

# Full-Choice Ballots

Only a small group can crowd around a tally board. Big groups use paper ballots, tallied by computer.

**Old-fashioned ballots** oversimplify most issues. They let you mark only one option “yes”, leaving all others “no”. This creates false dichotomies, limited choices that polarize voters and increase conflict.

**Full-choice ballots** reduce those negative effects. They let a voter rank a 1<sup>st</sup> choice, 2<sup>nd</sup> choice, 3<sup>rd</sup> etc. Ranks often reveal the dichotomies, “us versus them” or left versus right, hide moderate points of view.

1

2

3

## VOTE HERE

Fill only one “O” on each line.

Names	Ranks					
	Best 1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	Worst 6 <sup>th</sup>
John McCain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Barack Obama	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hillary Clinton	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
John Anderson	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ross Perot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ralph Nader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Michael Bloomberg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<i>Write In</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Movable Votes

Get your hands on **5** great voting rules.

See fair-share tallies organize voters.

Vote fast on **budgets**, **reps** and **projects**.



## A tally board has

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

## Budget Refill Votes Adjust Departments

- ✚ A big department has several **columns** to fill.
- ✚ The columns each need \$100... for the department to reach last year's budget; that's its **refill line**.
- ✚ A supporter's **cards** help refill its budget columns. Voters can push it above its refill line. But its gain will be another department's loss.

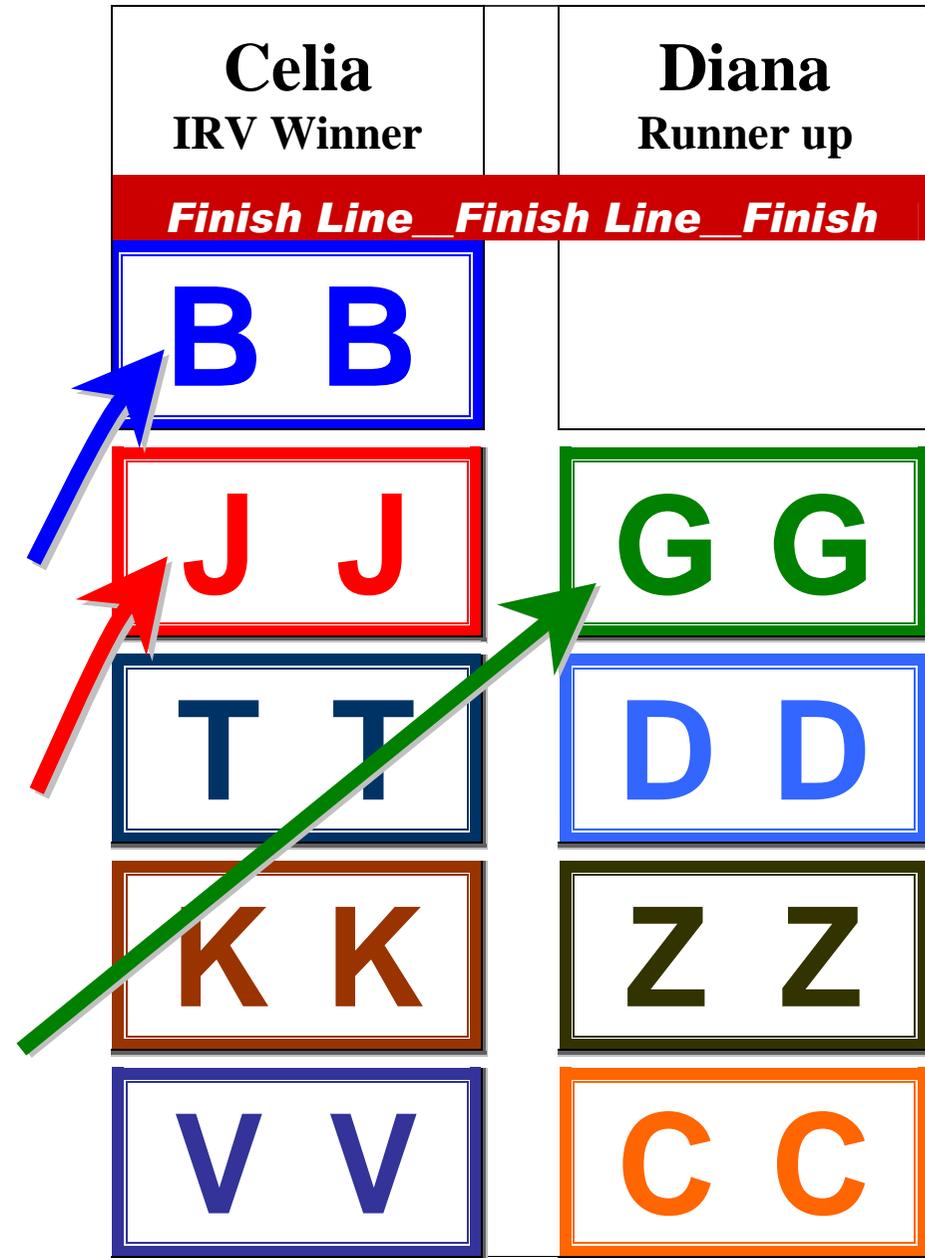
Let's say a council of 20 decides each program needs modest support from 10 members to restore its funding. So a column needs 10 cards from 10 voters to reach its refill line, or as few as 5 double cards from eager voters.

The group wants to budget 4 low-cost activities with 1 column each, plus 3 costly programs with 2 columns each. Those 10 columns X 10 cards to refill each = 100 cards.

The 100 cards / 20 voters = 5 cards for each voter; that's 1 double and 3 singles. You may put only 1 in a column.

- ✚ **Set target** budgets and rank your priorities. If a budget goes over your target, its **priority** drops. So **move** your cards to your under-funded priorities.
- ✚ We stop moving cards when a hidden **timer** sounds. You lose cards that are not on the board. This deters faking votes until a last-moment switch.
- ✚ A supermajority may **reopen** the voting.

- Did departments need a winning number of votes?
- Did your second choice hurt your first choice?
- Should a rep's cards be so visible to voters?
- Did your second choice hurt your first choice?



## Instant Runoff Voting Elects 1 Winner

For a tabletop tally by **Instant Runoff Voting**:

- The **finish line** is the height of half the cards + one. That is how many votes a candidate needs to win.
- **Eliminate** the weakest candidate if no one wins. Draw names from a hat to break ties.
- **Move** your card if your candidate loses. This is your “movable vote.”
- **Repeat** until one candidate reaches the finish line!

This **chart** shows four columns on a tally board. The rule **eliminated** Anna, so voter **JJ** moved his card. Then Bianca lost, so **BB** and **GG** moved their cards.

<b>Anna</b> Eliminated 1 <sup>st</sup>		<b>Bianca</b> Eliminated 2 <sup>nd</sup>	
		B B	•
J J	•	G G	•

## Pairwise Tally Centers a Policy example

- ✦ Flag C stands at our **center**, by the median voter. Three flags surround C, about 5' from it.
- ✦ Pairwise asks: “Are you closer to flag A than flag B? If so, please raise your hand.” Then A against C, etc. We put each total in the **Pairwise table** below.
- ✦ The winner must top every rival, **one-against-one**.

against	A	B	C	D
for A	—	2	2	3
for B	5	—	2	3
for C	5	5	—	4
for D	4	4	3	—

- ✦ A pole stands at our center, by the median voters. It holds a short **Red** ribbon and a long **Blue** one.
- ✦ If the **Red** ribbon gets to you, the **Red** policy gets your vote with its narrow appeal.
- ✦ But if the **Red** cannot touch you, the **wide appeal** of the **Blue** policy gets your vote. Which one wins?

If the flags are places for a heater in an icy cold room:

14. Do we turn on its fan to spread the heat wide?
15. Put it at our middle or in the biggest group?
16. Do voters on the fringes have any influence?
17. Can the middle voter enact any policy alone?
18. Did this favor a balanced or a one-sided policy?

**Answers:** IRV: T, T, T. STV:  $\frac{3}{4}$ , no. MMV: no, no, no, no. BRV: no, no, yes. Pairwise: yes, mid, yes, no, balanced, no.

## Instant Runoff Voting cont.

By **organizing voters**, Instant Runoff Voting avoids: Spoiler candidates *and* the lesser-of-two-evils choice; Costly runoffs *and* winners-without-mandates.

**IRV elects leaders** in London, Sidney, San Francisco...  
It elects students at Duke, Rice, Reed, MIT, UCLA...

1. How can your group use this voting rule?
2. A card that moves is no bigger than any other: T, F
3. Your 2<sup>nd</sup> choice vote can't hurt your 1<sup>st</sup> choice: T, F
4. Only one candidate can reach 50% + 1 vote: T, F

## Single Transferable Vote Elects 3 Reps

For a three-seat election by **Single Transferable Vote**:

- The **finish line** is set at 1/4 of the cards + one.  
Do not give a card to a candidate who has finished.
- **Eliminate** the weakest candidates one at a time.
- **Move** your cards until three candidates win!

STV is **used in** many Australian and Irish elections, at Princeton, Harvard, Berkeley, Oxford and Cambridge, in some labor unions and in the Church of England.

STV gives each group their **fair share** of council seats.  
It elects more **women** and political **minority** candidates.  
Voters get more **choices**; so more **turnout** to vote.  
It makes more **effective votes** that elect reps.

5. What total percent must three STV reps win?
6. Only three candidates can win 25% + one vote: T, F  
Ask questions one thru three with each voting rule.

## Movable Money Votes Buy Public Goods

For Fair-share Spending by **Movable Money Votes**:

- Let's say we each put in \$1 to buy some items.  
You get two 25¢ voting **cards** and a 50¢ card.
  - We say an item needs modest support from 8 of us to prove it is a public good worth public money.  
So the **finish line** marks the height of 8 cards.
  - You may put only one of your cards in a column.  
So you can't dump all your cards on a private item.  
Tip: Give your **double card** to your favorite.  
This way 4 eager voters can fund a low-cost item.
  - A costly item must fill several **columns**. A column here holds \$2, so a \$4 item must fill two columns.
  - When an item wins, the banker hides its cards.  
We **drop** items that cost more than all the cards left.  
Then one at a time, we drop the least popular item, with the lowest level of cards in its columns.
  - **Move** your card from a loser to your next choice.  
Tip: You may save a threatened favorite by briefly **withholding** your cards from lower-choice items.
  - We **stop** when all items still on the table are paid up.  
Only a few items can win, but all voters can win!
7. Should we let each member fund private items?
  8. Did your second choice hurt your first choice?
  9. Should voters who pay more taxes get more power  
a) to spend public money? b) to set public laws?