Chasing Electoral Ghosts

We looked at 130 million ballots from the 2012 election and found practically zero evidence of fraud.

By Sharad Goel, Marc Meredith, Michael Morse, David Rothschild, and Houshmand Shirani-Mehr

Donald Trump has stoked fears of voter fraud and claimed that the election is “rigged.” Above, he addresses a campaign rally on Thursday in Selma, North Carolina.

In the months leading up to Tuesday’s vote, Donald Trump has repeatedly asserted that there will be rampant voter fraud on Election Day, stoking fears that this election will be “rigged.” Several in-depth investigations have found no indication of widespread voter fraud, but skeptics argue that it’s simply hard to detect. In an effort to determine whether such fraud does exist, we undertook a comprehensive analysis using a national voter file compiled by TargetSmart to statistically analyze 130 million ballots cast in the 2012 presidential election. Like past studies on this topic, we found no evidence of large-scale fraud. There continues to be simply no proof that U.S. elections are rigged.

There are three primary avenues worth considering when analyzing potential voter fraud: (1) impersonation of a registered voter, (2) voting despite being ineligible, and (3) double voting.

The first possibility, voter impersonation, is difficult to pull off and hard to scale. The risk is that you will be discovered if the actual registrant shows up to vote. Though this cannot happen if the registrant is deceased, such fraud can be readily detected by linking registration records to vital statistics like death records. Extensive audits have found essentially no fraud of this type, and Indiana could not produce a single example of this ever happening when its voter ID law was challenged in court. The second possibility, voting despite ineligibility, is also unlikely to purposefully happen because the risk of an undocumented immigrant subjecting himself to detection is not worth the low potential reward of a single extra ballot cast for one side. Although a recent academic article claimed to show that some noncitizens vote, these claims have since been debunked. (But that hasn’t stopped the Trump campaign from holding it up as evidence of voting fraud.) Finally, votes cast twice within the same state—as Trump hinted might be happening in Colorado—are easily detected and eliminated by the state’s election administrators. Previous research turned up little evidence of such efforts to game the system.

This leaves interstate double voting as the most promising route for would-be fraudsters, and that was the focus of our analysis. Dick Morris, a prominent conservative political pundit, has claimed this type of activity led to more than 1 million fraudulent votes in the 2012 U.S. presidential election. It’s true that interstate double voting is harder to detect because voting records cannot be easily linked
across state lines. Kris Kobach, the Republican secretary of state of Kansas, promotes the **Interstate Crosscheck Program**, which coordinates the collection of registration records across states as a way to resolve this issue. As of 2014, 28 participating states (up from 15 in 2012) provided the organization with their registration records and in return received a list of registrations in their own state that matched the first name, last name, and date of birth recorded on a registration in another member state. In the 2012 election, for instance, Crosscheck flagged more than 1.4 million registrations as potential duplicates that member states should further scrutinize and potentially purge.

Here’s the problem with Crosscheck’s approach: In a country where 130 million votes are cast in a presidential election, there is a surprisingly high chance that two ballots cast under the same first name, last name, and date of birth actually belong to two different people. While it is unlikely that any two randomly selected vote records would share a common first name, last name, and birthdate, a sizable number of these cases will occur once we aggregate over the 10 quadrillion pairs of vote records in the population. This phenomenon is what statisticians call the **birthday paradox**.

In the 2012 presidential election, for example, 8,575 ballots were cast under the name John Smith among the votes we analyzed. Just considering people born in 1970, 141 votes were cast by people named John Smith. And among these 141 John Smiths, there were 27 pairs that had the exact same birthdate and so would be flagged as potential double voters under Crosscheck’s methodology. But in a group of 141 people, you would in fact expect to see 27 pairs that share the same birthday by chance alone.

Applying this statistical strategy to all the votes cast in the 2012 election, we estimate that, at most, 1 in 4,000 votes had the potential to be double votes. Then we went further and compared some of the electronic vote records to the original poll books. We occasionally discovered errors in the electronic records, indicating someone voted when the poll book revealed they had not. Nearly all purported double voting can be explained by the birthday paradox coupled with such errors in the voter data (i.e., our estimate for double voting approaches zero).

A closer inspection of the data Crosscheck sent to Iowa—which we obtained through a public information request—corroborates our statistical estimation. In both 2012 and 2014, Crosscheck flagged more than 100,000 Iowa registrations as potential duplicates, with a matching registration in another state. In only about 5 percent of these cases were both registrations used to cast a ballot. And in all but six total cases (in both years combined), the two registrations used to cast a ballot had inconsistent middles names or different Social Security numbers, indicating they are likely different people. If Iowa used Crosscheck’s guidelines for purging registrations, as **some counties have done**, about 1,200 registration records used to legitimately cast a single vote would have been purged in order to prevent these six potential double votes.

The current specter of voter fraud was promoted by Republicans and carried forward aggressively by the GOP’s current nominee. Republicans argue that Trump’s **volunteer poll monitors** thwart voting by ineligible voters, that stringent **voter identification laws** block voter impersonation, and that ending early voting prevents double voting. While once again it’s been demonstrated that there is little voter fraud for these tactics to prevent, such rhetoric and policies disenfranchise actual voters. Election rigging is not the problem. Our electoral integrity is not threatened by the little voter fraud that may occur, but rather by the disproportionate response that makes it harder for so many eligible Americans to vote.

**Read more Slate coverage of the election.**