Boulder County Voting Methods Team Report
March–April–June 2013
(partially compiled from *Boulder County Voter* articles)

INTRODUCTION

At our 2012 annual meeting, LWVBC members approved the following for 2012–2013: "A new committee will take the lead on a study and concurrence or consensus on the concepts and implementation of Ranked Voting. As a result of that process, existing positions on Elected Municipal Offices and/or Voting Procedures in Boulder County may be revised."

The new committee realized upon sampling the vast literature that we should change our focus—and our name—from the narrow "Ranked Voting" to the inclusive **Voting Methods**.

At our Unit meetings on April 15, 16, and 17 the Voting Methods committee will present information on a range of methods and systems, their history, their results, and their pros and cons.

FOCUS on VOTING METHODS

First, a definition: A voting system or **voting method** defines the form of the ballot, what constitutes a valid vote, how to count votes, and an algorithm for determining the outcome of the election. (A voting system is **not** to be confused with an **election system**, which is concerned with whether or not to have early voting, electronic or paper ballots, etc.)

The present method in Boulder County's municipal, county, state, and national elections is **plurality voting**, sometimes called "First Past the Post" (FPTP), in which candidates receiving the most votes win. In single-winner elections (such as for county commissioner districts, BVSD and SVVSD districts, and Longmont city council wards), voters choose one candidate; if no candidate gets a majority, no runoff election is held, and the candidate with more votes than any other(s) wins. In multiple-winner elections (such as for Boulder and Lafayette city councils), voters may choose more than one candidate; the top vote-getters win—five in Boulder and four in Lafayette.

Besides plurality voting, a host of alternative voting methods provide ballot formats, counting procedures, and algorithms that are many and various, and we will describe a representative sampling.

FOCUS RATIONALE

Voting systems matter, in a BIG way! Keith Devlin, a mathematician at Stanford University, explains: "Voting is not like physics or engineering where we have to do what the math tells us. Rather, it is one of those cases where we can make the math work for us—to use it to achieve our own ends as a society. The voters will make the selection, but the math we choose can shape the kind of government we get." (1)

"The plurality vote is pretty much the worst voting system there is," says Donald Saari, a mathematician at the University of California–Irvine (2). The 2000 presidential election gave a vivid demonstration of one of plurality voting's limitations, the so-called "spoiler" dynamic. Polls indicated that most people who voted for Nader would have preferred Gore to Bush. The votes for Nader and Gore combined in Florida would have beat Bush. But with the votes divided between them, Bush emerged the winner.

And Devlin asks, "Do we want politics to be about partisanship and fighting, where half the electorate will always end up as losers and we just keep seesawing between the two…" [that's **plurality** voting at its worst] "….or do we encourage cooperation and compromise, where no one gets everything but everyone gets something?" (1)

There is evidence that alternative voting methods can encourage positive campaigning and coalition building, as well as clarify voters' preferences, so we should know about them!

COUNTING THE VOTES

Here's a sampling of how different methods produce different results:
Suppose three candidates, A, B, and C, are competing for one seat. The preferences of the voters are as follows:

3 people rank A first, B second, and C third, or A>B>C
2 people rank them A>C>B
2 people rank them B>C>A
4 people rank them C>B>A

• In **plurality** voting each voter only gets to vote for one candidate. A would receive 5 votes, B 2 votes and C 4 votes. A wins.

• In **approval** voting, voters get to vote for (or approve) as many candidates as they wish, without ranking them. Suppose the voters approve of their top 2 preferences and disapprove of the 3rd choice. Then A would get 5 votes, B 9 votes and C 8 votes. B wins.

• In **instant runoff voting (a ranked voting method)**, since no candidate has a majority of first-choice votes (at least 6), the candidate with the fewest first-choice votes (B) is eliminated, and the 2nd-choice votes on those ballots are then counted, resulting in C gaining 2 more votes and beating A 6 to 5. C wins.

LWV AND VOTING METHODS

Several state and local LWVs have adopted positions supporting voting methods that represent the wishes of voters more accurately than plurality voting. Some LWVs support a specific method. Our committee, however, is currently reluctant to ask LWVBC members for concurrence with any of these positions. We see that each method has its own pros and cons, and we believe that a variety of on-the-ground experience and subsequent analysis in the U.S. is needed before promoting only one particular method.

A CLOSER LOOK

Voting methods fall into three categories, based on ballot format, instructions to the voter, and counting procedures.

1. **Plurality** voting is the method currently used in Boulder County. Each voter chooses one candidate, and the candidate with the most votes wins. In a multi-seat election, such as the Boulder or Lafayette city council elections, the top five (Boulder) or four (Lafayette) vote-getters win. Plurality voting does not always require the winner to have a majority of the votes. A **Final Runoff**, required to reach a majority, is expensive and is thus usually avoided.

2. **Preferential or Ranking** methods include **Instant Runoff Voting (IRV)** and Hare. Preferential methods allow voters to express their preferences by ranking at least two choices (1st choice, 2nd choice, and so on), whenever there are three or more candidates. In IRV, the winner must have a majority of the total votes, which is gained by applying a sequence of existing votes in each round. In the 1st round, if no candidate receives a majority of 1st-choice votes, the candidate with the fewest 1st-choice votes is eliminated, and the 2nd-choice votes on those ballots are then counted and added to the other candidates' tallies. The process continues until a candidate has a majority.

The **Hare method (aka STV, Single Transferable Vote)**, is a ranking method for multiple-seat elections. It is widely used in Australia, New Zealand, India, and elsewhere. In 1917 Boulder adopted STV/Hare for city council elections, the second city in the US to do so; Hare was repealed in 1947 and Plurality voting was instituted. Under STV/Hare, each voter ranks the candidates. A winning threshold (the minimum number of votes required to win election) is calculated based on the number of seats to be filled and the number of votes cast. Each voter only gets one vote, but the ballots are counted in rounds, with surplus votes transferred from winning candidates, and candidates with the fewest votes eliminated, until the number of candidates remaining equals the number of seats to be filled.

3. **Cardinal or Rating** methods include **Approval** voting and **Range** (aka **Score)** voting. Cardinal methods allow voters to score their choices along a scale, such as 0, 1, 2, 3, 4. Voters **may** give equal scores to different choices. The candidate with the highest rating wins. The CU-Boulder student government has just adopted Approval voting.

Colorado laws can make it tricky to use a voting method other than Plurality. However, in 2008, state legislation was passed that allows local governments the option of using IRV or SRV for their elections. This year, SB 65 would have allowed local governments the additional option of using Approval voting for their elections, but the bill did not make it out of committee. The bill is expected to be proposed again next year.

In our Unit Meetings, you will *experiment with* voting under a few of the more prominent single-seat election voting methods, and *experience* their ins and outs first-hand. We will assess those methods based on attributes that stem from LWV voting criteria, including:

- Which voting methods encourage voter turnout?
- Which are conducive to positive campaigning?
- Which are easy to understand?
- Which are easy to implement?
- Can you vote for your favorite without worrying that your vote might help your last choice candidate?
- Can the voter be honest and avoid tactical voting to help a chosen candidate?

_____

VOTING METHODS UNITS – INTERACTIVE AND INFORMATIVE

At the Voting Methods unit meetings in April and May, attendees voted for their favorite desserts using different voting methods: plurality, approval, score (or range), and instant runoff (aka ranked) voting. Attendees discussed how to compile votes under each method, reviewed a preliminary assessment of the methods, and discussed the pros and cons. Thanks to our members for putting up with rescheduling some of the meetings due to snowstorms and coming out in good numbers.

Our presentations received a lot of attention! Some voting methods and election systems VIPs in attendance:

Frank Atwood, approval voting advocate (Littleton) http://approvalvotingusa.org/

Jan Kok, vice president and a director of Center for Election Science (Fort Collins) http://www.electology.org/

Joe Richey, member of Secretary of State's Best Practices and Vision Commission (Boulder) http://www.sos.state.co.us/pubs/elections/BestPractices/bestPractices.html, but perhaps better known as League member Ingrid Becher's son-in-law. [Another member of the commission is Carol Tone who is on the CO LWV Legislative Action Committee.]

Bo Shaffer, former 3rd-party candidate for sheriff, state senate, state house, and county commissioner (Longmont)

We also received behind-the-scenes email comments about our presentation from…

Jonathan Singer, House District 11 (Longmont and Boulder) representative who co-sponsored Senate Bill 65 to allow approval voting in local, nonpartisan

elections. The bill died in committee but Rep Singer plans to introduce it again next year.

Rob Richie, FairVote's executive director since its founding in 1992. FairVote advocates election reform, specifically, the implementation of Instant Runoff Voting. FairVote's headquarters is in Maryland. http://www.fairvote.org/

Clay Shentrup, secretary and a director of Center for Election Science (San Francisco, CA) http://www.electology.org/

Here are some comments we heard from our members:

You should give your presentation to LWV/Arapahoe County.
This is the best unit I've ever attended.
Congratulations on such a thorough and provocative report.

What's Next?

Local –

- A list of resources on voting methods is being sent electronically to all LWVBC members with email addresses.
- Currently our committee is not in favor of any one voting method. Rather, we would encourage experimentation with various voting methods in order to get more on-the-ground data and experience with these methods.

State – A study/consensus on voting methods may be a topic worth recommending at state program planning in 2015. Bills have been introduced in the General Assembly, and we have no LWVCO positions!

National – LWVUS program planning and convention are in 2014. We have no LWVUS positions either.

Quotes:

(1) Keith Devlin, "Potential for odd outcomes in San Francisco mayoral election with ranked-choice voting system, says Stanford mathematician," http://news.stanford.edu/news/2011/november/devlin-ranked-voting-110711.html

(2) Science News: "Spoil-Proofing Elections," https://www.sciencenews.org/article/spoil-proofing-elections

---