

ANALYSIS OF VOTE-TYPE OSCILLATIONS IN 2021 ELECTION DATA

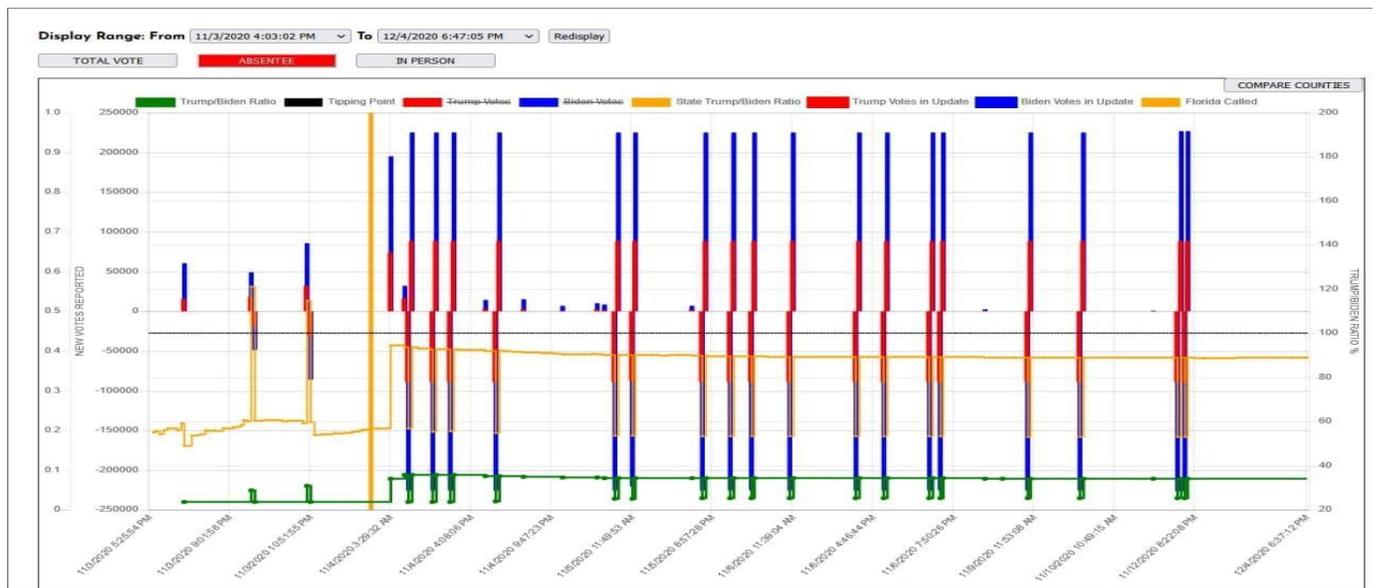
PREPARED BY JEFFREY O'DONNELL
10/22/2021

1. INTRODUCTION

A deep analysis of the county-level reporting during the 2020 election revealed an interesting anomaly. Numerous counties made updates at various times in the process which were only sent to update the In-Person vs. Absentee numbers – the total votes did not change. Many times, this was followed by a correcting update that changed the numbers back again. For lack of a more precise term, I refer to these changes as “oscillations”, as when they are plotted, they give the appearance of a signal oscillation, or “swaps”. This document will demonstrate the extent of this anomaly and theorize on it’s meaning. We use the term “vote types” to indicate absentee or in-person. These might also be considered “ballot types” as they indicate how the ballot containing that vote was cast.

2. EXAMPLE

This chart clearly shows an extreme example of the oscillations. The blue and red lines represent the changes in Trump (red) and Biden (blue) absentee votes reported in Fulton County, Georgia. It is easy to see the identical or nearly identical changes back and forth in the red and blue bars.



As a further example, here are the timestamp, total votes, total absentee votes, and total in-person votes reported by Fulton County on November 5th, 2020.

TIME	TOTAL	ABSENTEE	IN-PERSON
11/5/2020 1:16:53 AM	493,791 +10,461	425,819	67,972 +10,461
11/5/2020 5:25:00 AM	493,791	436,280 +10,461	57,511 -10,461
11/5/2020 5:55:01 AM	502,259 +8,468	436,280	65,979 +8,468
11/5/2020 8:35:36 AM	502,259	444,748 +8,468	57,511 -8,468
11/5/2020 9:49:55 AM	502,259	131,177 -313,571	371,082 +313,571
11/5/2020 10:36:35 AM	502,259	444,748 +313,571	57,511 -313,571
11/5/2020 11:43:40 AM	508,389 +6,130	444,748	63,641 +6,130
11/5/2020 11:49:53 AM	508,389	137,307 -307,441	371,082 +307,441
11/5/2020 12:13:24 PM	508,389	450,878 +313,571	57,511 -313,571
11/5/2020 5:15:13 PM	514,694 +6,305	457,183 +6,305	57,511
11/5/2020 6:03:25 PM	514,694	143,612 -313,571	371,082 +313,571
11/5/2020 6:59:07 PM	514,694	457,183 +313,571	57,511 -313,571

At the beginning of the day, a total of 493,791 votes had been reported, with the corresponding breakdown of absentee and in-person. Roughly four hours later, 10,461 votes were moved from in-person to absentee. A half hour later 8,468 votes were added, all in-person. Three hours later, those votes were moved to the absentee column. At 9:49, 313,571 were moved from absentee to in-person. Almost two hours later, these were returned to the absentee column. The pattern repeats several more times that day, with the 313,571 votes from earlier swapping vote types three more times. Were we to continue this list to include the 6th of November, it would show that same number being swapped *thirteen additional times*.

It is difficult to imagine that this was done manually by county personnel.

3. ASSUMPTIONS

The assumption was made that anything less than 3 of these corrections might be attributable to human error, and as such they are excluded from this analysis except where there were less than 4 corrections, but the number of votes involved was very large compared to the county's total vote count.

4. SUMMARY FINDINGS

An analysis of all counties using the above assumptions resulted in oscillations being flagged in 178 counties in 5 states. Following are the states and the number of its counties which were flagged.

STATE	COUNTIES	AVERAGE # OF EVENTS
Georgia	128	37
Michigan	2	10
North Carolina	33	13
Pennsylvania	14	60
South Carolina	1	4

It is clear from this data that this anomaly was endemic in Georgia, and to support a theory that this behavior was caused by simple human error stretches credulity.

The following counties demonstrated the largest number of anomalies in their state as a percentage of total updates. (For instance, if a county updated their totals ten times, and five showed a vote type switch, then this percentage would be 50%). NOTE: Because of relatively small numbers, South Carolina is omitted from further summary analysis.

STATE	COUNTY	% of TOTAL
Georgia	TOWNS	13.74%
	STEWART	13.58%
Michigan	MACOMB	7.69%
	EATON	3.06%
North Carolina	CHATHAM	13.71%
	LEE	12.5%
Pennsylvania	CLEARFIELD	19.62%
	POTTER	19.45%

Of additional note is that 18 Georgia counties, including Fulton, had more than 13% of their total reports be vote-type changes.

When just observing the number of events, it is of note that Potter, Mifflin, Pike, Clearfield, McKean, Lancaster, Lehigh, Armstrong, Sullivan, and Mercer counties in Pennsylvania were the top ten counties in the country.

Observing the average magnitude of the events, defined as the number of votes involved, the following shows the top two counties in each of the states.

STATE	COUNTY	AVERAGE # OF VOTES
Georgia	FULTON	274,816
	GWINNETT	216,371
Michigan	MACOMB	261,676
	EATON	840
North Carolina	WAKE	371,326
	DURHAM	117,136
Pennsylvania	LANCASTER	81,074
	LEHIGH	50,518

A few “battleground” counties were surprisingly missing from these tables, so to be thorough I checked them specifically.

STATE	COUNTY	TOTAL EVENTS	AVERAGE # OF VOTES
PENNSYLVANIA	ALLEGHENY	1	9,114
PENNSYLVANIA	PHILADELPHIA	1	277,229
ARIZONA	MARICOPA	2	33,646
FLORIDA	BROWARD	1	831,693
VIRGINIA	NEWPORT NEWS	1	48,299
TEXAS	HIDALGO	1	186,742

Although a single instance could be attributed to human error, the sheer magnitude of some of these updated deserves further investigation.

The following states had no counties which exhibited this anomaly.

Alabama, Alaska, California, Colorado, Connecticut, Delaware, District of Columbia
Hawaii, Idaho, Illinois, Indiana, Kansas, Maine, Maryland, Massachusetts, Montana
Nevada, New Mexico, New York, Ohio, Oklahoma, Oregon, Rhode Island, South Dakota Utah,
Vermont, Washington, West Virginia, Wisconsin, Wyoming

The following states had a high number of its counties exhibit at least one of these “corrections”, although they did not fit the assumptions above and were not flagged.

STATE	COUNTIES
Arkansas	45
Iowa	89
Louisiana	64
Texas	25
Virginia	19

5. THEORY

As many of the counties which demonstrated this phenomenon were located in heavily contested states, I developed the theory that these repeated changes and corrections were being caused by a software controller which had become unstable, searching for an unsolvable response to an unexpected condition. This leads to the further theory that the software controller was attempting to achieve a predetermined “setpoint”, and the vote type swaps were made necessary when the controller’s algorithm ran into problems allocating votes given the upper limits of actual in-person or absentee voters and was attempting to solve the problem by shifting votes from one category to the other. The oscillations would show the controller not able to solve the problem satisfactorily and entering a loop.

This theory does not necessarily exclude the possibility that these changes were made manually, for the same stated purpose. The data seems to support an automatic process, however.

6. CONCLUSIONS

After examination of these anomalies, it is difficult to explain their prevalence as simple human error. Given the other evidence of fraud which have been well documented, it is very possible that these vote-type switches are part of the overall mechanism used to commit that fraud.

This analysis did not include events where switches were made to the vote types, and the overall vote total was also changed. Should the analysis be repeated to include those events, the numbers above would be even more significant.

It should be noted that these county reports were taken from the New York Times website, saved shortly after the election. The process whereby the thousands of counties report their interim results, and how those results make their way through Clarity and Edison to the New York Times is one shrouded in mystery and misinformation. If we are to ever have another secure and transparent national election, this process needs to be demystified and fully documented. Situations requiring an update, like the ones which cause the oscillation effect, need to be well defined and documented.

Edison Research, their CEO Larry Rosin, Executive Vice President Joe Lenski, and Vice President of Data Science Clint W. Stevenson should be required to provide answers to the troubling questions this report outlines.