Accurate Democracy

4 *Easy* Tools

Make Group Decisions Better

“This is *the* site for learning about democracy.”
—Zoe Weil, author of *Most Good, Least Harm*,
president of the Institute for Humane Education.

“...a huge contribution to the democracy cause.”
—John M. Richardson Jr., former chairman of the
National Endowment for Democracy.

“Congratulations on a brilliant piece of work.”
—Robert W. Fuller former president of Oberlin College,
author of *All Rise* and *The Theory of Everybody*.

The primer, games and pictures let you

Read, Touch and See How

The best types of voting are quick and easy,
centered and stable, yet responsive and fair.
They help groups, from classrooms to countries.

One tool compares the votes for several versions of a **policy**. Two tools give **fair shares of seats or $pending.**

to Use and Enjoy

Share this colorful eBook with friends.
Grow support in your school, club or town.
Enjoy better politics, relations, and policies.

by Robert B. Loring VotingSite@gmail.com

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A. Voting Primer

Two of Many Tragedies

Old ways of adding up votes often fail to represent large groups. In the USA, beautiful North Carolina had enough Black voters to totally fill two election districts. But spread out over eight districts they were a minority. So for over 100 years, they won no voice in Congress. As voters they were silenced, with tragic results.[1]

The Northwest tore itself apart by changing forestry laws again and again. When forestry laws are weak, hasty logging wastes resources. But sudden limits on logging bankrupt some workers and small businesses. If this **policy pendulum** swings far, it cuts down forests and species, then families and towns, again and again.[2]

What can big swings in other policies do?

What's Wrong

We all know how to take a vote when there are only two candidates: We each vote for one or the other. For such a contest, the yes or no votes say enough.

But as soon as three candidates run for one office, the contest becomes more complicated.[3] Then that old yea or nay type of voting is no longer suitable.

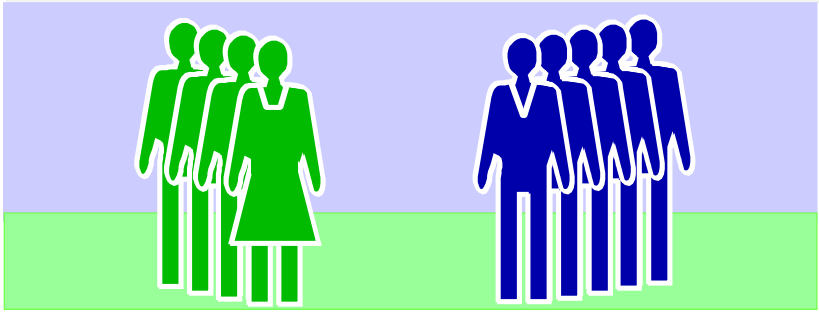
It's even worse at giving fair shares of council **seats**, setting many **budgets**, or finding a balanced **policy**. Our **defective voting rules** come from the failure to realize this:

There are different uses for voting,
and some need different types of voting.

Will their votes be effective?

Eras, Tally Rules and Councils

In the 19th Century
Winner-Take-All Districts ⇨ Off-Center Councils



$ $ $ Policies $ $ $

Typical Council Elected By Plurality Tallies

Some of England's former colonies still count votes by its old **plurality voting rule**. It elects only one rep from each district; each is a Single-Memeber District or SMD. Winning the district's seat does not require a majority. It merely elects the one who gets the most yes votes.*

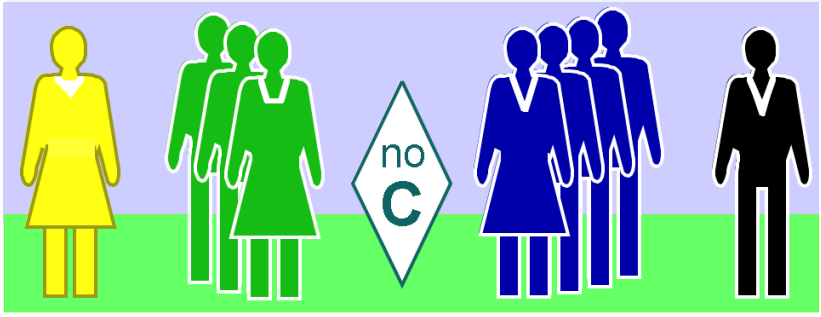
A district with only one rep tends to develop only two big parties.[4] Only their candidates have good chances. It gets worse: A district's bias often makes it a "safe seat" a captive audience for *one* party. So voters in a plurality district are given little or **no real choice**.[5]

If the voters in a few districts *are* given real choices, all power might flip from one faction of reps to another. Hopes and fears of budget or policy flips polarize politics. Each battle is brutal because it is **winner take all**.

* Each voting rule or system defines its ballot and its tally.

In the 20th Century

Fair-Rep Elections ⇨ One-Sided Majorities



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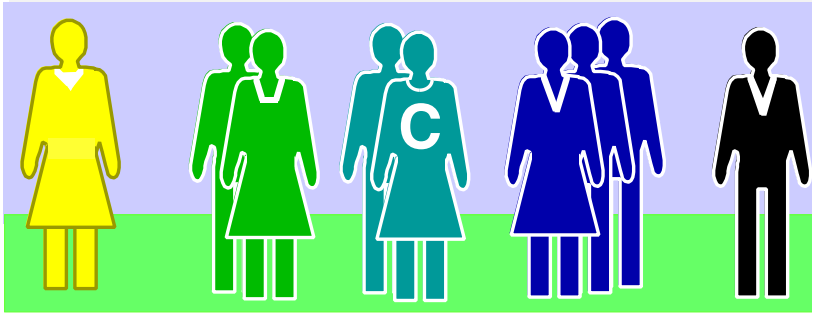
Typical Council Elected By Fair Representation

Fair Representation was developed around 1900 to end some major problems caused by plurality rule. Most democracies now use "Fair Rep." It elects several reps from each election district. It gives a group that earns say, 20% of the votes, 20% of the council seats. So Fair Rep delivers fair shares of representation.[6] It's often called Proportional Representation or PR.

It leads to broad representation of issues and views. But usually there is no central party (**C** above) and the two biggest parties normally refuse to work together. So the side with the most seats forms a ruling majority. Then it enacts **policies skewed toward its side**.

In the 21st Century

Ensemble Councils ⇨ Balanced Majorities



$ $ $ Policies $ $ $

Council Elected By Central and Fair-Rep Rules

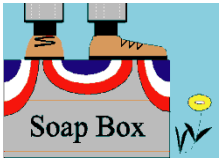
Ensemble rules will elect most representatives by **Fair Rep**, plus a few reps (**C** above) by a **central** rule.

The points of view within this council will have a **spread** plus a pivotal **midpoint** that match the voters more accurately. **O** + ● = ◉ That's the target*

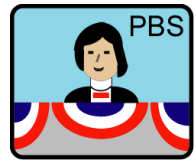
Later pages will show how we can elect a rep with wide support and views near the center of the voters.[7] So winners will be near the center of a Fair Rep council. There they can be the council's **powerful swing voters**, with strong incentives to build moderate majorities.

Many voters in this wide base of support won't want narrow centrist policies. They'll likely prefer policies to **combine the best suggestions from all groups.**

* Its colors suggest archery and political bunting.



Progress of Democracy



A centrist policy implements a narrow set of ideas. It blocks rival ideas: opinions, needs, goals, and plans. A one-sided policy also blocks rival ideas.

A compromise policy tries to negotiate all the ideas. But contrary ideas forced together often work poorly.

A balanced policy blends compatible ideas from all sides. This process needs advocates for diverse ideas. And more than that, it needs independent **moderators.** These swing-voting reps can please their wide base of support by building moderate majorities in the council.

A broad, balanced majority works to enact broad, balanced policies. These tend to give the best chance for the greatest good to the greatest number of people.

Excellent policies are a goal of accurate democracy. *Measure* their success by the typical voter's education and income, freedom and safety, health and leisure.[8]

Older rules often skew results and hurt a democracy. An ensemble is **inclusive**, yet **centered** and ***decisive*** – to help make its actions **popular**, yet **stable** and ***quick***. The best tools to set budgets or pick a policy also will show these qualities in our stories, graphics and games.

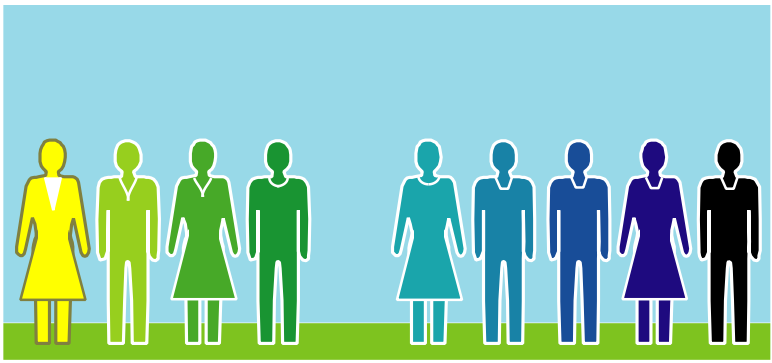
1. Electing a Leader

Nine Voters

Let's think about this election: Nine voters want to elect a leader. The figures in this picture mark the positions chosen by those voters. They stand along a political spectrum from left to right. It is as though we asked them, "If you want high-quality public services and taxes like France or Germany, please stand over ↓ here. Stand here ↓ if you want to be like Canada. To be like the USA stand over here ↓. For Mexico's low taxes and government services stand over there ↓."

Throughout this booklet, we're going to show political positions in this compelling graphical way.

Nine voters spread out along an issue.



High taxes buying great gov. services

Low taxes buying poor gov. services

These colors aid readers less able to see colors.

Plurality Election

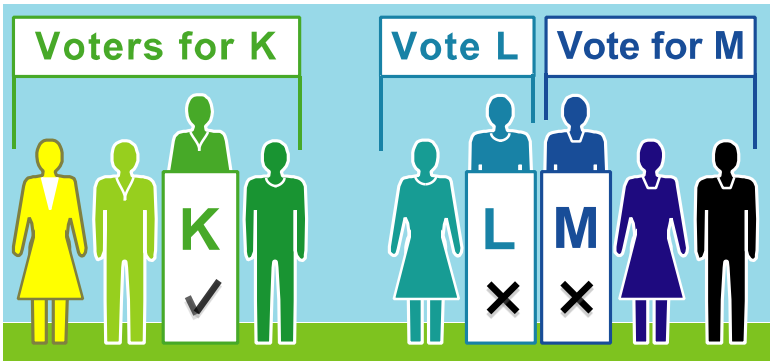
Here we see three rivals step up, asking for votes.
Each voter prefers the one with the closest position.
A voter on the left votes yes for the candidate on the left.

K is the candidate with a stance nearest four voters.
L is the nearest to two and M is the nearest to three.
Candidates L and M **split** the voters on the right.

Does anyone get a majority (over half), Yes or No?
Who gets the plurality (the largest number), K, L or M?
Who gets the second-largest number of votes?
Answers to questions are at the bottom of each page.

A mere plurality gives the winner a weak **mandate**.
This is the authority effective votes loan to a winner,
by consent not coercion. Strong mandates support
and speed action to reach popular goals.

By plurality rule, the one with the most votes wins.



K is nearest four voters. M is nearest three.
L is nearest two.

Answers: No. K. M.

Runoff Election

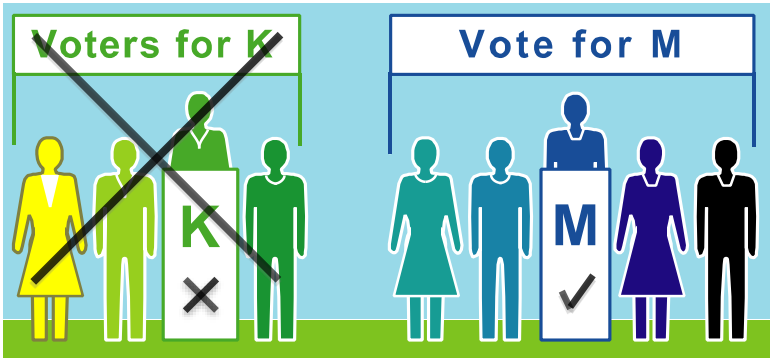
From the plurality tally, the top two may advance to a runoff. It eliminates the other candidates all at once. The two voters who had voted for L now vote for M. Do they each have more power than some other voter?

Wasted votes fail to turn a loser into a winner.
Effective votes succeed; a voting tally with more of them is more accurate, fair and responsive.

Does the plurality election waste more votes?
Does this discourage members from voting?
Does the runoff make a stronger mandate?

In effect, a runoff asks, "Which **side** is stronger?" Later, these voters will use another tally tool to ask, "Where is our **center**?" And a bigger group will use a tally to ask, "Which **trio** best represents us *all?"*

In a top-two runoff, the two compete one against one.



Four **wasted votes**. Candidate **M wins** a runoff.

Answers: No, each voter has one vote in each tally.
Yes, five votes. Yes. Yes, a majority mandate.

Politics in Two Issue Dimensions

When more issues (or identities) concern the voters, a voting-tally rule keeps its character.[1]

Here we see voters choosing positions spread over two issue dimensions: left to right plus up and down. A person's position on one dimension is little help for predicting his or her position on the other one.

A voter may rank candidates on any issue(s). He prefers the candidate he feels is closest.

"Please step up for more protective regulations. Please step down if you want fewer protections. Take more steps for more change."

The chapter on simulation games and research shows more tallies with two and even three issue dimensions.

Seventeen voters take positions on two issues:
more or less regulation ⇕ and taxes for services ⇔

K wins a plurality. M wins a runoff.

[1] For clarity, a candidate is "she" and a voter is "he."

The goal of **Ranked Choice Voting** is this

Elect a majority winner,
from a single election.

Voting is easy. **Rank your favorite** as first choice,
and backup choices: second, third, etc. as you like*
Your civic duty to vote is done.

Now your vote counts for your top-ranked candidate.
If no candidate gets a majority, the one with the fewest votes loses. So we eliminate that one from the tally.
Your vote stays with your favorite if she advances.
If she has lost, then your vote counts for your backup.
This repeats until one candidate gets a **majority**.

Why Support Ranked Choice Voting (RCV)

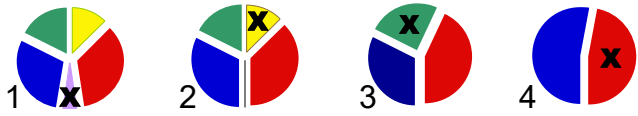
- **Backups give you more power and freedom** to express opinions with less risk of wasting your vote.
- **You can't hurt your first choice** by ranking a backup which does not count unless your first choice has lost.
- **No worry about vote splitting** in a faction as votes for its loser(s) can count for each supporter's backup.
- **Civility and consensus**[2] **rise**[3] as some candidates ↗ ask the fans of rivals to, "Rank me as your backup." [3]
- **A majority winner** from one election, so no winners with weak mandates and **no costly runoff** elections.
- **High voter turnout** also creates **strong mandates**
  The turnout for an election runoff often goes down.[4]

*Pages 29 and 45 show ballots.

Ranked Choice Voting Patterns

Running for president of South Korea, the former aide to a military dictator faced two reformers. The two got a majority of the votes but split their supporters. So the aide won a **plurality**. (37%, 28%, 27%, 8%) Years later, he was convicted of treason in the tragic, government killing of pro-democracy demonstrators.[5]

A voter's backup is often like his favorite, but more popular. So by dropping one reformer, RCV might well have elected the stronger one with a majority.



From a five-faction debate to a majority mandate

1) **Violet** loses; so backup choices get those votes.
2) Amarilla loses; so backup choices get those votes.

This **chief executive** starts in a big band of voters on the biggest side, then builds a majority. This helps her work with reps on the biggest side of a typical council.

→ For 11 years, Papua New Guinea used RCV, then plurality rule for 27 years but ethnic violence increased.[6] They returned to RCV then the violence decreased.

Irish and Australian voters have used it for decades. They call it the Alternative Vote or Preferential Vote. Some Americans call it Instant Runoff Voting or IRV. The endorsements page lists many groups using it. It often helps women achieve parity in politics.[7]

The workshop shows an RCV game on pages 39-42.

2. Electing Representatives

The principle of **Fair Representation** is:

Get true majority rule by representing each group in proportion to its voters.

That is, 60% of the vote gets you 60% of the seats, not all of them. And 20% of the vote gets you 20% of the seats, not none of them. These are **fair shares**.

How does it work? There are three basic ingredients:

- We elect more than one rep from an electoral district.
- You vote for more than one; you vote for a list. You pick a group's list, or you list your favorites.
- The more votes a list gets, the more reps it elects.

Why Support Fair Representation (Fair Rep)

- **Fair shares** of reps go to the rival groups so **Diverse candidates** have real chances to win so Voters have **real choices** and **effective votes** so **Voter turnout** is strong.[1]
- **Women win** two or three times more often[1] so **Accurate majorities** win—also due to more: choices, turnout, effective votes and equal votes per rep so **Policies match** public opinion better.[2]

Many people call this Proportional Representation or PR.

Fair Shares and Moderates

Chicago elects no Republicans to the State Congress, even though they win up to a third of the city's votes. But for over a century it elected reps from both parties. The state used a fair rule to elect 3 reps in each district. Most gave the majority party 2 reps and the minority 1. So no district was unwinnable and neglected by 1 party, and thus a captive audience for the other party.

Those Chicago Republicans were usually moderates. So were Democratic reps from Republican strongholds. Even the biggest party in a district tended to elect more **independent**-minded reps. They could work together for moderate policies.[3]

✓ **Shares of votes equal fair shares of seats.**

New Zealand switched in 1996 from Single-Member Districts to a layer of **SMD**s within Fair Representation. This is called Mixed-Member Proportional or **MMP**. A small, one-seat district tends to stress local issues. Fair Rep helps a party elect experts on other topics.

The seats won by women rose from 21% to 29%. The native Maori reps increased from 7% to 16%, which is almost proportional to the Maori population. Voters also elected 3 Polynesian reps and 1 Asian rep.[4]

Why Full Rep Elects More Women

New Zealand and Germany elect half of their MPs in Single-Member Districts and half from Fair Rep lists. This is the best way to elect a parliament, some say.[5] The SMDs elect few women; but in the same election, the Fair Rep lists elect two or three times more women.[1]

A **safe nominee** for a two-party duel in an SMD is from the dominant gender, race, religion, etc. It leads to a macho duel and poorly represents all others.

Fair Rep leads a party to nominate a **balanced team** of candidates to attract voters. This promotes women.[6] A team can have class, ethnic, and cultural diversity. And that gives us diverse reps to approach for help.

MORE: Real choices, Competition, Effective votes, Voter turnout, Strong mandates, Diverse reps, Women reps, Popular policies

Some leading women spoke of **starting a new party** in **Sweden**, which uses Fair Rep. Under plurality rule, a big new party splits its own side, so it likely loses. But Fair Rep gives every big party its share of seats.

This credible threat made one old party decide job experience was not as important as **gender balance**. So it dropped some experienced men to raise women higher on the party's list. And they won.[7] Now they are incumbents with experience, power and allies.

Voting Rules and Policy Results

The **SMD**s often elect reps with **unequal** vote totals. So a majority of reps might *not* represent most voters. **Fair Representation** has more equal votes for each rep. So each majority of reps *does* stand for most voters. This produces **policies closer to public opinion**.[2]

LESS: ~~Wasted votes,~~
~~Gerrymandered districts,~~
~~Monopoly politics,~~
~~Dubious democracy~~

Many voters see a woman in a multi-winner race less as fighting her rivals, more as **supporting her issues,** in multi-sided conversations and debates.

Councils with fewer women tend to do less for health care, childcare, education and other social needs.[8] Then poor health and education weaken workers and children.

> If such urgent needs overwhelm us, we neglect the essential need to fix their **structural sources**. The plurality rule is a key defective part to replace. It wastes votes and underrepresents most voters. It gives the reps less incentive to help most voters.

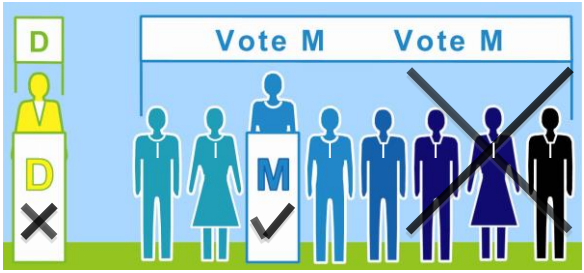
A more accurate democracy leads toward a better **quality of life**, as measured by the scores on page 60. We would all like better quality of life results for our country, and for our towns, schools, clubs and co-ops. So help friends talk about and try these voting rules.

Three Single-Winner Elections

A class of 27 wants to elect a 3-member committee. Someone says, “Elect a rep from each seminar section. To win here, you need to get the ballots of just 5 voters.”

Section One's Election

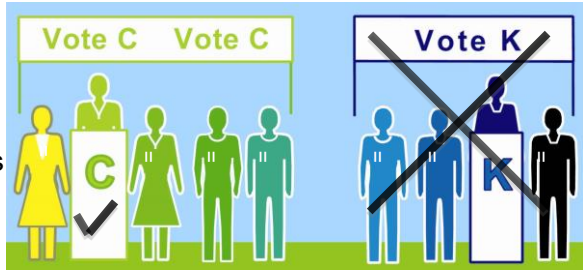
1 D vote **wasted** on loser



8 M votes; 3 are **wasted** in a surplus

Section Two's Election

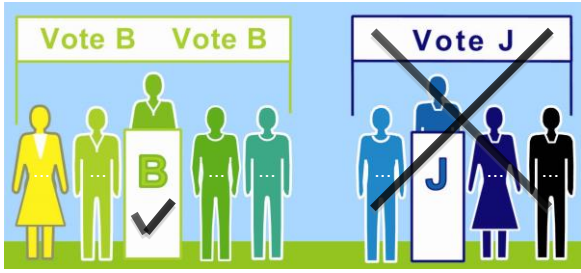
5 C votes elect a rep.



4 K votes **wasted** on a loser

Section Three's Election

5 B votes elect a rep.



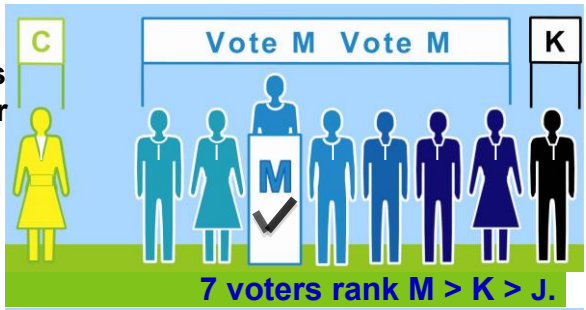
4 J votes **wasted** on a loser

▶ An 11-voter minority gets 2 reps; that’s majority power. If spread out, 3 or 4 in each section, they’d get no rep. Plurality rule **wastes votes** so it’s erratic and easy to rig.

One Fair Representation Election

A better idea: Keep the class whole; change the votes needed from 1/2 of a section to 1/4 of the class plus 1.
To win here, you need to get the ballots of 7 voters.
A voter may rank a first choice and a backup choice.
If his first choice loses, his vote counts for his backup.

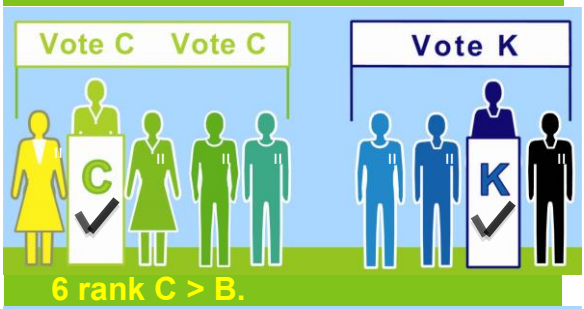
Three Sections Together In One Election



M wins. Any surplus helps each voter's backup.

+

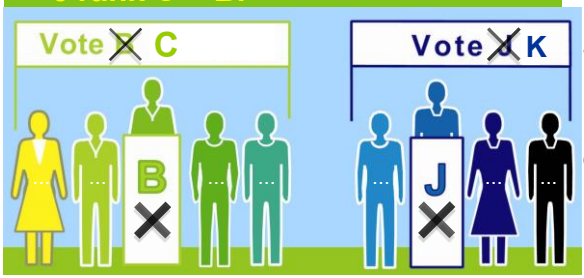
5 votes help elect C.



4 votes help elect K.

+

B loses; these backup choices help elect C.



J loses; these backup choices help elect K.

Final 11 C (4 surplus) 7 M 9 K (2 surplus)

▶ Now the minority gets 1 rep and the majority gets 2.
Their mandate is fair, **accurate**, popular and strong.

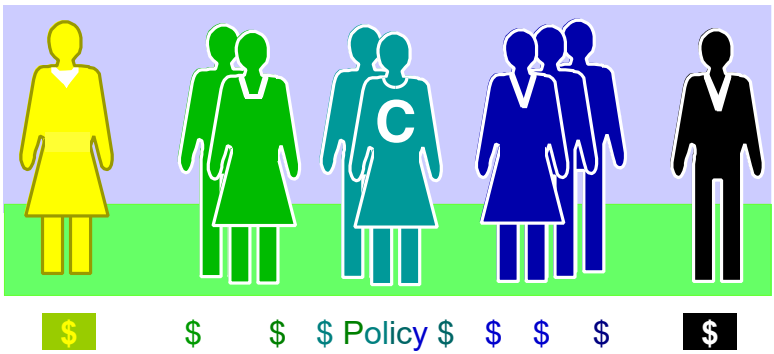
3. Allocating Budgets

Fair Shares to Buy Shared Goods

Electing reps is the most obvious use of voting rules. Rules to pick projects or a policy are also important. These group decisions occur more often than elections. They occur in many groups that have no elections.

Good democracies work hard to become more fair, thus accurate, responsive, widely popular and strong:

- ✓ Voting rights for wealthy men, then many years later, for most men, then for Black men, then for women.
- Fair Representation can give out council seats fairly. But is it fair if its majority controls all of the money?
- Fair Share Voting can give out some funding fairly. This is a big boost for responsive self-government.
- The voters in a club, a co-op, a college, or a grant giving group all can enjoy using Fair Share Voting.



All big groups have the right to spend some funds.

Patterns of Unfair Funding

Participatory Budgeting (PB) lets neighbors research, discuss and vote how to spend part of a city's budget. Some PB events let each voter direct over $1,000. Seeing voters direct **money motivates people to vote**. The World Bank reports PB may reduce corruption plus raise a community's health and education.[1]

In 2010, a Chicago alderman gave $1,300,000 to PB.[2] But a plurality rule made the votes and **voters unequal**. For example, in 2011 each vote to help a park won $501. That was its cost divided by its voters. But votes cast for bike racks, each won a mere $31. That's too unfair. Even worse, most of the votes were wasted on losers.[3]

✓✓✓✓

A costly winner makes many lose.

A bad election rule gets worse when it picks projects. It is **not cost aware**, so it often funds a very costly item and cuts a bunch that get many more votes per dollar. To win this bad tally, load various proposals into one. Keep raising its cost if that attracts more votes.

One year, a scholarship fund got many **surplus votes**. These were wasted votes because they had no effect. So the next year, some supporters chose not to waste a vote on this "sure winner." It lost*!* They saw the need for voting tools that do not waste surplus votes.[4]

The principle of **Fair Share Voting** is:

Give spending power to groups, in proportion to their voters.

So 60% of the voters can spend 60% of our fund, not all of it. Your ballot's **share** from our fund lets you vote to pay your shares toward the costs for your favorites.

Voting is easy: Simply rank your choices, as in RCV.

Your ballot pays one share of the cost for each of its top ranks — as many of your top items as it can afford. A tally of all ballots drops the item with the fewest shares. This repeats until each remaining item gets full funding.[3]

Paying one share proves you feel the item is worth its cost and you can afford it in your high priorities.

Some Merits of Fair Share Voting (FSV)

- **A winner is a popular priority worth its cost.**
  To qualify for funding from our group's source, an item needs our "base number" of voters or more.
- **FSV is fair** to an item of any cost and to its voters:
  A ballot pays a costly share to vote for a costly item.
  cost / base = 1 share *e.g.* $100 / 25 ballots = $4
  If more ballots divide a cost, each of them pays less.
- So a ballot's money can help more low-cost items.
  This motivates each voter to give his top ranks to the items that give him **the most joy per dollar**.
- See page 16 point 1, page 14 points 1, 3 and 4.

Fair Shares and Majorities

If a majority controls all the money, the last item they buy is a low priority; so it adds little to their **happiness**. But FSV makes some money purchase *high priorities* of other big groups, adding more to their happiness.

In political terms: The total spending has a wider *base of support:* It appeals to more voters because more see their high priorities get funding.

In economic terms: The *social utility* of the money and winners tends to rise if we each allocate a share. Fair, cost-aware voting gives *more* voters *more* of what they want for the same cost = more satisfied voters. Shares also spread good opportunities and incentives.

Items
Goods
Services

Projects
Programs
Budgets

Fair shares
spread the joy and opportunities.

Plurality rules let **surplus votes waste** a big group's power, as seen on page 20, and let rival items **split** it. The biggest groups often have the biggest risks.

FSV protects a majority's right to spend a majority of the fund. It does this by eliminating split votes, as did RCV, and surplus votes, as we'll soon see.

Setting Budget Levels

A co-op helped develop and test Fair Share Voting. They let each voter rank **budget levels** for *some* items.

A budget level needs to get the **base** number of votes. It gets one if a ballot offers to share the cost up to that level or a higher level. cost / base = 1 share = 1 vote
You only pay up to a level you voted for and can afford.

The item with the weakest top level loses that level. Any money your ballot had offered to it moves down your ballot to your highest ranks needing more support. This repeats until the top level of each item is fully funded by its supporters. Thus fair shares and backup ranks select a set of winners with **more supporters**.

A group of voters can *prove*, "This item's cost is a high priority and within our budget."

My club with 100 members set our **base** number at 25 votes.[5] My first choice got just enough votes, so my ballot paid 4% of the cost. 100% / 25 votes = 4%

My second choice lost. Did it waste any of my power?

My third choice got 50 votes, so my ballot paid only 2% of the cost. Was there any surplus? Did I waste much of my power by voting for this sure winner?

None. None. Not much.

More Merits of Fair Share Voting

- After all the discussion, a **quick** poll funds many items. It reduces **agenda effects** such as leaving no money for the last items or going into debt for them.
- It lets subgroups fund items **like federalism** does, but with less layers of laws, taxes and bureaucracy. And it funds a big group even if they are scattered.[6]
- Each big group controls just its share of the money. This reduces their means and motives for **fighting**. So they block rivals less, attract allies more: page 37. It makes becoming the plurality tribe less profitable.
- **Fairness builds trust** in spending by subgroups and raises support for it. This reduces relative spending at the extremes of individual or central control, often dominated by billionaires or politicians.
- Multi-winner funding helps **voters feel more hopeful.** It moves groups closer to common **ethical goals** like: "the Golden Rule."[7] "All men are created equal." and "Everyone holds a piece of the truth." (See page 57.)

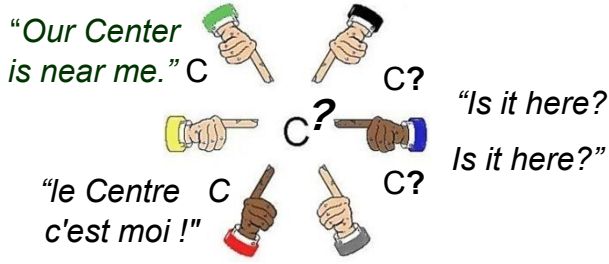
Merits of FSV for an Elected Council

- FSV may give some funds to reps in the opposition, so Electing them is more **effective**, less of a wasted vote
- They might feed a project hit by a "starvation budget." This could make project management more **efficient**.
- A voter can see grants from his rep to each project, tax cut, or debt payment; then hold her **accountable.** Her ballot could reveal some **corruption**.

4. Enacting a Policy

Enacting a policy is a type of one-winner election. We may guess it works well with Instant Runoff Voting. But it is different from electing a leader to promote one side, one party, one faction. Many groups seek a central and balanced policy; maybe even a consensus.

Problem 1: Groups often struggle to find the Center of opinion.



Goal 1: A Policy with Wider Appeal

A **plurality** or runoff winner gets no votes from the losing side and has little need to please those voters. But we may motivate building a policy to win support from all sides if voters can **rank** it against close rivals. This way, every voter is "obtainable" and valuable.

Then a winner is well balanced and widely popular.[2, 3] It gets a majority from voters on the **center** and **right** over any leftish policy. At the same time, voters on the **left** and **center** rank it over each right-wing policy. **All sides** rank it over narrowly-centrist policies.

A Less Rigged Agenda *Now!*

Some meetings concoct a policy by a series of yes-no choices, with or without rules of order, agendas or votes. An early proposal might have to beat each later one. An early decision might preclude some later proposals. So "**stacking the agenda**" can help or hurt a proposal.

Other meetings discuss the rival options all at once. But often, many members express **no backup choices**. So similar options split supporters and hurt each other. Then a minority pushing one option can appear to be the strongest group. Even sadder, a member with a well-balanced option but few eager supporters might drop it.

Too often, a committee chooses all the parts in a bill. Other voters can say only yes or no to that **bundle**. It might include free-rider or wrecking amendments.

Rigged votes often build a bad policy and animosity. To reduce the risks, let the members rank the options.[1]

A Policy-Choice Ballot

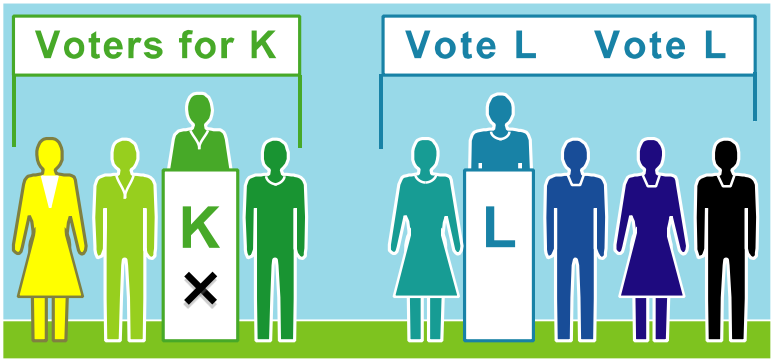
My Rank	Option
3	Continue Discussion
2	Original Bill, the main motion
1	Bill with Amendment 1 (a free rider?)
8	Bill with Amend. 2 (a wrecking amend.?)
7	Bill with Amendments 1 and 2
4	Postpone for 7 days
5	Refer the Bill to a Committee
6	No Change (a vote for gridlock exposed?)

Any "Incidental Motions" do not wait for the ballot.
These include a personal complaint or request.

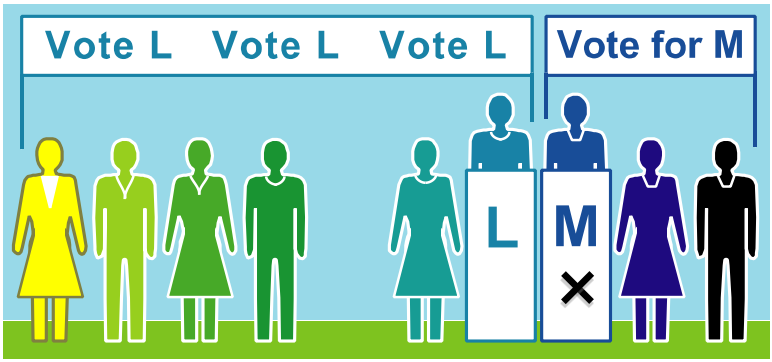
Condorcet Tally, CT,
the Complete Set of 1 Against 1 Runoffs

Page 12 showed the one-against-one runoff contest between the policy positions of reps M and K. Five reps ranked M's position over K's. 5 > 4

Here are the other 1-on-1 tests within that council.



Rep L's position tops K's by five votes to four. 5 > 4



Rep L wins the third test by six to three. 6 > 3
Her position wins majorities against each of its rivals.
This makes it the "**Condorcet winner**." L > M. L > K.

The chair's favorite could be given a final 1 against 1.
Rock < Paper < Scissors < Rock

The goal in a **Condorcet Tally** is this:

Win majority victories over every single rival.

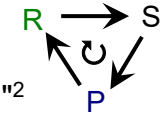
The winner must top every rival, **one-against-one**.
A good **analogy** is a round-robin tournament.
A player has one test with each rival, one at a time.
If she wins all her tests, she wins the tournament.

Each voting test sorts all the ballots into two piles.
If you rank option K above L, your ballot goes to K.
The option that gets the most ballots wins this test.
If one wins all its tests, it wins the Condorcet Tally.*

Why Use a Condorcet Tally (CT)

- **Choice ballots:** Rank the alternatives on one ballot so **Simplify** the rules of order, **speed up** the process and **Reduce agenda effects**, from simple errors and **gridlock**, to "free-rider" and "wrecking" amendments.
- **No split-vote** worries as duplicates don't help or hurt each other. An ad hoc majority can rank all of their favorites over the other options. Ballots from all voters help decide which one of the majority's favorites wins.
- **A balanced policy** tends to be **stable** and settled. Yet, **a balanced process** can calm some fears about reviewing and **changing** a good policy to improve it. This saves time and builds respect for the council.

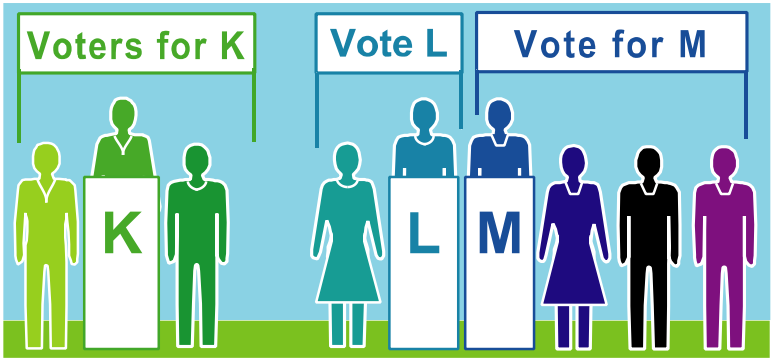
* Different majorities might support R > S, S > P, and P > R. **RCV** can break this unusual tie or "voting cycle."[2]



Resist Rigged Votes

In the **plurality election** on page 11 candidate M lost. Let's say her party **gerrymanders** the borders of her election district or the membership in her committee. It adds voters who like her and cuts some who don't. In this **safe-seat** district, bluish voters can elect M or an even less central person who may **polarize** politics.[3]

But this gerrymander didn't change the **CT** winner, L. With **central** tools, policies take big swerves less often.



3 rank K>L>M. 2 rank L>M>K. 4 rank M>L>K.

Plurality gerrymanders make many **wasted votes**.[4] **CT, RCV** or **Proportional RCV** reduce those, page 21.

To buy a one-seat district that uses CT or RCV, $ponsors must **mislead** a majority, not just a plurality. And helping "**spoilers**" in a rival group fails to split it.

Foul **manipulations** of plurality rules are not rare. And point voting incites *extremist* high and low votes, as I worry, could my points for a low choice hurt my fave? But a chance to rig **RCV** or **Condorcet+RCV** is rare, risky and hard.[2] There's less danger of rigged votes.

Tools to Select Central Winners

1 **A Top-Four Primary then an RCV election** puts a focus on four big rivals. They offer more hopes, fears and plans than two rivals in a macho duel.[5]
A winner earns both **intense** and ***wide**spread* support.
This pair has elected strong central candidates.[4.2]

But in voting by legislators, they might propose many tempting variations of the options in policies or budgets. They may try to muddle the central interest groups. Then **RCV** factions of the **left** and **right** might squeeze out the more **central options** in **early eliminations**.

Research finds **CT +RCV** enacts the central option and in most cases it is the tally tool hardest to rig.[2]

Meeting procedures that might break a group's tie:
Continue the discussion or postpone the decision.
Hold a membership assembly or a Polis referendum.

CT +RCV can set a balanced **policy**. pages 29, 56.
It can select the base number for **FSV**, page 26,
or one plan for many ongoing **budgets**, page 46.
But is it likely to spread spending fairly? yes or no?
It can elect a **moderator** to a council, page 8.
But is it likely to elect diverse reps? yes or no?
Do CEOs **moderate** & balance or **advocate** & lead?
e.g. a mayor CT+RCV RCV

Top 4 +RCV is often the best way to elect one official.
CT +RCV can best select a policy or a budget plan.

Answers: No. No. Discuss this.

Summary and Index of Benefits

Ranked Choice Voting has proven to: pages

1,2,3,4. **Make voting easy**, more often effective. **14**, 57
Give you power to rank a backup choice; so 29, 45
Reduce your risk of wasting your vote; so 12, 16
Vote worry free for your true first choice. 14
Boost mandates as more voters count. **11**-21, 57

1,2.**Reduce attack ads** that scare, anger and polarize. 14
Weaken gerrymanders and spoilers. 14, 16, 32

2. **Give fair shares** of reps to the rival groups; so **16**
Give diverse candidates real chances to win; so 18
Give voters real choices and effective votes; so 17
Make voter turnout stronger. 61

2. **Elect women** near twice as often as plurality did. **18**
Accurate majorities win also due to more: choices, 17
turnout, effective votes and equal votes per rep; so 19
Make policies match public opinion better. 19, 60

Even then, old decision tools push policy pendulums. 4

An RCV Toolbox can do more ♥

4. **Elect a few central reps**, the key votes pulling **31**
reps of many factions **to moderate policies.** 8, 54

3. **Use Fair Share Voting** for projects, savings etc. **24**
Reveal spending by each rep; **cut corruption**. 27, **59**

3,4. **Reduce agenda effects** and scams. 27, 30, **29**, 36
Streamline group decision-making. **27**, 29, 36

Social Effects ♥

Tools that Shape Communities

A group's decision rules pull its **culture** toward fair shares *or* toward winner takes all. They spread power wide and balanced, *or* narrow and lopsided. Other relations among members may follow their models.

Fair rules make **cooperation** safer, faster and easier. This favors people and groups who tend to cooperate. It can lead others to cooperate more often.

Politics are more **principled** and peaceful when *all* our rules help us find fair shares and central majorities. This could reduce political fears within our community, which helps us to be more receptive, creative, and free.

So better tally rules can help us build better decisions, plus better **relationships**. Both can please most people. Fair rules won't please some who get money or self-esteem from war-like politics. But countries with fair rules tend to rank higher in social trust and happiness[1].

Consensus and Voting

Group decision-making has two linked processes:
1) A **discussion process** might have a facilitator, an agenda, some reports and proposals. Each participant may ask to add or alter proposals. This process could close key options before the decision process. page 29.
2) A **decision process** asks the members concerned, "Which proposals have enough support to be winners?"[2]

Voting only **yes or no** leads us to discuss and decide *one* formal "motion" at a time in a very strict sequence. It stifles the sharing of ideas and development of plans.

But both **consensus** and **ranked choice ballots** let us decide some closely-related options at the same time. Both reward **blending compatible ideas**. pages 9, 31
They're less divisive than yes-or-no voting. " 14, 45, 56
So more members want to help carry out a decision soon and make it work; fewer try to slow it down.

Why Take a Vote

Discussing an issue well often resolves most parts, with mandates up to 100%. Yet we might want to decide some parts with the best voting tools. Why?

The best rules *strengthen* some reasons for voting:

- Choice ballots can **speed up meetings**. pages 27, 29
- Secret ballots **reduce social pressure** and coercion.
- Well-designed ballots and tallies **promote equality**: Even busy or unassertive people can cast full votes.

Complementing Consensus

Groups that seek consensus on basic agreements may vote on other issues: They may vote on a **detail** like a paint color or on a list of optional **projects**.

Fair Share Voting gives fair shares of power. Inclusive yet fast, it won't let one person block action. It is cooperative, not consensual or adversarial. It is less about blocking rivals, more about attracting allies. Its ballot guides a voter to limit and prioritize projects. Its tally finds the collective priorities for the intersecting interest groups. We may modify our FSV results through our usual process.

All majorities prefer the Condorcet winner. A proposal must top each rival by 50% plus one; and we may require it to win 60% or even 100% over the status quo on issues involving our basic agreements. If so, 41%, or even one voter, may block a Condorcet winner by convincing us it breaks a basic agreement.

Carpentry Analogy

The nice consensus methods are like nice hand tools, and these nice voting methods are like nice power tools. The power tools speed cutting through piles of boards or issues, and cutting through a steel-hard one. The hand tools help us discover and develop insights into new options.[3] So most of us want both kinds of tools.

This primer told the *stories* of the best voting tools. The games will let us *be inside* the simple tallies.

How You Can Try a Voting Tool

It's easy to **test**-drive a decision tool in a survey. Or a council can form a committee of the whole to discuss, vote, tally and report results to enact by its old rules.

Many groups **adopt** a book of parliamentary rules; then they amend it with "special rules of order" to make their decisions more popular, stable and quick.[4]

Steering Analogy

When choosing a voting rule, a new Mercedes **costs** little more than an old jalopy. That cost is a bargain when the votes steer important budgets or policies.

Does your car have an 1890 steering tiller or a **new**, power steering wheel? Does your town have an 1890 voting rule or a new, centrally balanced rule? page 28

Some groups offer **apps to tally your votes**.
https://AccurateDemocracy.com/z_tools.htm

B. Workshop Games

Get your hands on 4 great voting rules.

See how fair-share tallies organize voters.

Vote fast for projects, reps or policies.

A tally board has

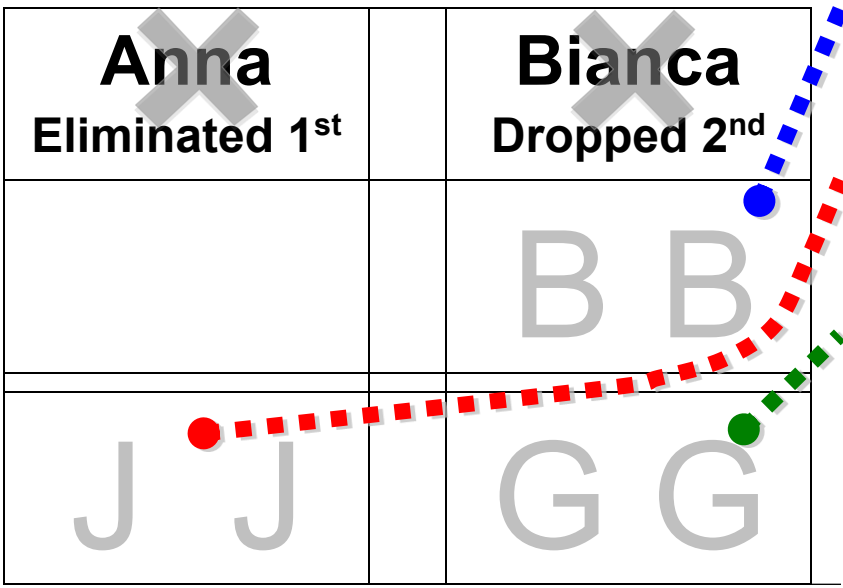
- a card for each voter,
- a column for each option,
- a finish line for the favorites.

1. Ranked Choice Voting to Elect One

Tabletop tallies make Ranked Choice Voting lively.
Let us work together, explore, persuade, celebrate*!*

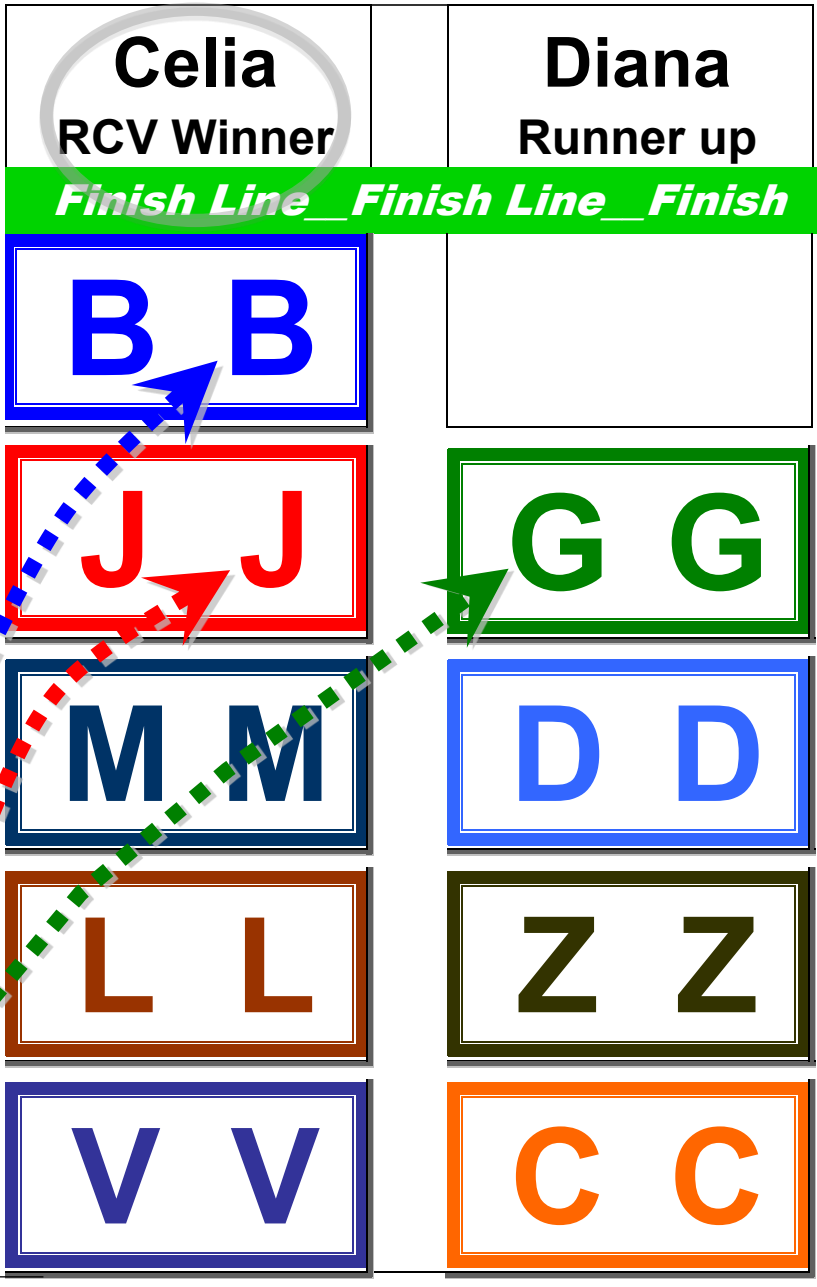
- The **finish line** is the height of half the cards, plus one.
  That is how many votes a candidate needs to win.
- If no one wins, we **eliminate** the weakest candidate.
  We draw names from a hat to break ties.
- If your favorite loses, you can **move** your card.
  You can give it to your next backup choice.
- We **repeat** this to eliminate all but one, the winner*!*

This **chart** shows four columns on a tally board.
The rule **eliminated** Anna, so **voter JJ moved** his card**.**
Then Bianca lost; **BB** and **GG moved** to their backups.
They were free to choose different backups.[1]



JJ ranks Anna 1, Celia 2.

GG ranks Bianca 1, Diana 2.



The winner had no surplus.

The last loser held 4 votes.

Quiz on RCV to Elect One

1. How can your group use this voting rule?
2. A card you move counts just like others, True or False?
3. Ranking a backup can't hurt your first choice, T or F?
4. Only 1 candidate can reach 50% plus a vote, T or F?
5. Name 4 cities or schools that use RCV. *See page 62.*
6. What benefits does it give them? *See page 14.*

Answers: *2) True, each card counts once in each round.*
3) True, a backup doesn't count unless your 1st has lost.
4) True, more reps would need over 100% of the votes.

Ranked Choice Voting includes **RCV** and **PRCV.**
The endorsements page lists some of the users.
Most of the groups tally their votes easily with apps.

2. Fair Rep by Proportional RCV

A tabletop game to elect three reps works like **PRCV**.

- We set the **finish line** at 1/4 of the cards plus one. Don't put your card on a column that is full.
- One at a time, we **drop** the weakest candidate.
- If your candidate loses, you can **move** your card.
- Repeat until three candidates reach the finish line*!*

Ask the RCV questions above again for PRCV adding:
4. Can only three candidates each win 25% plus a vote?
7. What total does a trio of reps win all together?

Answers *for PRCV: 6) see page 16. 7) 75%.*

PRCV with a cost-aware tally gives us FSV.
PRCV is also known as Single Transferable Vote, STV.

3. Fair Shares Buy Shared Goods

For our tabletop tally of **Fair Share Voting (FSV)**

- You get one share; here that's three 50¢ voting **cards**.
- We decided an item needs modest support from six of us to prove it's a *shared* good worth shared funding. So the **finish line** marks the height of six cards, and
- You may put only one of your cards into a **column**.
- A costly item has several **columns** to fill. A column here holds $3, so a $6 item needs two full columns.

Rule B lets you vote a 50¢ card, a 25¢ card half as tall, and a 75¢ card to boost your top choice (without inciting extreme high and low votes as point-voting ballots do.)

- When an item wins, the treasurer hides its cards, then drops any item that costs more than all the cards left.
- Then, one at a time, we **drop** the least popular item, the one with the lowest fraction of its columns filled.
- **Move** your cards from a loser to your backup choices.
- **Repeat** until we fill all the columns still in the game.

Only a few items can win, but all voters can win*!*

Rule C: An app shows the cards pop onto the columns.[2] It pops a tall card on the 1st column of each voter's fave. A shorter card pops onto each voter's next column, etc. After placing all cards, it drops the weakest item-level and restarts, rebuilding the remaining columns from zero.

4. Condorcet Tally Centers a Policy

To win a Condorcet tally, an item must top each rival, **one-against-one**. Two games show how it works.

1) Flag L stands at our **center**, by the median voter. Flags J, K and M surround L, 2 m. or yards from it.

   We asked 9 voters, "Are you closer to J than to K? If so, please raise a hand." Only one raised a hand. We entered J vs. K, etc., in a **pairwise table** below.

against	J	K	L	M
for J	—	1	3	4
for K	8	8 + 1 = 9	4	5
for L	6	5	—	5
for M	5	4	4	4 + 5 = 9

The nine voters gave L a majority over each rival.

2) Flag L has a ribbon 1 or 2 m. long and a longer rope.

   If the ribbon reaches to you, the ribbon policy gets your vote with its narrow appeal.

   But if the ribbon cannot reach you, the **wide appeal** of the rope policy gets your vote. Which one wins?

If the flags mark places for **a heater** in a cold room:

1. Do we put it at our center or in the biggest cluster?
2. Do we turn on its fan to spread the heat wide?
3. Do voters on the fringes have any influence?
4. Can the median voter enact any policy alone?
5. Do we get a balanced or a one-sided policy?

Normally: Rope. Center. Yes. Yes. No. Balanced.

Ranked Choice Ballots

A tally board might serve 30 voters. But it's easier to mark **paper ballots** or webpages and tally by computer. Some groups need the secure paper ballots or printouts used in **risk-limiting audits** to catch frauds and errors.[3]

☒ **Yes-or-no ballots** badly oversimplify most issues. They often highlight only two factions: "us versus them" and can **polarize** a community.

Ranked choice ballots reduce those problems. They let you rank your 1st choice, 2nd choice, 3rd etc. Ranks can reveal a great variety of opinions. Surveys find most voters like the **power** to rank candidates.[4]

Party Menu 1

Fill only one 'O' on each line.

		Best		**Ranks**			Worst
lbs.	**Treats**	**1st**	**2nd**	**3rd**	**4th**	**5th**	**6th**
3	**Almonds, Toasted**	O	O	O	O	O	O
7	**Apples, Honey Crisp**	O	O	O	O	O	O
5	**Apricots, Dried**	O	O	O	O	O	O
6	**Oranges, Navel**	O	O	O	O	O	O
6	**Peaches, White**	O	O	O	O	O	O
6	**Tangerines**	O	O	O	O	O	O

Which one wins by plurality? Hints: 5 sweets vs. 1 nut, and the top name on a ballot gets a 2% to 9% boost.[5] Which wins by Ranked Choice Voting or by Condorcet?[6]

We can vote for a party playlist, snacks, drinks and more. **Caution**: Ballots with many contests might use up the mental energy a voter needs to vote in each contest.

Budget Levels and Long Ballots

These two cases taught us to avoid very long ballots:

We have seen Ranked Choice Voting for reps is easy. It cuts worries about wasted votes, from your own ballot up to whole districts gerrymandered to waste thousands. The worries in the cases below didn't occur in elections. Each of us had to **adjust too many budgets** at once.

We can't afford items *we* rank below **a costly favorite**: Our ballot had 40 items. Most of us ranked a few higher than the costly sure winner. But, as we picked from so many items, most got just a few shares. So most lost, even some that a few of us ranked over the sure winner. Then that costly favorite won, taking a lot of our money.

Wise voters ranked it high only at its low budget levels. So they had money left to help more items each reach the base number of votes and qualify for funding.

Adjusting Many Ongoing Budgets

Each year we reset the levels of 50 ongoing budgets. Some voters said **a long ballot** was too hard and slow. Now any 5 of us may propose a plan for these budgets. Most voters say it's easier to rank a few complete plans. This evaluates more than ranking every budget does: A plan may help more or less than the sum of its parts. And changing budget B may call for changing budget P.

A **Condorcet Tally** then picks one plan.[4] It is likely to coordinate all of the budgets and it has majority support. But it might be nicer to a majority than to others.

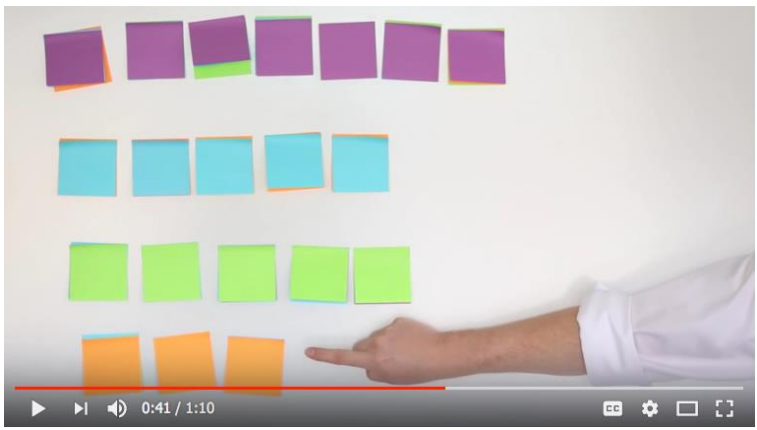
Workshop Finale 𝄞 Notes

It's easy to give this workshop in a class or a club.[6] In an hour, 20 voters can review plurality, try **RCV**, then try **PRCV** for colors as shown below or **FSV** for treats:[7]

Eat the winners*!* while you plan to take a poll, for the central majority or fair shares, in a group you know. What qualities do you want in this poll? (See page 34.)

Voter education can be fun to do and it is essential. FairVote.org has model ballots, voter-education flyers, videos, stories and much more to help your voters. A **music video:** simple or silly. flip2020.wordpress.com

Some groups offer **apps to tally your votes**. Here's a list at AccurateDemocracy.com/z_tools.htm

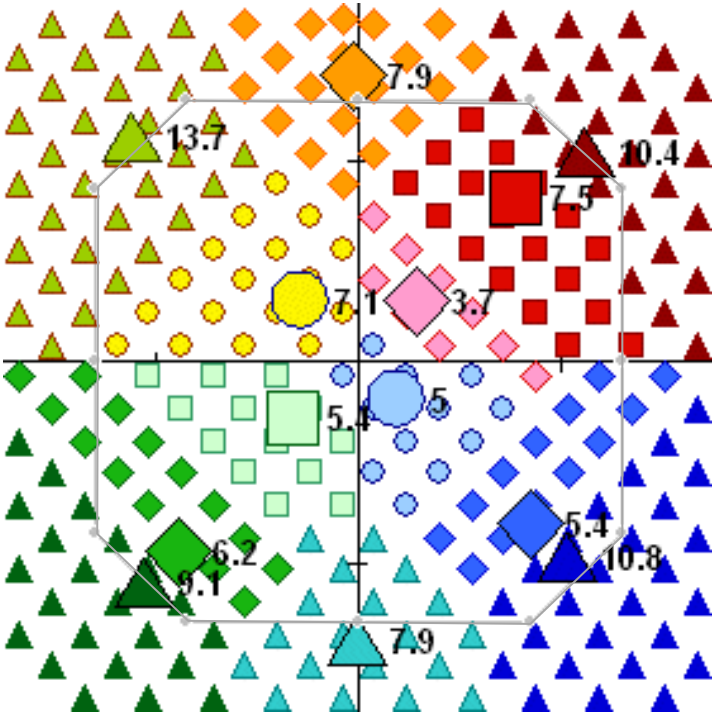


Hands-on games and shared treats make memories of how each tool *works*. Next, simple simulations and national statistics show some of the high-level *effects*. The effects on pages 54 through 59 are important for the governance of schools, clubs, towns and more.

C. SimElection Games

2. Watch Fair Rep Balancing a Council

These maps show **Proportional RCV** ballots electing **five** reps. A little shape is a voter's ballot; a big one is a candidate. Each little ballot has the color and shape of its current top choice, the closest remaining candidate.[8]

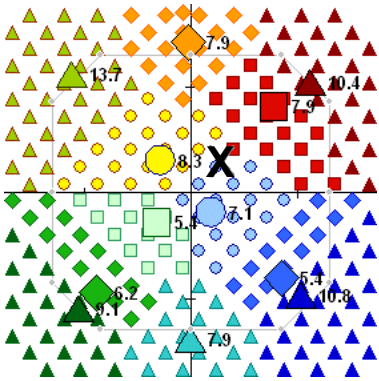


1

Sim players position candidates to get votes (page 56). The numbers on a map show each candidate's current share of the votes; 16.7% will win a seat and a halo! After this round of counting, the weakest candidate must lose and get an **X**. The 3.7% ◆ will be the first to lose.

To make close rivals distinct, colors vary from a spectrum.

The Weakest Lose, One at a Time



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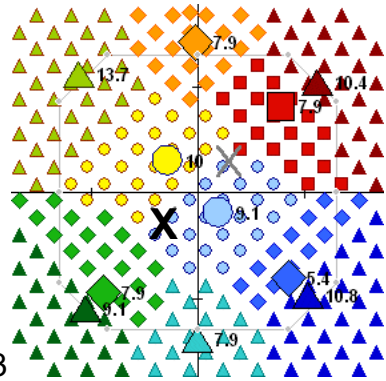
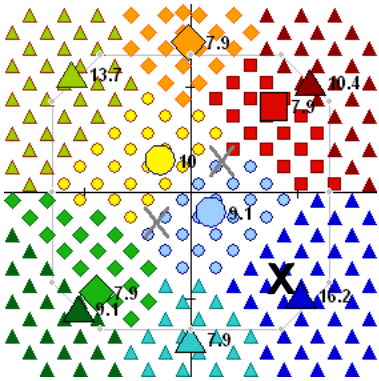


3

In map 2, the first loser gets an **X**. Her ballots change color and shape as each counts for its new top rank, a close rival whose nearby field of color grows. ● ■ ● (Game maps may portray places or political positions.*)

In map 1, a gray line circles half the ballots. Candidates outside it lead their close rivals on the first ballot count. But in 2 and 3, as weak candidates lose, most of their ballots count for **moderates** or centrists inside that line.



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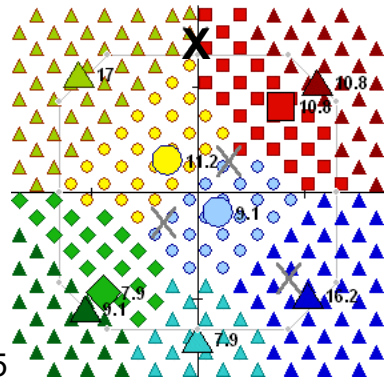
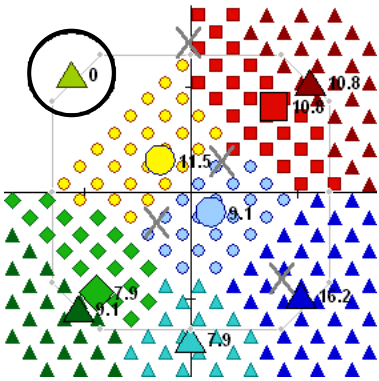


5

* Pages 10 and 13 introduced political dimensions.

Votes Transfer, Elect Reps



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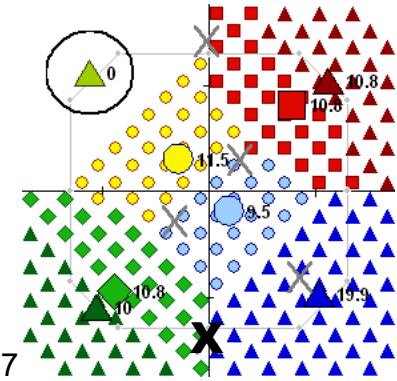
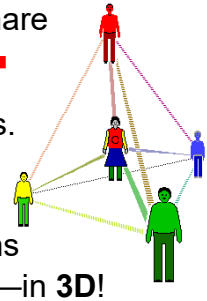


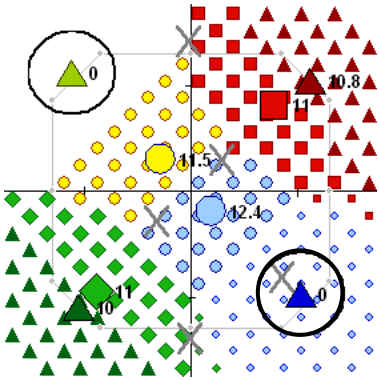
7

In 6, a candidate has just enough votes to win a seat.
In 8, a winner has **surplus votes**; a fair share goes to each supporter's next choice. ◆ ● ■



The maps show only two issue dimensions. But a five-seat council can form decisions in 3D, if its reps are diverse. More issues and positions get represented in campaigns and debates, then in policies and projects—in **3D**!

"RCV…gives you proportionality on every axis."[9] ↔ ↕ ↯



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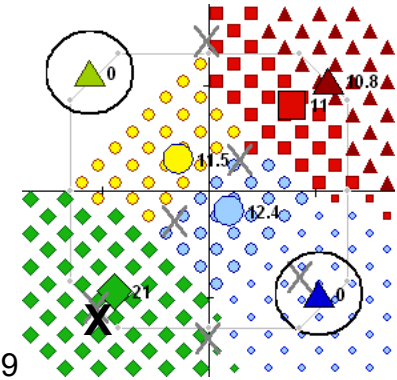
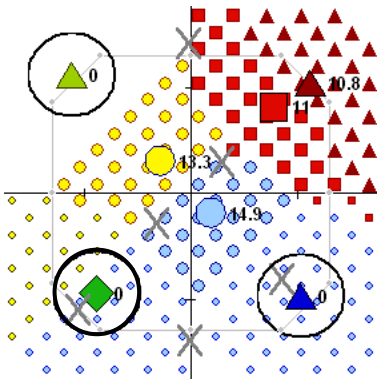


9

A Diverse and Balanced Council



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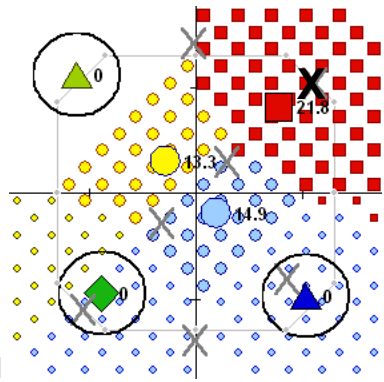
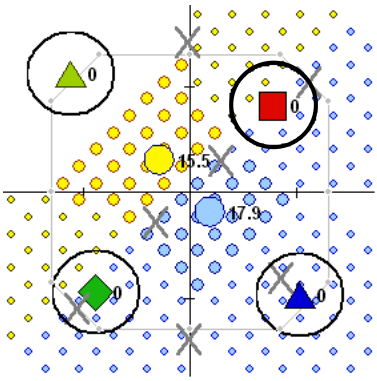


11

This pattern of voters makes their choices easy to see. SimElection™ also created uniform, random, custom and normal bell-curve patterns for games and research. To learn about life, play in lifelike normal patterns.[10]

In 13, the box with half the ballots holds all but one rep. Does PRCV tend to favor and elect fringe candidates? Five reps together need what percentage of the votes? Are the reps diverse? Balanced fairly? Centered well?



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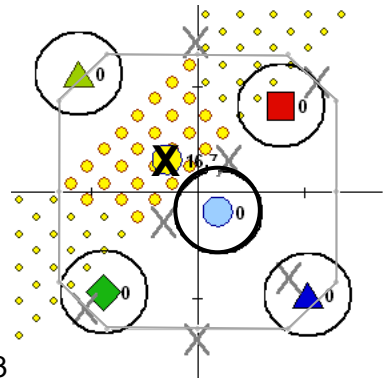


13

No. Over 83%. Yes. Yes. See page 55.

3. Simulation of Fair Share Voting

Fair Share Voting helps voters self organize many ad hoc groups big enough to fund their favorite items. Each voter may try to help a few groups give money or labor to one-time resource allocations, (OTRAs) or even to optional items in some ongoing budgets (e.g., FSV can choose repairs for roads but not new routes.)

To find the best buys for our money,
use Participatory Budgeting meetings then
Fair Share Voting ballots and tallies.

This map shows the public plants proposed by voters on a campus. Often, the site closest to a voter is most useful to him and is his top choice. But this case has four distinct interest groups: **Red, Yellow, Green,** and **Blue.** Items can be close together on the map and yet be far apart in color. This map shows a third issue dimension as deep layers of color within your screen.

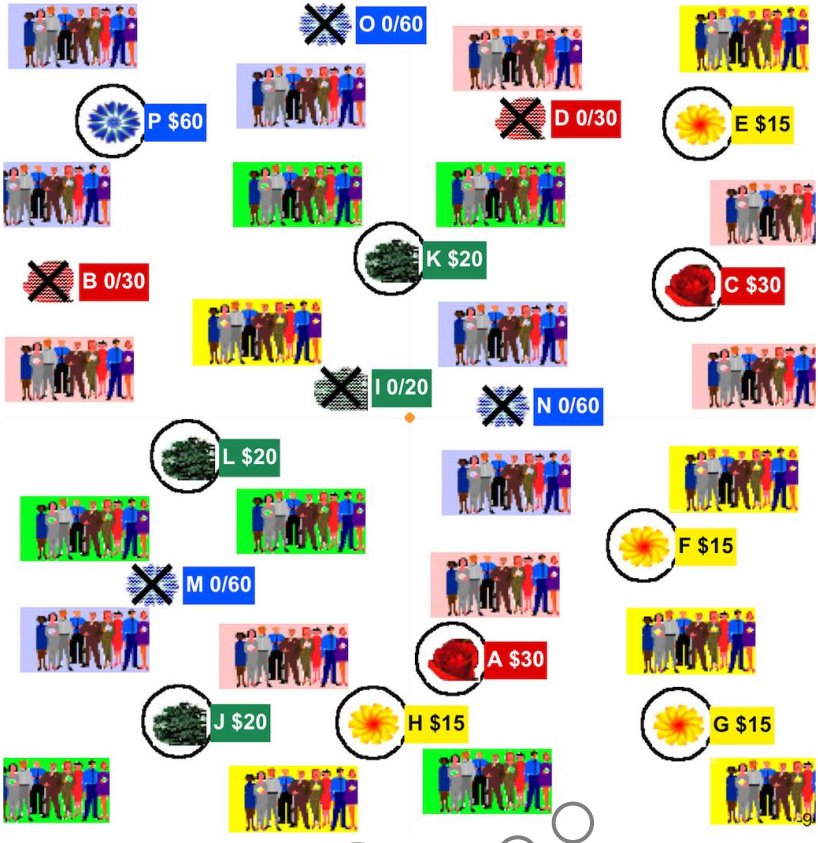
This is a proposed **blue-flower garden.** It is far from what the **red voters** want, even if it is next door. A voter prefers the closest item with his favorite color.

Here a garden club had $240 to buy public plants and each interest group got a quarter of the votes. So how much did each group allocate?

A red rosebush cost $30, two big sunflowers $15, an evergreen $20, a blue passion flower vine $60. A group with only a few, low-cost proposals might be able to fund them all. Did that happen here?

Answers: $60, $60, $60, $60. Yes for sunflowers.

Campus Map



Any big group can focus or spread their spending.

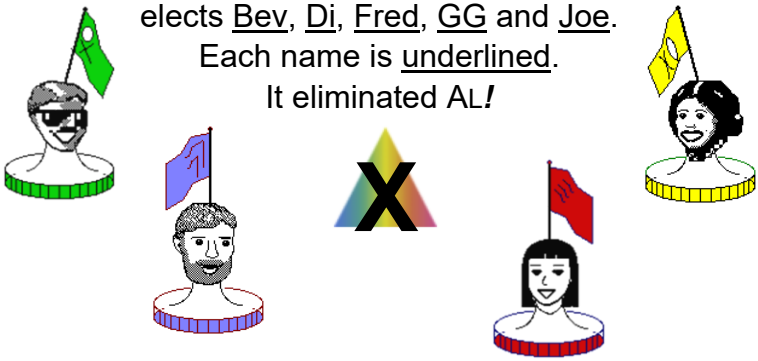
The **Loring Allocation Rule** uses a Condorcet Tally to fund a few items, then a Fair Share tally. The Condorcet Tally funds items with wide appeals to ad hoc majorities. It lets you vote for a sure winner without wasting any of your own power. Then the Fair Share tally funds items with narrower, more intense appeals. Elections, too, may tally Condorcet then fair-share winners.

Contrast 3 Councils, Each Has 5 Seats

1. The **Loring Ensemble Rule** elects a few reps by a Condorcet Tally, the rest by a Proportional RCV tally. On this map Condorcet Tally elects **AL** then Fair Rep by four-seat Proportional RCV elects **Bev**, **Di**, **Fred**, and **Joe**. The map shows each winner's name in **bold**.

2. The *Condorcet Series* elects the candidates closest to the middle of the voters: *AL, Bev, GG*, *Joe* and *Fred*. The lower right or southeast gets no rep, so the council is not well balanced. Each winner's name is in *italic.*

3. Fair Representation by five-seat Proportional RCV elects Bev, Di, Fred, GG and Joe. Each name is underlined. It eliminated AL*!*



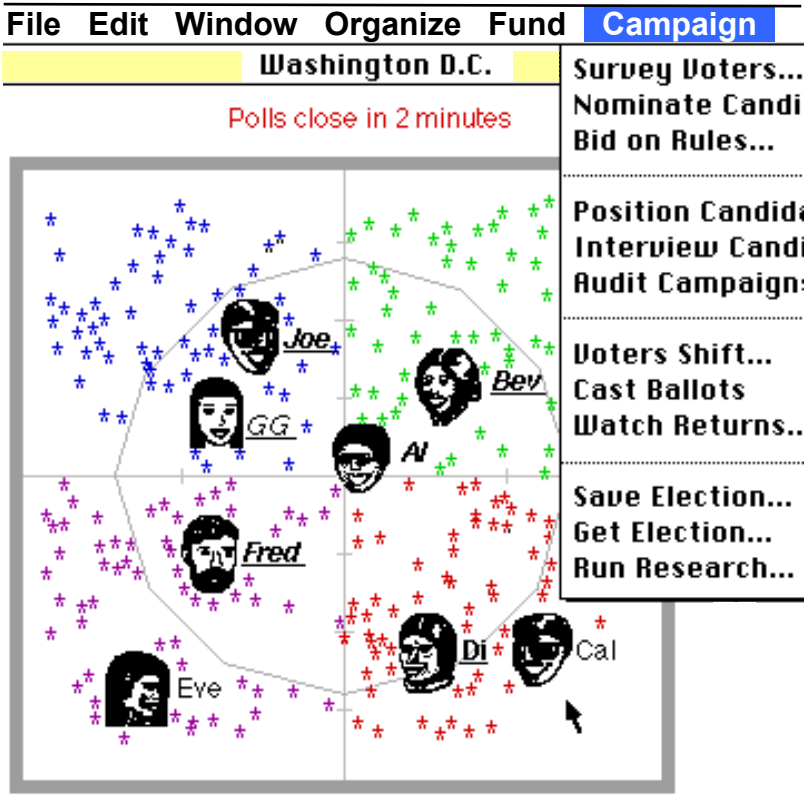
Notice Two Surprises

1. It may be surprising that broad Fair Rep helps the *central Condorcet* winner be the council's **swing voter**. With these tools, political diversity can be a source of moderation as well as balance and a wide perspective.

2. *Central reps* can lead a broad Fair Rep council to **broader majorities**, holding moderates from *all* sides. This can add to or replace some of the "checks and balances" used to moderate a council's impacts.

Well Centered and Balanced

An **Ensemble** council combines
the breadth and balance of Fair Representation
with the centering of *Condorcet*.

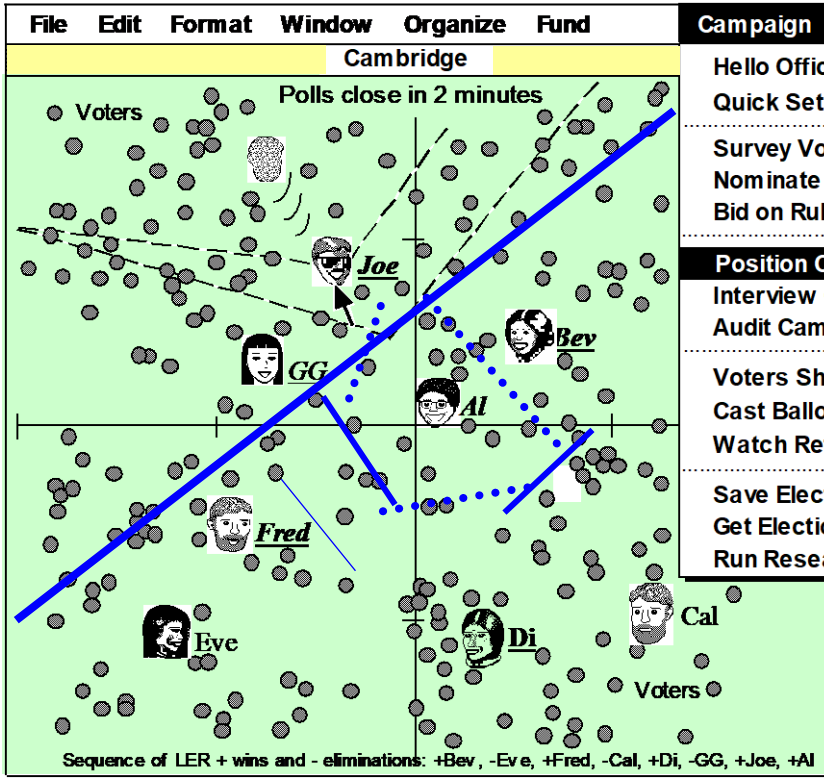


A council's **swing voter** on a regulation or a budget can strongly influence but not dictate those decisions.

Proportional RCV works to elect a balanced council with moderates and often a centrist. But it does not push any rep to please *central majorities* of voters. *Condorcet* does. ➚

4. Watch Condorcet Find the Center

This map puts a line halfway between AL and a rival. Voters ● on AL's side of each line are closer to AL, so they rank AL above the rival. The long line has more voters on AL's side than on Joe's. So AL wins that test. AL wins a very different majority over each rival here. To do that, AL's political positions must be *central* and have *widespread support*, as decribed on page 31.



In contrast, PRCV requires the most intense support, top-rank votes, to avoid early elimination. ● page 48
RCV does too, with a high finish line of 50% + 1 vote.

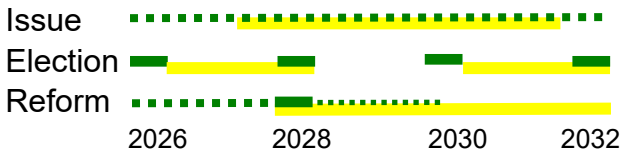
✳ Back Matter

Voting Reform Is Cost Effective

Issue campaigns teach voters and reps for years. This eases one problem, but rarely fixes the source.

Election campaigns cost a lot all at once. The biggest faction can skew all policies for a few years.

Reform campaigns cost no more than elections. RCV strengthens reps and policies for many years.



Campaign **costs in green**, results in yellow.

.

Strengthen Votes ∴ Mandates ∴ Policies

RCV expands the base of power, the numbers of effective votes and voters supporting:

		Pages
1	a **CEO** or a **Chair** from a plurality to a majority	14, 31
2	a **Council** from a plurality to over three quarters	21
3	the **Budgets** from a few power blocs to all voters	24
4	a **Policy** from a one-sided to an overall majority.	30

Votes for real choices tally up real democratic power. It needs big mandates to govern new nondemocratic powers in big money, media, marketing and more. Mandates aid actions to achieve popular goals. They build up a democracy and its leaders. 57

Voting Reforms Aid Related Reforms

1 **Ballot access** rules make it hard for small parties to get on the ballot, because big parties fear "spoilers." To calm that fear, let voters rank their backup choices. **Ranked Choice Voting, RCV**, opens up elections.

3 **A news firm** may serve us better if the subscribers steer more parts of it than investors or advertisers do. There's a low-cost method for any membership group: **Fair Share Voting** can reward the best news bloggers.

3 **Public campaign funding** lets reps and rivals give less time to their sponsors, more time to their voters. One plan gives each voter $50 of vouchers to donate.[11] Such nameless gifts or **FSV** can cut corrupt paybacks.

Big sponsors aim gifts to buy the few swing districts. 1 2 **RCV** and **Fair Representation** make it harder.[12] Big business and billionaires can buy fewer seats.

*"It's very hard to see us fixing the **climate** until we fix our democracy." —Dr. James Hansen*[13]

1 2 3 **Good schools,** taxes and voting may go together Schools build our group skills and political know-how.[14]

1 **Sabbatical terms** make the current rep run against a former rep returning from rest, reflection and research Then the candidates include two with records in the job*!* Two alike do not break apart a group that uses **RCV.**

4 **Citizens' assemblies**[15] and their referendums get more choices and control by using **Condorcet Tallies.** The laws on voting rules, reps' pay, sponsors, etc., need referendums as all reps have conflicts of interest.

Civil Society Builds Democracy

Merchants and workers in medieval guilds won some rights by building **group skills**, unity and allies. Now local councils, co-ops and schools can build skills.

Empirical thinking grew in the Age of Enlightenment, leading to revolutions for **human rights**.[16] Now rights must include Fair Representation and Fair Share Voting.

A big need for workers has often raised their pay and political strength, thus the **political equality** in a society. Now very progressive taxes[17] can help political equality.

Move to a more democratic place or group.

To get good policies quickly, go where they are used. For example, do you want the democratic control and long-term savings of county or **co-op owned** utilities?[18]

CEOs may need to be assertive, but not authoritarian. That corrupts commerce and wrecks human rights.[19]

How can voting rules **reduce the abuse of power**?

Answers: RCV rivals act nicer. Swing-voting reps moderate. Fair Rep and FSV spread power. So do the related reforms. But a winner-takes-all tally starts a bad pattern.

Better Voting for Better Living

Data on the next page suggests, to elect reps who enact superb health, education, tax[7] and other policies, a country needs effective, not wasted votes.

Does **Fair Representation** elect more women? page18
Do they tend to raise health and education results?[20]
Can these lift low incomes and reduce violent crime?

Do voter **turnouts** or seats won by **women** tend to be lower in countries with more: people? diversity? religion? polygamy? corruption? billionaires? militarism? hot days*!*
Are those harder to change than the voting rules?

Data Definitions and Sources

Measures of respectable power and policies, circa 2016

Seats avg. per election district; Inter-Parliamentary Union
Women % of main legislature; Inter-Parliamentary Union
Turnout % Int'l. Inst. for Democracy and Electoral Assistance
Health Rank first is best; World Health Organization
Math Score Program for Int'l Student Assessment, OECD
Poverty % of children below half of median income; OECD
Murder Rate per million; 7th UN Survey of Crime Trends
Scores weighted by population give a voting rule's average.

The table's **worst** numbers are in **bold**.

Country	Seats	Women %	Turnout	Health Math		Poverty%	Murder
Fair Rep	page 16	37%	75%	15	503	13%	12
Sweden	14	*44*	86	23	502	8	10
Finland	13	42	67	31	548	4	15
Spain	6.7	41	69	7	480	**20**	6
Norway	8.7	40	76	11	490	5	5
Belgium	8.4	39	89	21	520	13	16
Denmark	15	38	88	34	513	4	5
Netherlands	150	37	80	17	528	10	5
Austria	19	28	82	9	505	8	7
Switzerland	7.8	28	**49**	20	530	10	6
Costa Rica	21, 4	19	81	36	**407**	-	**112**
Uruguay	30, 2	**13**	90	**65**	**409**	-	**111**
Mixed, MMP	p17	36%	71%	26	505	9%	11
Germany	19, 1	39, 13	72	25	514	16	11
New Zealand	50, 1	45, 15	77	41	500	15	9
PRCV, **RCV**	p42,14	34%	89%	29	517	14%	11
Australia	6, 1	38, 25	*93*	32	520	15	10
Ireland	4	**15**	70	19	501	10	10
Runoff	page 12	27%	60%	1	496	11%	12
France	1	27	60	1	496	11	12
Plurality	page 6	**21%**	**58%**	**34**	**486**	**19%**	**42**
Canada	1	26	68	30	527	15	17
United Kingdom	1	29	66	18	495	10	12
USA 2020	2024* 1	**24**, 25	64, 47	37	**474**	**21**	**50**

AccurateDemocracy.com/d_stats.htm will add data on: Corruption at transparency.org; Democracy Index at eiu.com; Freedom at freedomhouse.org, Social trust, and Peace.

* U.S. voter turnout rises ~15% in presidential years.

What Good Is a Good Democracy?

"Democracy is broadly understood to mean 'rule by the people'. In practice, it is often defined as people choosing their leaders in free and fair elections.

Other definitions go beyond this. For example, some of them see democracy as people having additional individual rights and being protected from the state.

Democracy gives citizens the right to influence important decisions over their own lives and allows them to hold their leaders accountable.

But it can have other benefits too: democratic countries seem better governed than autocracies, seem to grow faster, and foster more peaceful conduct within and between them." https://ourworldindata.org/democracy

COMPARE the quality of life in the best democracies with that in authoritarian / theocratic / monarchies or in totalitarian one-party states at OECD Better Life Index.

Why Support More Democracy?

It tends to strengthen our rights and freedoms, social trust and safety, health and leisure; and to resist corruption and abuses of government power. Peace ⇒ prosperity ⇒ successful cities and states.

Why Support Accurate Democracy?

A good democracy develops, improving itself, the quality of the society and its social agreements.

Democracy tools are powerful means for building social equity and trust, peace and prosperity.

Consider the 1998 Northern Ireland **Good Friday Agreement referendum**.
The major factions were these:

The Catholics who were opposed to the peace deal and for union with the Republic of Ireland.

The Catholics for peace with the Protestants in N. Ireland

The Protestants for peace with the Catholics in N. Ireland

The Protestants who were opposed to the peace deal and for closer ties to the United Kingdom.

In some districts, no faction got a majority.
If you wanted peace, who was your second choice?
Some Catholic candidates for peace asked followers to rank the Protestants for peace, above the Catholics opposed to the peace deal.
Some Protestants for peace made a similar ask.
RCV helps. "RCV gives you proportionality on every axis."

Peace won.

Where else do you see a polarized society?

Q: Can rules reduce battles of birthrates or indoctrination?
~ A: FSV makes becoming the plurality tribe less profitable.

Humorous Quotes in PoliticalSim™

The game PoliticalSim™ has dozens of interview questions. This sample teaches players to tell the difference between **1** ⇐ more democratic and more authoritarian ideas. ⇒ **4**

Who said: “In Paris they simply stared when I spoke to them in French; I never did succeed in making those idiots understand their own language.” 1) Mark Twain 2) Ronald Reagan 3) George W. Bush 4) Donald Trump.

“We have always known that heedless self-interest was bad morals; we know now that it is bad economics.” said: 1) FDR 2) Boris Yeltsin 3) R. Reagan 4) D. Trump.

Anthropologist Ashley Montague wrote, “It is the mark of the cultured man that he is aware of the fact that _____ is an ethical and not a biological principle.” 1) Equality 2) Interdependence 3) Succession 4) Survival of the fittest.

Theologian Reinhold Niebuhr wrote, “The tendency to claim God as an ally for our partisan values and ends is . . . the source of all religious _____.” 1) Awakening 2) Growth 3) Dogma 4) Fanaticism.

Who said, "He is a barbarian and thinks the customs of his tribe are the laws of nature." 1) George Bernard Shaw 2) Mark Twain 3) Rev. Billy Graham 4) J.D. Vance

Who said the US is “the greatest poem.” 1) Walt Whitman 2) Abraham Lincoln 3) Barak Obama 4) Donald Trump.

Publisher Clare B. Luce wrote, “___ has done more to cause the social unrest of the 20th century than any other factor.” 1) Revolution 2) Democracy 3) Socialism 4) Advertising.

Read the answers in our online game.
https://accuratedemocracy.com/a_humor.htm

Self quiz questions are on pages 16, 26, 32, 42, 47, 51, 59, 60, 63 and 65.

Some Questions to Ask

Some basic questions to ask about any voting rule:
Has any group used it repeatedly over several years?
How consequential and competitive was their voting?
What were the percentages of turnouts and of wasted votes?

What incentives does it give to voters and leaders?
Is its pattern of winners erratic or dependable over the years?
If dependable, is its pattern fair shares or winner takes all?
If winner takes all, is the winner from one side or the center?
If it is from the center, is the winner's appeal wide or narrow?
How often was it manipulated by a gerrymander, a "spoiler,"
a stacked agenda, strategic voting, or other rigged votes?

Some basic questions to ask about voting-rule research:
Are the data from: 1) Real competitions, 2) Computer sims with: A) normal distributions of voters and candidates B) weird distributions, 3) Concocted examples, 4) Mathematical proofs. Only the first really includes human psychology. Most sources cited here **use real data** or realistic simulations. Other kinds of data risk "garbage in, garbage out" and may be fascinating mathematically but misleading in real-life.

Manipulation is best resisted by Condorcet-RCV hybrids.
They're even better than the usual RCV.[4.2] Any decisive, non-dictatorial voting rule can be manipulated sometimes. So the operant questions are, 1) How often can each rule be manipulated in a realistic electorate? 2) How easy is the manipulation? and 3) How damaging is its effect?

Why do this work? To help the most people, give them tools to make better group decisions, to allocate resources and to reduce conflicts. The multiplier effects are huge. That's why many schools, clubs and towns are adopting RCV.

Some Users and Endorsers

1. Ranked Choice Voting (RCV) elects leaders
in more and more places: New York City and San Fransico, Alaska and Maine; colleges such as Duke, Harvard, Princeton, Rice, Stanford, Tufts, MIT, Cal Tech, Carlton, Clark, GWU, Reed, UCSC, Vassar, the Universities of Auburn, CA, Houston, IA, IL, MA, MI, MN, NC, OK, TX, VA, WA, WY.[21]

2. Multi-Winner Proportional RCV elects a whole council
in Cambridge Mass, in Portland Maine and Portland Oregon; plus colleges such as Carnegie Mellon, Clark, MIT, Oberlin, UC Cal, UC Davis, UCLA, UCSB, UT Austin, and Vassar. For decades, Australian and Irish voters have used Ranked Choice Voting in local and national elections.

Many groups endorse ranked choice voting.

Organizations: The Academy Awards (Oscars), AAAS, Common Cause, Sierra Club, UUA; for more see link below.

Leagues of Women Voters: : AZ, CA, FL, ME, MA, MN, NC, OR, SC, VT, WA, and more

National Newspaper Editorials: New York Times Sunday, USA Today, Washington Post; Recent regional editorials: Portland Press Herald, Las Cruces Sun News.

Journalists: David Brooks, Hendrik Hertzberg.

Celebrities: Krist Novoselic, Jennifer Lawrence, John Cleese, Dr. James Hansen, and more

US Senators: McCain, Obama, Sanders, and more

US Reps: Keith Ellison, Jamie Raskin, Don Beyer, and more

Parties: **Democrats** of CA, CO, MA, and ME; Green Party US Libertarian Party, **Republicans** of UT, VA, and AK sometimes

About Us

FairVote is a nonpartisan organization working for better elections for all. We research and advance voting reforms that make democracy more functional and representative for every American, with a focus on two key reforms: ranked choice voting and the Fair Representation Act.

Through our research and advocacy, we are making the case for reform at the federal, state, and local levels and empowering state and local allies with the resources they need to drive reform in their communities. Working together, we've already made ranked choice voting the fastest-growing nonpartisan voting reform in the nation.

About My Work

VotingSite@gmail.com

In 1990, John Chamberlin and Samuel Merrill each encouraged me to use their research, cited below (+3), to support a hybrid Condorcet-RCV tally. (See page 30.) In the 1990s, I coded *PoliticalSim*™ and *SimElection*™. They compared 30 single- and multi-winner tallies and were used in a few universities. (See pages 48-56.) My sim research led to *Democracy Evolves*[22] in 1997. Then I helped FairVote as its webmaster and librarian. For over ten years, I've advised groups developing the use of Fair Share Voting. (See pages 24, 43 and 46.) This eBook summarizes AccurateDemocracy.com

Goals: Make better policies. (Seen on pages 9 and 61.) Give better incentives to cooperate for better harmony, even in multi-cultural places. (See 24, 27, 28-35, 54.)

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voting in your clubs, college, city and state.
What will you do or give to live in a more
educated and accurate democracy?
Consider helping FairVote.org

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comments or compliments to me at
VotingSite@gmail.com

Endnotes by Chapter

For each chapter, the endnote numbers restart at one. Good pdf viewers let you click on each entry's Web link. I abbreviate and format as needed to fit the page width. I favor online sources that use data from real elections or realistic sims. This is essential for realistic research.

This is the first book about **Ensemble Councils**, **Fair Share Voting** and rules of order for **Condorcet policies** **YOU** may begin and build Wikipedia pages about these. My coleagues and I may not as we are primary sources.

It covers some **AccurateDemocracy**.com (ⓐ) pages including a_primer.htm a_workshop.htm d_stats.htm. The website has *free apps* z_tools.htm, animations d_stv2d.htm or p_tools.htm, and Web links z_bib.htm

FairVote.org has model ballots and bylaws, stories, research reports, voter-education videos and more. See also expanddemocracy.org www.rcvresources.org

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Glossary and Index

Accurate democracy gives fair shares of seats and spending. It cuts scams and enacts a policy that tops all rivals. *4 goals*

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a **Plurality** option has the most votes – often not a majority.
" **rules** use yes-or-no voting; contrast RCV... **6**, 11, 23, 31-, 61

a **Ranked Choice Vote** lets you rank a 1st choice and backups. It is a tool for effective votes and fair shares. **14-**, 29, 45

a **Voting Rule** (system, tally, tool) has a ballot, tally steps and a level of support needed for a win. 6, 14, 17, 24, 30, **42-**

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