



National Association of Voting Officials
Media Contact: 650-726-1133

To: Election Officials

We, the authors of this letter, are election process experts, involved in the creation of completely transparent open source election systems. We are writing this letter to tell you of a democratic disaster that has taken place. We are horrified by this loss of democracy, and we are certain in our belief, based on straightforward statistical analysis of the available data. We would welcome independent analyses of the data.

Democracy is the core tenet of our nation. Without it, we are no different than any of the other myriad forms of government, from monarchy to plutocracy, from fascism to dictatorship. Each registered voting citizen in our democratic nation has a right to cast a vote, and to have that vote counted as cast. This is the definition of a democratic election.

It is with heavy heart that we deliver this news to you: we do not believe that a democratic election has taken place this election cycle.

Our examination of the exit data collected by Edison Exit Polling shows a large and unprecedented discrepancy between the exit polling and the final vote count at minimum in certain states—the so-called swing states of Wisconsin, North Carolina, Pennsylvania, and Florida. That we found this discrepancy in these states is especially troubling. It strongly suggests inappropriate and external meddling in our nation's most sacred act – the act of its citizens voting.

We cannot currently know, until further study, the exact method that was used to modify the outcome. However, many methods of modifying the software and the tally system are widely understood by the computer science community, and have been demonstrated time and again. Known attack vectors include:

- Hacking the most recent software updates that are applied to the machines before the election,
- Modifying the running code in the machine via wireless technology,
- Physically hacking the machine while voting, so that subsequent votes tally differently,
- Modifying the tallying software local to the precinct, and,
- Modifying the database of results at the election center

Because the systems in question are proprietary, the source code is not available to the general public, and thus we cannot examine the code for bugs. This would **not** prevent foreign entities with resources commensurate with the size and power of a nation from hacking into the manufacturer's location, and retrieving a copy of the source code. Such an entity can then discover "zero-day" software bugs, and exploit them against the systems in the field. In addition, such an entity would be eminently capable of replacing some of the code at the

manufacturer, so that updates sent out to the field contained a “backdoor” or other nefarious code.

We have concluded that the results tendered by the proprietary systems in your jurisdiction should be questioned. The foundation of the systems lack the necessary security to defend against manipulation of the outcomes, i.e. "*hacks*". These hacks can be from inside the system (those with access to the systems / software- vendors / technicians / software creators / officials, etc.) or from outside intruders (foreign entities, etc).

These ideas are not fundamentally new - there has been public attention given toward outside intrusion up to the day of the election.¹ We believe that this election cycle, these hacks have been used against the systems in your jurisdiction.

Your jurisdiction has proper and appropriate cause to currently refuse to certify the results until full and complete recounts are appropriately conducted.

It is not our intent to cast aspersion upon the fine and dutiful effort of your jurisdiction. Rather, we wish to necessarily inform you of the scientific conclusions available.

Based upon this information, we respectfully request a full and complete recount.

Sincerely,

Brian Fox, Lawrence Rosen, and Brent Turner

¹Foreign:

- <http://thehill.com/policy/cybersecurity/306331-nsa-head-dnc-hack-a-conscious-effort-by-a-nation-state-to-attempt-to>

Solution work:

- www.navo-us.org

Government studies:

- <http://www.sos.ca.gov/elections/voting-systems/oversight/top-bottom-review/>
- <http://votingsystems.cdn.sos.ca.gov/oversight/ttbr/red-overview.pdf>
- <http://votingmachines.procon.org/sourcefiles/Everest.pdf>

Brian Fox:

- [https://en.wikipedia.org/wiki/Brian_Fox_\(computer_programmer\)](https://en.wikipedia.org/wiki/Brian_Fox_(computer_programmer))