## No Evidence Placer County Elections Are Manipulated

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**Executive Summary** In a series of recent presentations, Douglas Frank claims to show that elections in Placer County, California are manipulated. In this brief memo I show that his analysis is flawed and therefore his conclusion is mistaken: there is no evidence that Placer County elections are stolen. Rather, Frank's claims that Placer County precincts have identical turnout rates is simply false. Other claims about unusually strong relationships are merely the result of a poorly chosen statistical analysis that essentially correlates a variable with itself. As my research group has previously shown, this is a problem that plagues many of Douglas Frank's analyses.

In a recent presentation at Mike Lindell's "Moment of Truth" summit, held August 20th to August 21st, 2022, Dr. Douglas Frank focused on Placer County California as an example of voter fraud in California. Frank claimed to have clear evidence of manipulated results—every precinct in Placer County, according to Frank, had the same rate of Republican turnout. Frank asserted that "stated simply 88% of the registered Republicans in EVERY Placer County precinct voted...Exactly 88% of all Republicans voted in that Precinct". After asserting that this is unbelievable, Frank presented a slide where he opines that "we might suspect that someone was stuffing ballots up to a target limit of 88%." He went on to assert that this same basic pattern holds for Democratic and overall turnout in Placer County and for precinct-level partisan turnout in counties statewide claiming "this is all over the state, this is happening everywhere". Frank concluded that all California elections were manipulated at the state level.

Frank's assertion that there is a constant partian turnout rate in Placer County precincts is demonstrably false. The left-hand plot in Figure 1 replicates, as close as possible, the plot Frank presented at the "Moment of Truth" summit.<sup>1</sup> To replicate Frank's plot, we use precinct level data from the 2020 general election in California.<sup>2</sup> The horizontal axis in the left-hand plot of Figure 1 shows the number of Republican registered voters, and the vertical axis shows the number of Republicans who turned out to vote. The blue line is a regression line of the number of Republicans who voted against the number of Republicans who registered to vote.

This plot and the regression line only reveals the obvious fact that larger precincts have more registered Republicans and more people who turnout to vote. This regression line, however, cannot speak to Frank's claim about exactly equal precinct-level turnout rates.

<sup>&</sup>lt;sup>1</sup>Exact replication is not possible because Frank claimed initially that there are 35 precincts in Placer County and in a revision of his analysis that there are 568 precincts. The 35 precincts appear to be the result of aggregating precinct level results to the Precinct Name level. The 568 precincts are found if the data are downloaded at a lower level of granularity than the official precinct results. There are actually 127 precincts in Placer County, which corresponds with the number of precincts in my analysis. None of my conclusions depend on the specific level of analysis.

<sup>&</sup>lt;sup>2</sup>All data is gathered from the state wide database: https://statewidedatabase.org/

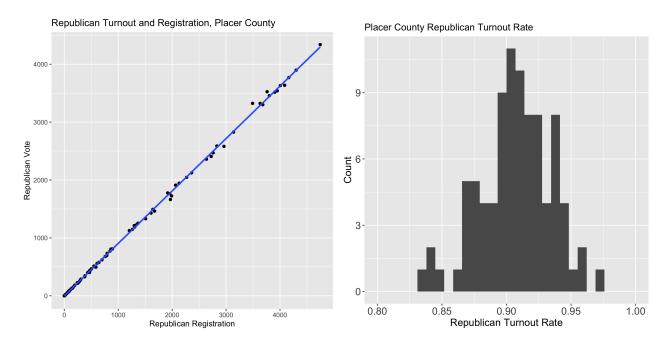


Figure 1: Evaluating Douglas Frank's claim that Placer County Republicans all Turnout at the Same Rate. The left-hand plot replicates Frank's analysis and merely shows that places with more registered Republicans have more Republicans who vote. The right-hand plot shows that there is considerable variation in the precinct-level Republican turnout rate.

Frank reports a slope of the regression coefficient of 0.88 (our replicated slope is 0.9). With this slope in hand, Frank then asserts that *every* precinct has 88% of Republicans voting. This is demonstrably false.

The right-hand plot in Figure 1 presents the precinct-level Republican turnout rate in Placer county for all precincts with more than 100 registered voters. Clearly, this plots shows that there is considerable variation in the precinct-level Republican turnout rate—with a precinct-level high of 98% of registered Republicans voting and a low of 78% of Republicans voting in a precinct. We see the same pattern for Democrats and overall turnout in Placer County. Figure 2 shows that there is also considerable variation across precincts in the turnout rates for Democrats (left-hand plot) and overall turnout rates (right-hand plot).

Frank's claim of a single precinct-level partian turnout rate for all counties in California is also demonstrably false. Figure 3 shows the distribution of precinct-level Republican turnout rates in the 24 largest counties in California. Unsurprisingly, across precincts we see

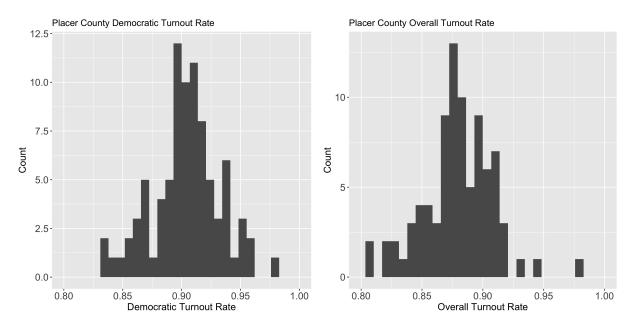


Figure 2: Democratic and Overall turnout rates in Placer County. This reveals that there is considerable variation in the turnout rate in the county.

considerable variation in precinct-level Republican turnout rates. Figure 4, which shows the Democratic turnout rate across the largest California counties and Figure 5, which shows the overall turnout rate across the largest California counties show the same basic pattern—in no county do all precincts have the same turnout rate for any partian group.

## Douglas Frank's Evidence Results from Correlating A Variable With Itself

Douglas Frank's primary evidence of election fraud are correlations between variables that he asserts are unnaturally high. After presenting these correlations, Frank's common refrain is, "that ain't natural, buddy." In fact, the correlations that Frank obtains are quite natural and the direct consequence of poorly chosen statistical analyses. This is because Frank's analyses essentially correlate a variable with itself.

This is clear in Frank's analysis of Placer County. There, he claims to show evidence about the registered voters' *turnout rate* by group–which is the number of individuals who

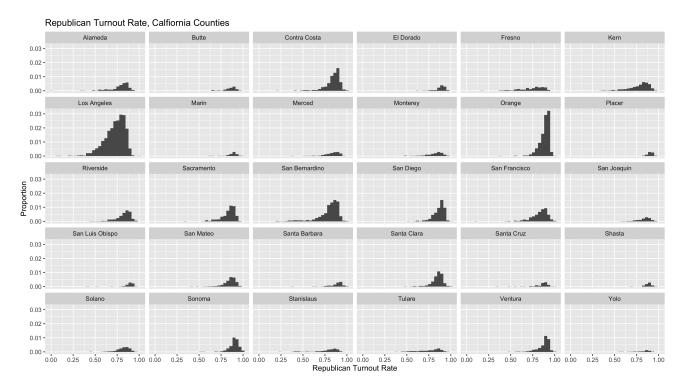


Figure 3: Republican Turnout Rates for the 24 Most Populous California Counties. Across the counties there is considerable variation in the turnout rate of precincts

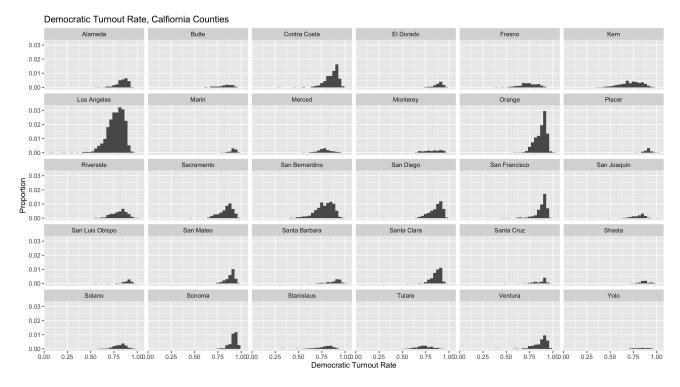


Figure 4: Democratic Turnout Rates for the 24 Most Populous California Counties. Across the counties there is considerable variation in the turnout rate of precincts

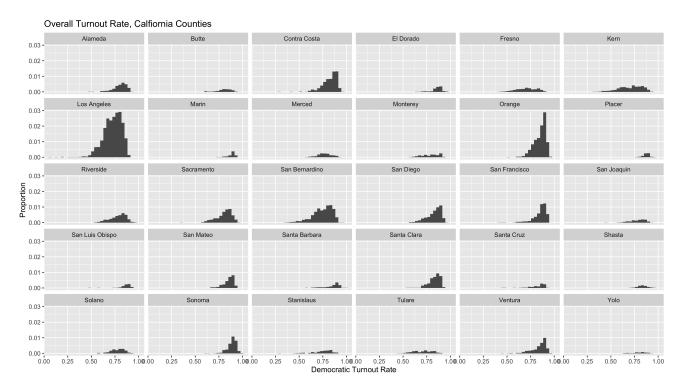


Figure 5: Overall Turnout Rates for the 24 Most Populous California Counties. Across the counties there is considerable variation in the turnout rate of precincts

turned out to vote from a particular group, divided by the number of registered voters in a group. But Frank's plots, instead, presents the number of voters against the number of registered voters: the turnout rate is never plotted. Obviously, places with more registered voters can have more voters to turnout to vote, so there will necessarily be a relationship. If the turnout rate is sufficiently high, then this will mechanically create the appearance of a quite strong relationship. Heuristically, this is because if the turnout is high enough Frank is essentially correlating the number of registered voters with the number of registered voters.

In fact, in a simple simulation we can show that for a county with a high turnout rate, like Placer, we should expect the strength of the relationship Frank uncovers even if each precinct's turnout rate is independently and randomly determined. I show this in Figure 6 which displays the results of a simple simulation. In that simulation, I suppose that the Republican turnout rate in each precinct is randomly determined, with the average turnout rate across precincts increasing as we move to the right of the figure. The vertical axis

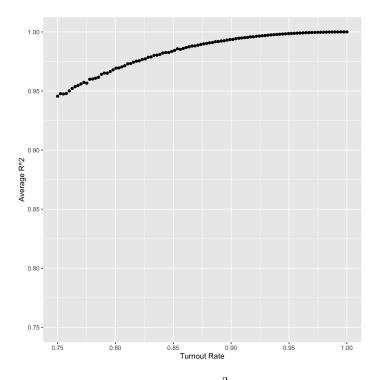


Figure 6: There is nothing unnatural about the  $R^2$  values Douglas Frank obtains in Placer County. In fact, Placer County's turnout rate implies an  $R^2$  of 0.991.

measures the strength of the relationship between the number of voters who participate in the election and the number of registered voters.

As expected, as the average turnout rate increases, the strength of the relationship between the number of voters and registered voters increases. And the supposedly unnaturally strong relationship obtained in Placer County is entirely consistent with precincts having independent and randomly determined turnout rates. In this simple simulation the average  $R^2$  value for Placer's 88% turnout rate is 0.991. Far from being unnatural, the strong relationship Frank uncovers is actually expected. It is the mere consequence of the ill-suited statistical analysis Frank performs.

In other analyses, Douglas Frank asserts that a strong correlation between the predicted count of votes from age groups and the actual count of votes across counties in swing states is evidence that a "key" or "algorithm" was used to determine the vote before the election. In an updated analysis he asserts the same about Placer County. But there is nothing remarkable about the correlations that Frank produces. Because the number of registrants appears in both terms of the correlation, Frank's reported correlation is artificially inflated. If we make the same effective comparison without including the number of registrants, then we find considerably more modest correlations. Additionally, in other work I show that Frank's high correlations are found even if the predicted turnout rates are generated with substantial noise. In short, Frank's analysis is not evidence of fraud at all.

My research group's analysis of these other claims is found here: https://www.dropbox. com/s/jibv67zh9lwdlwq/FrankMemo.pdf?dl=0

## Conclusion

Frank's analysis of Placer County is not evidence of voter fraud, nor of any sort of vote manipulation. His claims of surprisingly high correlations are actually just based on a poorly chosen statistical analysis. Contrary to Frank's claims, a simple analysis of turnout rates in precincts in Placer County reveals considerable variation in precinct-level turnout rates. And the supposedly strong relationship between the number of voters and the number of registered voters occurs because Frank is essentially correlating a variable with itself. This flaw occurs in other of Frank's analysis and leads him to find seemingly large correlations that are just the result of the particular analysis he had run.

Contrary to Frank's claims, the results in Placer County are natural and expected in a fair election.