

Suggestions for handling write-in votes in a ranked-choice election

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Under the current system, ballots are handled differently based on whether they have overvotes and write-ins on them, and whether they are scanned by the Optech IV-C or the Optech Eagle. I first summarize how ballots with write-in and overvotes are currently handled and then describe a recommended approach for handling the same cases under ranked-choice voting.

1. Current system

a. Optech IV-C (for absentee and provisional ballots)

The Optech IV-C has 3 bins: a main bin, a lower bin underneath the machine, and an outstack. Here is a summary of what type of ballots get sent to each bin, and how they are handled:

Main bin: Ballots that have neither write-in votes nor overvotes are counted and slotted into the main bin. These are “clean votes” that don’t need to be further handled after the IV-C counts them.

Lower bin: Ballots that have a write-in vote but do not have any overvotes get counted and slotted into the lower bin. These ballots have to be manually examined to determine the name of the write-in candidate voted for.

Outstack: Any ballots with overvotes, including write-in overvotes, are slotted into the outstack. These ballots are not counted by the machine. They are examined for voter intent, and if it’s discernable, the ballot is either “remade” and scanned or re-introduced into the IV-C in the override mode. A write-in overvote is a ballot that contains an overvote either in the same race in which the voter indicated a write-in candidate, or in another race on the same ballot card. When the write-in and the overvote are in the same race (and it is a vote-for-one race, as will be the case for all IRV races), the vote is valid only if the write-in candidate listed is the same as the other candidate voted in the race.

b. Optech Eagle (for precinct ballots)

The Eagle has 2 bins: bin #1 and bin #2. There is also an auxiliary bin for use in case of equipment failure.

Bin #1: Any ballot with a write-in that does not contain an overvote gets scanned by the Eagle and slotted into bin #1. After the ballots are delivered to headquarters, these ballots are manually inspected to determine the name of the write-in candidate.

Bin #2: Any ballots that are clean or have an overvote get scanned and slotted into Bin #2. These ballots are not handled further in the counting process.

2. Handling write-ins in a ranked-choice election

The key difference between the current system and a ranked-choice election is that the voting results in the current system consist of sub-totals for each candidate on the ballot. In a ranked-choice election, the voting results consist of a data set that contains each voter's ranking. Such a data file would look like the following:

Sample File #1 (no write-in votes)

```
# Precinct: 3110
# Contest: Mayor
# Absentee and provisional votes counted by the IV-C
# "Clean ballots" slotted into the main bin
#
# The candidate codes 1 through 8 refer to the candidates listed on the ballot
#
# The following lines show the first, second and third choice candidates
# ranked by 20 voters in this precinct. Each line corresponds to 1 voter.
#
# Format: ballot number) 1st_choice_cand, 2nd_choice_cand, 3rd_choice_cand
1) 1, 2, 3
2) 1
3) 1, 2, 3
4) 1, 2, 7
5) 1, 2, 4
6) 1, 2, 7
7) 1, 4, 2
8) 1, 8, 5
9) 1, 4, 5
10) 1, 4
11) 1, 4, 7
12) 1, 6
13) 1, 7, 5
14) 2, 1
15) 2, 1, 4
16) 3, 1, 2
17) 3, 1, 2
18) 4
19) 7, 1, 3
20) 4, 1
```

For each bin on each piece of equipment, we can describe the output of the voting equipment and how to handle write-in votes.

a. Optech IV-C

Main bin: These are “clean votes” that don’t need to be further handled after the IV-C counts them. The output of the IV-C is like **Sample File #1** above. It does not contain any write-in votes and requires no further handling.

Lower bin: Ballots that have a write-in vote but do not have any overvotes get counted and slotted into the lower bin. These ballots have to be manually examined to determine the name of the write-in candidate voted for. The output of this bin is a data file that looks like the above file except that it contains a write-in on each line. The size of this file is likely to be much smaller than the file that comes out of the main bin, since most ballots do not contain write-in votes:

Sample file #2 (containing write-in votes)

```
# Precinct: 3110
#Contest: Mayor
# Absentee and provisional votes counted by the IV-C
# Write-in votes slotted into lower bin
#
# The candidate codes 1 through 8 refer to the candidates listed on the ballot
#
# The following lines show the first, second and third choice candidates
# ranked by 5 write-in voters in this precinct. Each line corresponds to 1 voter.
#
# Format: ballot number) 1st_choice_cand, 2nd_choice_cand, 3rd_choice_cand
1) 1, Write-In, 3
2) Write-In
3) 1, 2, Write-In
4) Write-In, 2, 7
5) Write-In, Write-in, 4
```

In this case, a Department staffer needs to pick up the 5 ballot cards from the lower bin and determine which row of the data file corresponds to that ballot. The staffer then manually replaces the word, “Write-In,” in the data file with a code or name corresponding to the write-in candidate that the voter listed on the ballot. After doing this, the data set looks like this, where the term “Write-In” has been replaced the names of three write-in candidates: Parker, Lee and Fonseca.

Sample file #3 (with write-in candidate names manually inserted in file)

```
# Precinct: 3110
#Contest: Mayor
# Absentee and provisional votes counted by the IV-C
# Write-in votes slotted into lower bin after replacing term, “Write-In,” with
# the write-in candidates codes
#
# The candidate codes 1 through 8 refer to the candidates listed on the ballot.
#
```

```
# The following lines show the first, second and third choice candidates
# ranked by the 5 write-in votes in this precinct. Each line corresponds to 1 voter.
#
# Format: ballot number) 1st_choice_cand, 2nd_choice_cand, 3rd_choice_cand
1) 1, Parker, 3
2) Lee
3) 1, 2, Fonseca
4) Fonseca, 2, 7
5) Lee, Parker, 4
```

Outstack: Any ballots with overvotes, including write-in overvotes, are slotted into the outstack. These ballots are not counted by the machine. The output of this bin is a stack of uncounted ballots. These ballots are manually examined for voter intent, and if the intent is discernible, the ballot is “remade” (or reintroduced in the IV-C in override mode) scanned by the machine and ends up in the main bin or the lower bin, and is treated just like the other votes in those bins.

b. Optech Eagle

The Eagle has 2 bins: bin #1 and bin #2. There is also an auxiliary bin for use in case of equipment failure.

Bin #1: Any ballot with a write-in that does not contain an overvote gets scanned by the Eagle and slotted into bin #1. The output looks like **Sample File #2**. As with the lower bin on the IV-C, the ballots in bin #1, which get placed in a plastic bag and delivered to a Supply Drop Off point after polls close, have to be manually examined, and the term, “Write-In,” has to be replaced with the write-in candidate’s name on the corresponding ballot, as in **Sample File #3**.

Bin #2: Any ballots that are clean or have an overvote get scanned and slotted into Bin #2. The data set consists of valid votes as recorded by the Eagle or IV-C. No further handling of the ballots or manipulating of the data is required.

3. Summary

Ranked-choice voting requires the capture of “ballot images” in data files that show the first, second and third choice ranking for each candidate. Ballots with write-ins need to be manually examined, and the write-in candidate’s name has to be manually inserted into the corresponding data file. Ballots with overvotes on the IV-C are not counted by the IV-C. Instead, these ballots are “remade,” (or re-introduced into the IV-C on “override mode” when appropriate) and sent back through the machine and are then treated according to which bin they end up in (either the main bin if it has no write-in or the lower bin if it has a write-in).

The outcome of the ballot counting process will consist of two files per precinct. The first file will consist of all ballots scanned by the Optech Eagle in the precinct, with the term “Write-In” manually replaced by the write-in candidate’s name. The second file will consist of all absentee and provisional votes scanned by the IV-C, after appropriate remaking of overvotes and manually inserting write-in candidates’ names.

The ballot scanning process will be complete after:

1. All precinct, absentee and provisional votes have been scanned by the voting equipment;
2. All overvotes ballots outstacked by the IV-C have been examined and either re-scanned as is, or remade to reflect the voter's intention when possible; and
3. All write-in ballots (Bin #1 on the Eagle, lower bin on the IV-C) have been manually inspected and the write-in candidates' names inserted into the data sets.

At that point, the ranked-choice tabulation can occur, and the official winner of the election can be announced.