## - CONFIDENTIAL - <br> Pennsylvania Voter Analysis: Briggs

As a citizen and scientist, I (John Droz) have one objective regarding the 2020 elections (esp regarding the Presidential election): that all - and only - legitimate votes be counted.

Since Pennsylvania is a key swing state, on 11-6-20 I was sent three files of 2020 PA voter information (contact me if these confidential files are needed to be seen), and was asked to have them analyzed for any statistical anomalies. I shared this data with five statistically competent people who were sympathetic to the stated election objective.

The biggest challenge is that we were only given a few hours to analyze this data clearly not an optimum situation for an in-depth critique. However, the time-frame was determined by other constraints (e.g. legal time periods to file objections).

In any case, this is a report mostly about one of the analyzers, Dr. William M. Briggs, who did an outstanding job with very limited time and information. He chose to graph (plot) this PA data to see what may jump out from what was provided. Below are eight (8) different graphs that he put together, and his brief commentary on each...

## 1 - I looked at DOB (Date of Birth) first.

There are many different Party Codes (over 60). The three largest were D, R, NF. I put all the others into 'Other'.

Then looked at the fraction of registered voters born before Year $=X$, and I let $X$ vary from 1900 to 2022.

Democrats are red, Republicans are purple. The other two categories you can see.
How to read: take birth year $1960.50 \%$ of Ds were born before then, but only $38 \%$ Rs.
$75 \%$ of all registered Ds born before 1975, but only $62 \%$ of Rs.
So there are clear differences, but I caution you that this says nothing about cause. It could just be Rs are younger than Ds, which is not implausible.

I then did the same, but focused in on 1900-1920 (as just an example).
We can do the same by count and not proportion, and I did, but there were only 76 Ds born before 1920 .



2 - I believe I have identified 3 or 4 suspicious counties. (These include three counties with more Rs than Ds, and one with more Ds than Rs.) If any cheating happened, it was likely there. (Of course, it could be in the big cities, too.)

In the graph below, the four notable counties, with Biden vote totals, are:
Montgomery 313,543
Chester 177,408
Cumberland 61,168
Pike 12,845
I'd look into these counties, especially Montgomery and Chester more closely.
I plotted D/R registration ratio by Biden/Other D votes. You can see Philly (far right), which had a smaller proportion for Biden than Obama 1, Obama 2, or Hillary.

But Biden soared in three predominately R counties, by 1.24 to 1.43 times greater than either Obama run or Hillary. This is a likely absurd result, that Biden would get that much more in these almost 50-50 $\mathrm{D} / \mathrm{R}$ counties.

County Level Biden to Obama First Run Votess Ratio by D to R Registration Ratio


3 - The third plot (below) which is similar, but looks at total voter turnout, Biden/ Other Candidate races, and $D / R$ registration ratios.

Counties which had higher turnouts in this race have y-axis values $>1$. I highlighted the same four counties as above.

Philly had less turnout. Almost all other counties had more. Now a lot of that could have been for Trump, too.


4 - Next, I looked at the Biden/Trump ratio by D/R registration (graph on next page). I displayed the county names with the number of MORE votes Biden got over Trump, but just for when Biden got more.

Chester again is the most suspicious county.
Obviously there were a lot more extra votes in Philly and Pittsburgh, too.


5 - Okay, another plot (see next page), with the same conclusion: that Chester county is worth looking into.

This looks at the Biden/Trump ratio of votes by the number of extra votes Biden got: negative means Trump got more. Blue dots have more than Ds than Rs registered, and red more Rs than Ds. All looks as you'd expect until Chester county.

Chester, Delaware, Allegheny, Montgomery, and Philadelphia added the most "excess votes" to Biden. Chester is odd because it's predominately R.

5 - The final plot (second on next page) is the Proportion of Democratic Registrations by Biden/Trump Votes. This is a refinement of an earlier analysis. Don't forget there are Ds, Rs, and Others, and this ratio is D to total, including Others.

The counties which are not predominately but where the Biden/Trump vote ratio is greater than 1 are named. They may be worth looking into.


Proportion of Democratic Registrations by Biden/Trump Votes


6 - Lastly, I don't see any glaring errors in the registration or status change dates, other than the handful we always find in datasets like this. I attach the plots of birthdate by registration and status anyway, so you can see.

The size of the registration file for Philly is about $1 / 2$ the number of people who voted in Philadelphia county.

I then looked up population county size. Only one county, Columbia, had more votes cast than people who live there. 30,041 votes cast, with population 27,295. The county went $R$ anyway.

The ratio of voters to population was anywhere from $1 / 3$ to almost $2 / 3$, with the exception of Columbia. There was a slight trend in that the greater the population that voted, the more proportional votes Biden got.

That about exhausts what I can be done with the data. Clearly, as a minimum, a voting recount should be insisted on (esp in Montgomery, Chester and Cumberland counties), as this data indicates that there are statistical anomalies with some voting results.


Note that another aberration in Montgomery county is that the records indicate $90 \% \pm$ of registered voters voted. That is an extraordinarily high (suspicious) percentage. (Note: For comparison, the PA state average in the 2016 national election was $61 \%$.)

Dr. Steven Miller also looked at these figure, and added three additional columns to the Excel spreadsheet (see here). The resulting data also supports the contention that the Montgomery, Chester and Cumberland voting results are worth investigating.

We are also doing a Benford's Law analysis of the PA voting figures, and there are unexpected results. That data will be supplied as it is available.

Recommendation: Based on the concerns outlined herein, to correct any honest errors, and to eliminate the possibility of fraud, a well-supervised recount (where every vote is verified as being legitimate) is necessitated in at least these three Pennsylvania counties: Montgomery, Chester and Cumberland.

I'm expecting some further analysis of this data from one additional expert, (hopefully today), but that would not change this minimum recommendation.

If there are any questions, corrections or improvements on this report, please contact the undersigned, and this document will be updated, and the date revised.

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