2   Voter Registration Audits

2.1   Introduction

An accurate and complete voter roll is the foundation of secure and credible elections. Although relatively uncommon in the U.S., voter registration audits are a common tool used in other democracies by legislators, election administrators, election observers, and other stakeholders to assess the overall accuracy of a voter register, and to provide the information needed for effective reforms. Voter registration audits can also provide evidence of some forms of election malpractice.

A typical audit will include an initial assessment of the registration process as defined in law and regulation; an IT-based audit of the register (if appropriate); and random sample-based surveys of voters to assess the accuracy of the register. The scope and focus of the surveys can be general, or targeted at specific aspects of the register, depending on the priorities of sponsor.

Voter registration audits are of particular interest to civil society-based election integrity organizations because, unlike other types of election audits, they can be conducted without the participation of local government or election officials.

2.1.1   General Voter Registration Audit

The survey portion of a comprehensive voter registration audit may include two different tests, referred to as *list-to-people* and *people-to-list*. Whether one or both tests are included in an audit would be determined by priorities and available resources.

The *list-to-people* test involves surveying a random sample of voters drawn from the voter list to determine the accuracy of the list, including the percentage of moved or deceased voters on the list. The *list-to-people* test can also reveal fraud, if voter history is included in the survey. For example, if the surveyor finds a voter has moved or died or never lived at the address, that shows error in the list; but if the same voter is listed as having cast a ballot in an election after they moved or died, that shows fraud.

The *people-to-list* test measures the proportion of eligible citizens listed on the list (comprehensiveness). For example, if you survey a random sample of 1000 citizens who would be eligible to vote, and confirm 780 are on the voter list, you have a registration rate of 78%. If you know the total number of citizens in an area who meet the age and residence requirements to vote from the census, and calculate 78% of that total, then that number should equal (within the margin of error) the total number of registered voters on the voter list.

Typically, the number of voters on the list will be greater than the number calculated from the census, because the list still includes some voters who have moved or died. The percentage over your calculated number will be the magnitude of error or bloat in the list. A well-maintained list might be just a few percent off, while a poorly maintained list could contain 50 or 100% more names than actual voters. This is important, as a bloated list can be used to facilitate fraud, and also skews turnout percentages.

A general voter registration audit with a *list-to-people* test, or both a *list-to-people* and a *people-to-list* test, would be most appropriate when the priority is to drive reform of the voter registration process.

2.1.2   Targeted Audit

A targeted audit is primarily focused on just one aspect of the voter list, or one period in time. A targeted audit would normally be based on the voter list, so would be a *list-to-people* test.

An example of a targeted audit was conducted in Virginia in 2021. The election commission reported weekly the names of people who had returned absentee ballots during Virginia's 45-day voting season, and after the first week an election integrity organization ran that list through commercial software to identify suspect addresses, then drew a sample from that list and sent surveyors to confirm that the submitted ballots came from qualified voters. They found that at least 5.7% of absentee ballots submitted during the first week of polling came from addresses where the voter was unknown, or was known but had moved well before the election.

A targeted audit can be conducted at any time using this method, not just during the advance voting period or for absentee ballots. A voter list with voter history is processed through commercial software that identifies a likely mismatch between the voter's listed name and address, and their actual address. A sample from the processed list is then surveyed, and the percentage confirmed as bad addresses during the election period in question can then be applied to the whole list to yield a minimum number of fraudulent votes (this is a minimum number because the commercial software may not catch all bad addresses, and because fraud may have occurred in other ways).

A targeted audit might be most appropriate when the priority is to prove that this type of fraud occurred in a previous election. This type of audit would be less effective at driving reform of registration processes than a general VRA.

2.1.3   IT-Based Audit

An IT audit might be an examination of the machines and processes used for voter registration, or could be a machine-run analysis or test based on available data. The list screening process for bad addresses described above is one type of IT-based audit. IT audits can be easier and cheaper to conduct, because they don't require fieldwork, but are less accurate and therefore less credible than more intensive audits; making them most useful when an overview is needed, or as part of a more in-depth audit.

Types of IT Based Audits
- Comparison of voter registry with obituaries.
  Comparison of voter history across states to detect double voting
- Compare the voter registry with census data
  Compare voter history with post-election registry to identify registrants who voted and then were purged from the list

2.1.4   Sampling

Surveys or canvassing without a sampling frame can reveal the existence of errors or fraud, but not their prevalence, and consequently such surveys have less impact in driving reform than sample-based surveys. While it is slightly more difficult to survey using a robust sampling methodology, doing so will allow accurate characterization of the area being surveyed, so it is well worth the extra effort.

If it is too difficult to do a random sample of a whole state, you can use a multistage random sampling methodology. For example, a random sample of counties, then a random sample of precincts, then a random sample of voters. It's actually a bit more complicated than that, but the science is well-known, and accessible, as it is used by polling firms all the time.

Another option is to limit the size of the survey area. If the auditing organization is strong in only some parts of the state, several counties can be selected as sampling areas. For example; if you do three counties across the state, you can accurately (authoritatively) characterize the situation in each of those counties, compare and contrast results across those counties, and hypothesize about the causes of similarities and differences. This is enough for a good report and may be enough to spur reform, or further investigation.

While a limited but rigorous and representative audit is more useful than no audit, or an unrepresentative audit, a comprehensive audit is preferred is possible. A comprehensive audit provides the most possible useful data; but can also be a tool for the organization to build out and strengthen their network across the state.

2.2   Conducting a Voter Registration Audit

2.2.1   Process Map

- a. Decide what type of audit you want to do. Consider your priorities (voter list reform or revealing previous malpractice). Also consider what types of data are available.
- b. Decide the area you will audit (state-wide or counties/municipalities).
- c. Acquire relevant data.
- d. Draft the questionnaire. Most of this should be off-the-shelf, with minor changes based on priorities and local conditions. While drafting questionnaire, also do an outline of the report. This will help ensure your questionnaire captures the information you need for your report.
- e. Draw the sample.
- f. Test the questionnaire
- g. Build questionnaire app for iPad or cellphone (primarily off-the-shelf)
- h. Recruit and train enumerators/canvassers.
- i. Field work and data collection.
- j. Analysis and report.
- k. Develop recommendations.
- l. Present report (press, radio, TV, election commission, executive and legislative branches, and judicial branch/law enforcement if significant violations have been found).

2.2.2 General Voter Registration Audit

Sample – Either households or individual voters. If households, could any registered voter be the respondent or do we need something like a kish grid? Timing? How do we manage "no one home" or "voter not home"? I think we will probably just have to over-sample, and record limitations in the methodology.

Draft Questionnaire

   a. Does the address exist?   Y/N   if Y, go to next field, if N, record and end
   b. Did someone respond to the knock?   Y/N   if Y, go to next field, if N, record and end
   c. Can I speak to X?   If home, wait. If not home, ask any inhabitant
   d. Did you, or anyone else present now, live here during the fall of 2020? (if no, end)
   e. I'm checking the accuracy of the voter roll, which lists the following people as registered voters at this address (show list). Can you tell me if they lived here during the fall of 2020?
        Responses: don't recognize
                          Yes, lived here
                          Used to live here, but moved before period in question
                          Died
   f. I don't want to know who you voted for, but can you tell me, did you vote in 2020?

This questionnaire should yield percent of voters on the list who have moved or died or are unknown at the address (error in the list), and (if we have voter history) the percent of fraudulent votes cast in the missing voters' names.

2.2.3 Targeted Voter Registration Audit

The exact shape of a targeted audit would depend on specific local priorities, but one similar to that done in Virginia could be conducted by screening the relevant voter register to identify voters that likely did not live at the listed address, but were shown as having voted in the last election. This set would be potential fraudulent votes. A representative sample of these addresses would then be canvassed to verify information and collect affidavits.

In the 2021 Virginia statewide elections, the IT-based audit suggested 7.5% of absentee ballots submitted in the first week of polling came from suspect addresses, and that was further refined to 5.7% though canvassing. This formed the floor for fraudulent votes, as the initial screen likely missed some people that moved or died, as it incorrectly identified some who had not moved. If fraud occurred throughout the polling period at a similar rate, it would have totaled about 19,000 fraudulent votes.