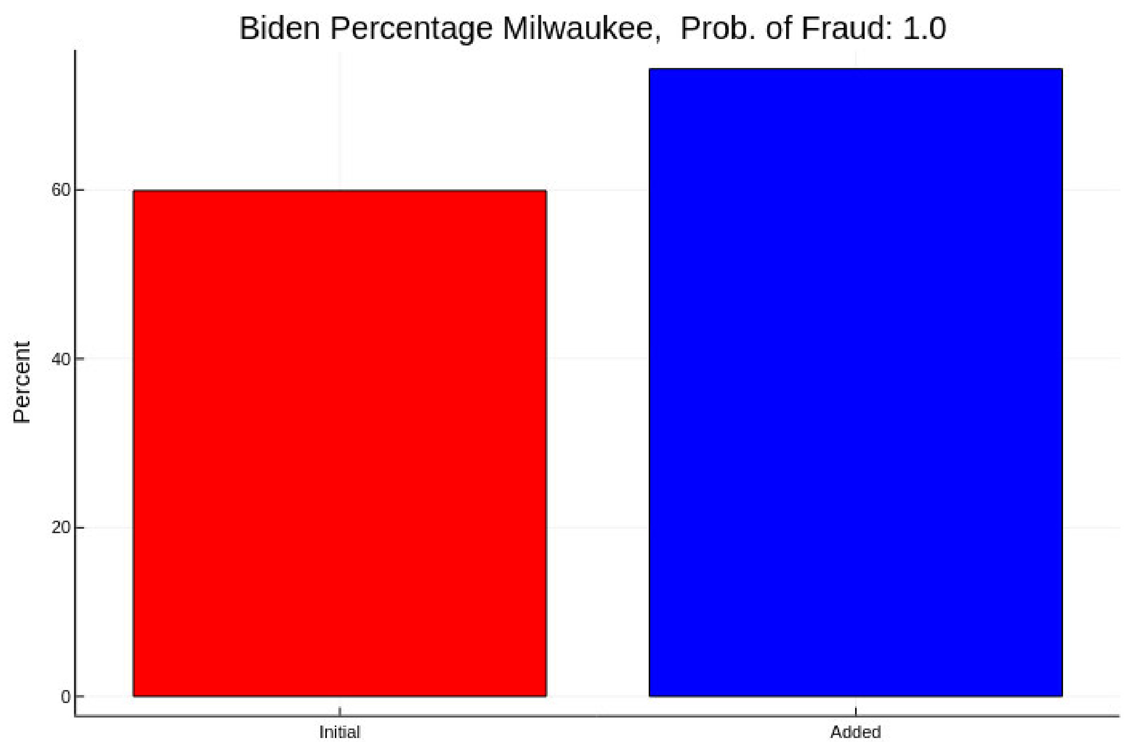

Figure 7: Before and After Democrat Fraction in Milwaukee

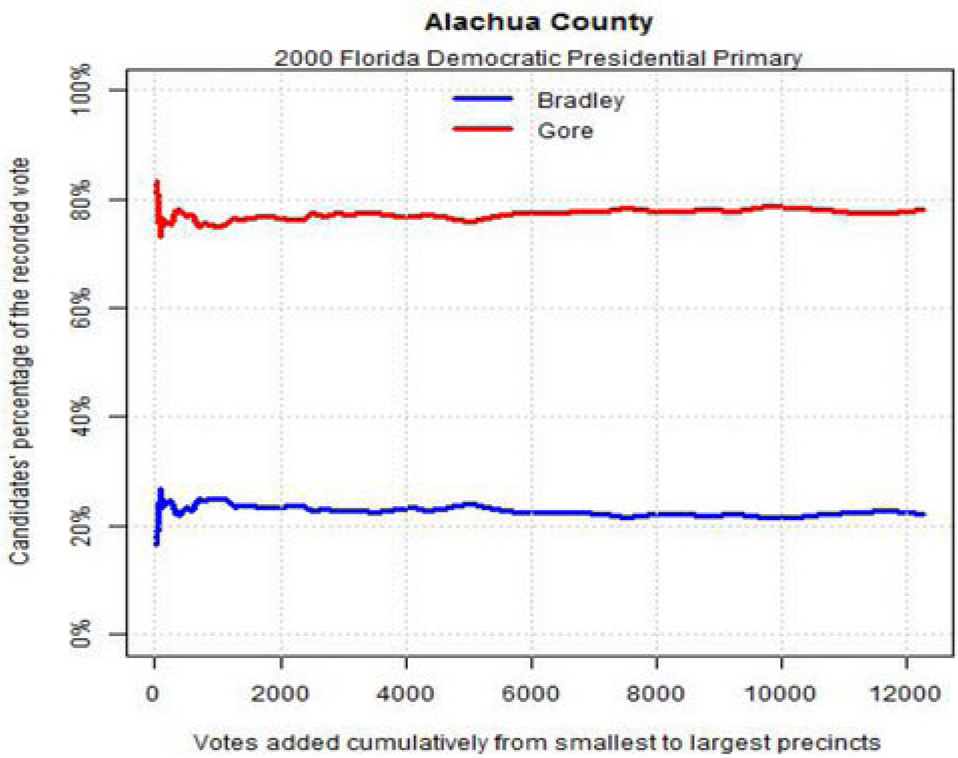

Figure 8: Baseline Cumulative Fractions Sorted by Precinct Size

42365 votes and remove 42365 votes from Biden.

4.2 Candidate Percentages Sorted by Ward Size

Another useful tool for evaluating fraud is to look at the cumulative vote percentages sorted by an independent input factor. An easy factor to use is ward or precinct size. This concept was used throughout the report on voter irregularities in [2]. In that report there was an anomalous dependency on precinct size in many of the 2016 primary elections. The larger precincts had introduced the use of voting machines. But one could also theorize the opportunity for cheaters to cheat in small precincts, where there may be less oversight.

Normally we would expect the cumulative vote percentage to converge to an asymptote, and bounce around the mean until convergence. An example of this can be found from the 2000 Florida Democratic presidential primary between Gore and Bradley. This is shown in Figure 8, and is taken from [2].

However when one sorts the Milwaukee, Thursday night data, by precinct

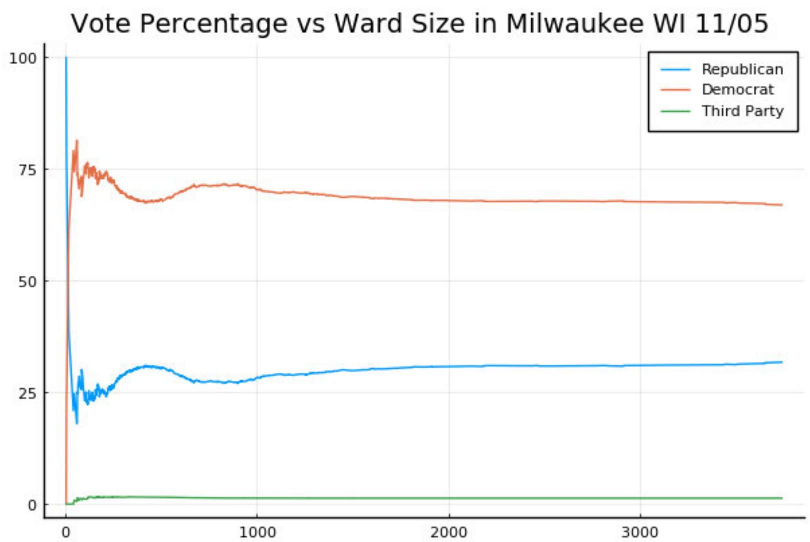

Figure 9: Milwaukee Democrat Ballots Percentage vs Ward Size

size, you will see trendlines that do not converge to an asymptote, as shown in Figure 9. It appears that smaller precincts almost uniformly have higher Democrat percentages. There is no obvious reason for this. It was certainly not seen in the control case in Figure 8. Furthermore the third party percentages quickly converge to their asymptote as would be expected in a fair election. One possible model for this would be vote switching from Trump to Biden, which would show up more strongly in the smaller precincts.

5 Analysis of Third Party Vote Count

Third party voters offer another way to examine a possible fraud mechanism. Votes could either be switched from third party candidates to the cheater, or fraudulent ballots that are added to benefit the cheater, may not include third party choices. For the control example, we look at absentee ballots in the state of Massachusetts. In Massachusetts the initial absentee ballot count was 117,618, and the number of added absentee ballots is 10,281.

The reported 3rd party percentage of absentee ballots vs time in Massachusetts is shown in Figure 10 and the comparison of the inital and added 3rd party ballots in MA is shown in Figure 11. There is only a small change in party preference, relative to the size of the added ballots. Therefore the probability of the fraud model is only 22%.

When we look at the total 3rd party percentages in Milwaukee, between Wednesday morning and Thursday night, we see a significant drop from 1.9 percent to 1.4% for the newly added ballots. But this is among 293,159 added

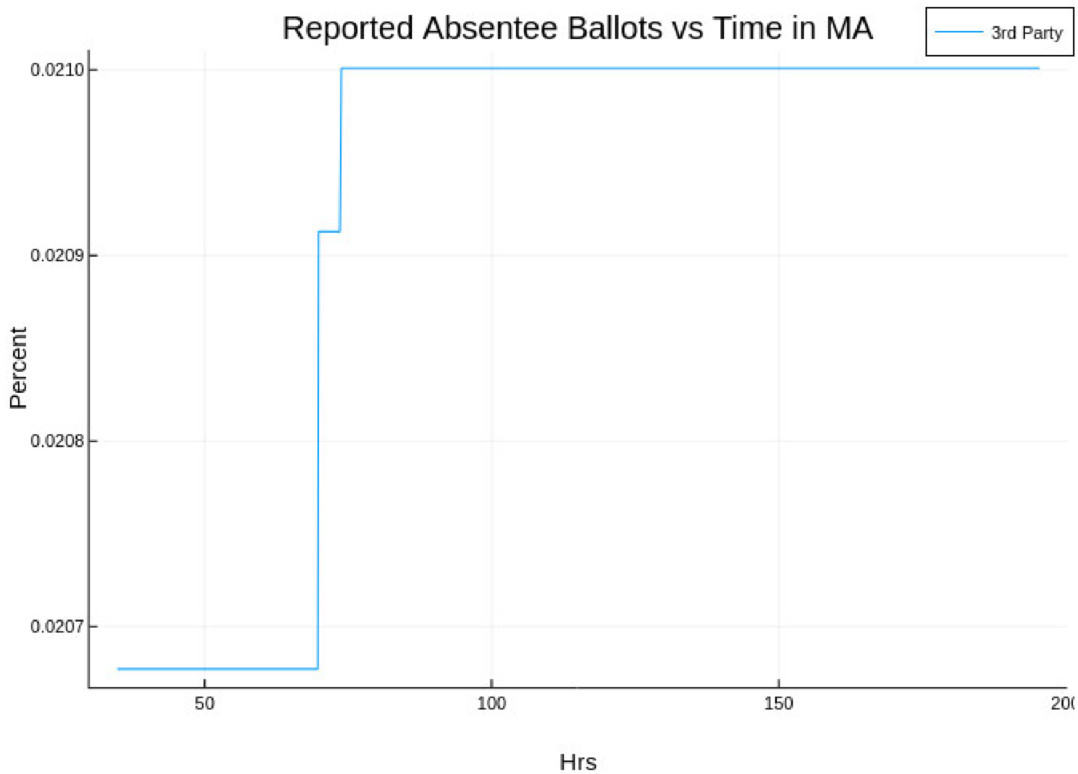

Figure 10: MA 3rd Party Absentee Votes vs Time

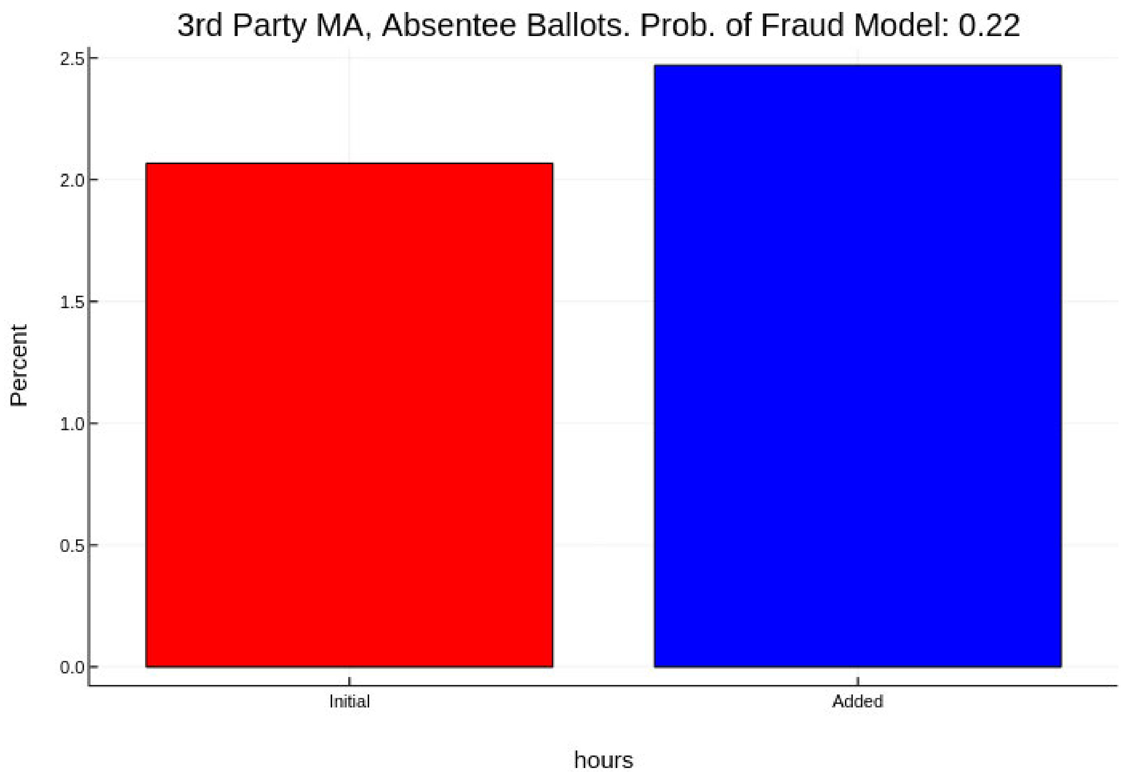

Figure 11: MA 3rd Party Percentage Initial and Added

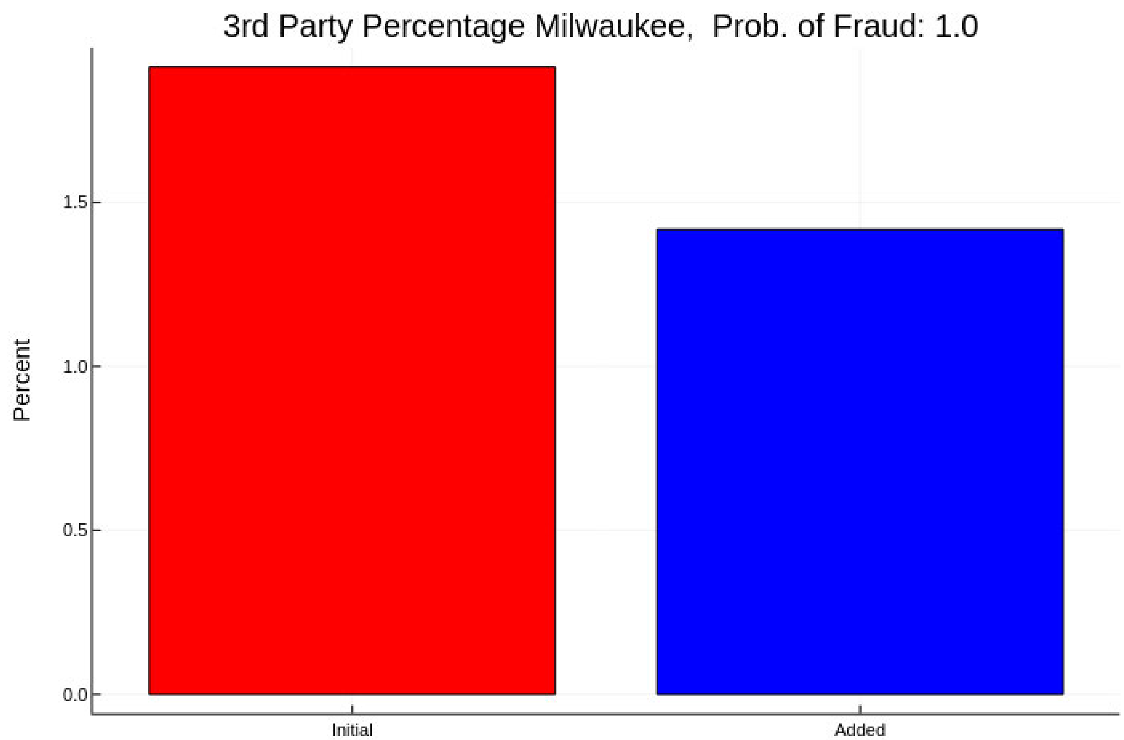

Figure 12: Milwaukee 3rd Party Percentages between Wednesday and Added

ballots. This is illustrated in Figure 12. Again in this case the fraud model has a posterior probability of 100% to machine precision.

6 Analysis of Fulton and DeKalb Counties in Georgia

We perform a precinct level analysis of Fulton and DeKalb counties in Georgia based on an aggregate data set likely culled from the New York Times. The Fulton data was collected on 11/08/2020 and the DeKalb data was collected on 11/09/2020. As in Milwaukee we look at the cumulative vote percentages as a function of precinct size. A plot of this for DeKalb county is shown in Figure 13.

Although there are somewhat concerning trendlines in the beginning, after the size 600 precinct mark, thereafter the overall picture is what one would expect of an election where the voter preferences are not dependent on precinct size. Both DeKalb and Fulton counties are in predominantly urban Atlanta,

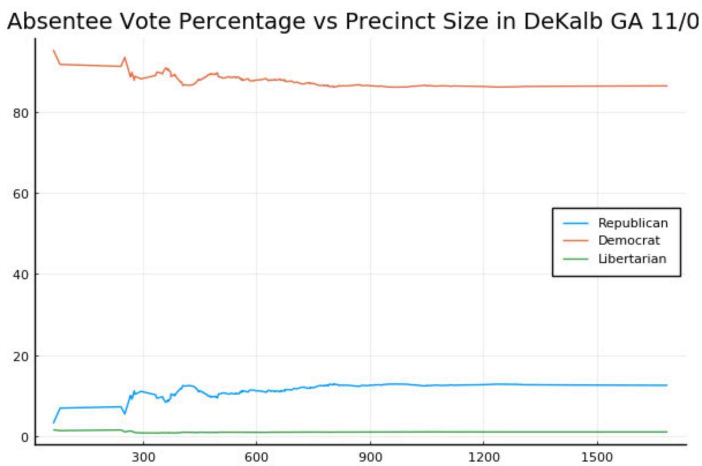

Figure 13: Dekalb County Absentee Ballots: Percentages vs Precinct Size

neighbor one another, and have similar voting preferences across precincts. DeKalb county is still suspect, however, due to the irregularites observed prior to the Ward 600 mark.

A different story emerges when we plot the absentee vote percentages for Fulton county as a function of precinct size, as can be seen in Figure 14. Here the trendlines for the Democrat and Republican percentages are quite pronounced, amounting to a difference of 8 percent from the halfway mark.

We divide the Fulton county data into a group of smaller precincts and larger precincts. One group has precincts less than 308 and another larger than 308. The total absentee ballots for the small group is 24,575, and the large group is 120,029. The small group has a Democrat percentage of 85% and the large group has a percentage of 77%, for a change of 8%. The fraud model is preferred in this scenario again with probability of 100% to machine precision.

One might presume that small precincts generally favor Democrats over large precincts, biasing the results. However take a closer look at the Libertarian party results in Fulton county in Figure 15. The percentages are exactly what we would expect if there were no bias in precinct size. The percentages bounce around a mean, not trending in any direction.

So if there were a bias favoring the democrats in small precincts, we would expect that to effect both the Republican and Libertarian totals. However it appears to only effect Republican totals, as if the Republican ballots were switched over to Democrat in a higher percentage in the smaller precincts. Indeed if a fixed number of ballots are switched in each district, it would have a larger effect in the smaller districts and then show up as trend lines in these percentage plots. At a minimum the data suggests a statistical anomaly that is not normally present in a fair election.

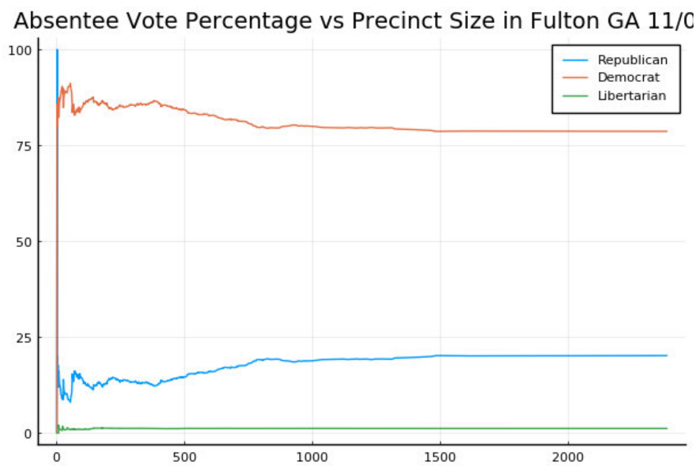

Figure 14: Fulton County Absentee Ballots: Percentages vs Precinct Size

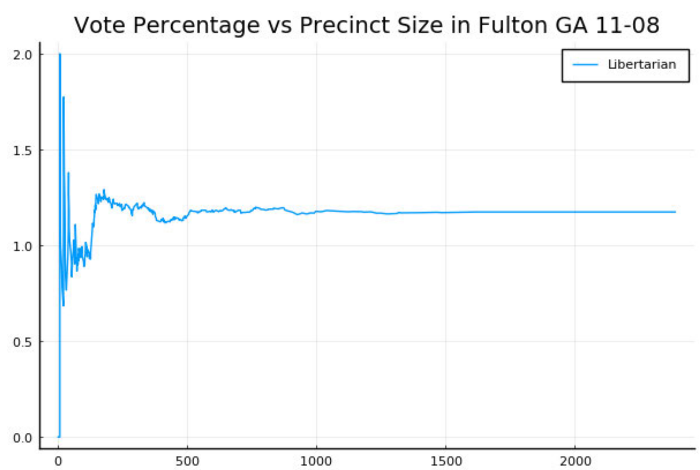

Figure 15: Fulton County Absentee Ballots: Libertarian Percentage vs Precinct Size

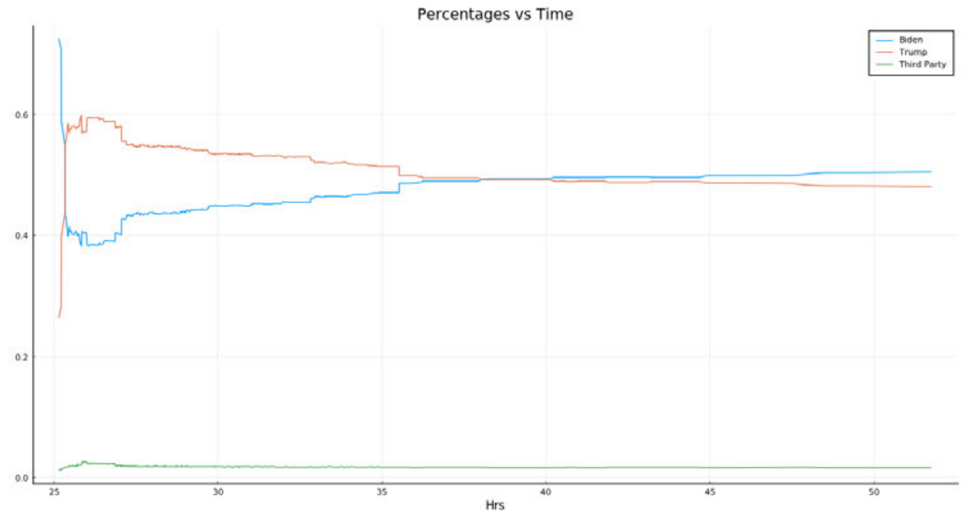

Figure 16: Michigan Vote Percentage vs Time

7 Michigan Analysis

We now due a time series analysis for Michigan. The data was culled from Edison Research. We first show, Trump, Biden and 3rd party voting percentages vs hours after the start of the election in Figure 16. The third party votes shows the proper convergence to an asymptote that we would expect from the law of large numbers. However the Trump and Biden percentages are vastly different You can see large discrete jumps in the percentages as very large Biden ballot dumps occur over time. You also see that the Biden percentages are mostly always increasing after hour 27, which is statistically unlikely in a fair election.

Note also that almost a million of the ballots are received by hour 27, and we use this as our starting point. At that point we have a total of 970,119 votes cast. At the end of 167 hours we have 5,531,222 votes cast. At our initial point the Biden percentage is 38%, but the new ballots have a Biden percentage totaling 53% as seen in Figure 17. The fraud model has posterior likelihood of 100% to machine precision.

For Michigan we compute the estimated amount of fraudulent Biden ballots conservatively, assuming that the 50.5 percent seen at the end of the count should have been the correct percentage among the newly added ballots. From this and (4) we obtain an estimate of 237,140 fraudulent votes added for Biden.

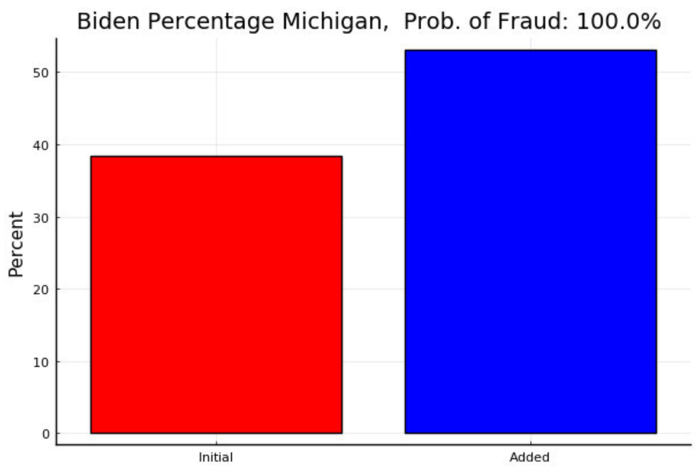

Figure 17: Biden Percentage Before and Added

References

[1] Peter Klimek, Yuri Yegorov, Rudolf Hanel, and Stefan Thurner. Statistical detection of systematic election irregularities. 2, 2.1

[2] lulu Fries'dat and Anselmo Sampietro. An electoral system in crisis. http://www.electoralsystemincrisis.org/. 4.2