Ranked Choice Voting is only a small step up from the current Plurality voting system. We can do much better, much simpler, and much cheaper than RCV. RCV also loses about 10% of the votes in "transfers" between multiple elimination rounds.

The accuracy of RCV depends on the counting methods. A look at Alaska, Maine, and Alameda County California shows that the counting system can vary enough to make RCV an entirely different voting system than RCV run in another jurisdiction. When voters don't get what they expect they don't trust the government that the election creates.

The Center for Election Science chart below shows how well each of the three most well-known voting systems respond to the largest problems voting systems have – ranked on the left. Vote splitting is the greatest hinderance to voter satisfaction with the other problems following below. The chart does not address secondary effects like those listed above or other issues like election cost, complexity, and security.

Sector Contractor	0.00		
	Choose-One Plurality	Ranked Choice (IRV)	STAR
Spoiler Effect / Vote Splitting?	YES	YES - With 3 or more viable candidates.	NO
Cives an advantage to some types of candidates?	Favors polarizing candidates who are "viable".	Strong underdog candidates are at a disadvantage.	NO
Wasted Votes and Exhausted Ballots?	Not voting for a front-runner is a wasted vote.	Exhausted Ballots are not counted in the final round.	NO
Ballots tabulated locally?	YES	NO	YES
Tabulation Complexity	Add up votes. 2 Elections Needed.	Multiple elimination rounds and vote transfers. Only one election needed.	Add up stars, then add up votes. Only one election needed.
Accuracy measured by Voter Satisfaction Efficiency	72 - 86%	80 - 91%	91 - 98%
Strategic Voting Incentives	17 : 1 Strongly incentivised	2.7 : 1 Weakly incentivised	1 : 1 Not incentivised
EQUAL V/TTE + Statistics from the Center For Election Science Key: Worst to Best			

## Single-Winner Voting Method Scorecard

Dozens of voting systems have been researched. The Center for Election Science and other research places Ranked-Choice below Approval Voting (not shown in the above chart but included in the next chart). STAR is a newer hybrid system that combines the strengths of Approval and Ranked-Choice methods while eliminating the top causes of election inaccuracy and voter frustration.

## https://electionscience.org/library/approval-voting-versus-irv/

STAR stands for Score Then Automatic Runoff. STAR uses one election to conduct a non-partisan scored primary then a runoff of the top two candidates. It collects and uses much more data on voter preference than other methods without adding election complexity or equipment. Deeper dive and a sample ballot at <a href="https://www.starvoting.org/star">https://www.starvoting.org/star</a>

The second chart is from an election science development platform. Farther right indicates more voter satisfaction with "strategy" indicated by the dot color. Our current plurality system ranks very last and is probably only there for a reference. I encourage you to read the 2pg analysis at <a href="https://electionscience.github.io/vse-sim/VSEbasic">https://electionscience.github.io/vse-sim/VSEbasic</a> There is also a link to a longer version and links with a deeper dive into the math. Analyses suggest that mutually exclusive but desirable voting criteria make it unlikely that any voting system can achieve a Voter Satisfaction Efficiency of 100%.

The blue dot shows how satisfied fully honest voters (#2 above) are with each system. The red and green dots show the satisfaction of the voters who try to "game" the system by voting "strategically." Systems have missing dots due to of overlap or because their structure prevents identifying that data.



The blue data point shows that honest voters are among the most dissatisfied plurality voters. The red dot says that strategic game playing is encouraged by our current Plurality system. That sounds right even talking to regular people.

At ~98% voter satisfaction, STAR incentivizes honest voting more than any other system. STAR has versions for multi-winner and proportional elections without ballot changes.

STAR is constitutionally legal in every US jurisdiction. All votes are counted in the final round and no votes are lost in failed "transfers" or "exhausted ballots." Current voting machines would only need a software update.

The above is a summary. I'll help in any way you like.

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