

Comparison of Election Methods: Alaska 2022 Special House Election

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Oregon Open Primaries



Election Methods

- **Successive Elimination** (a.k.a. “instant runoff voting (IRV)” or “RCV”) Starting with voters’ 1st choices, candidates with the fewest votes are eliminated in rounds. Ballots supporting eliminated candidates have the next choice counted if that choice has not yet been eliminated.
- **Approval** Voters vote for as many candidates as they like.
- **STAR (Score Then Automatic Runoff)** Voters score candidates from 0 to 5. A runoff between candidates with the top two scores determines the winner.
- **Condorcet Minimax** (a.k.a. Minimax, Simpson-Kramer) Ballot rankings are used to perform head-to-head runoffs between each pair of candidates. The Minimax winner is the candidate with the best runoff result against their strongest opponent. If that result is a victory, then the Minimax winner is a Condorcet winner who defeats each of the other candidates.

Top-4 Primary

Top vote recipients were:

Sarah Palin (27.0%)

Nick Begich (19.1%)

Al Gross (12.6%)

Mary Peltola (10.1%)

Palin and Peltola would presumably have won closed party primaries.

Al Gross dropped out of the race.

General Election

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Ballot Ranking Distribution

% of Ballots	14.3	8.2	6.0	18.1	1.9	11.3	25.1	2.5	12.6
1st choice	Begich	Begich	Begich	Palin	Palin	Palin	Peltola	Peltola	Peltola
2nd choice	Palin	Peltola	–	Begich	Peltola	–	Begich	Palin	–

Successive Elimination

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(“Instant Runoff Voting” or “RCV”)

	Begich	Palin	Peltola	Total	Notes
Round 1	28.5	31.3	40.2	100.0	Begich eliminated
Round 2	0	45.6	48.4	94.0	Peltola wins

Begich is eliminated in Round 1. Voters who selected Begich first have their second choices counted.

Palin is eliminated in Round 2. Voters who selected Palin first do not have their second choices counted (this is unfair!).

Approval Voting

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(Assume voters approve 1st and 2nd choices)

Begich	71.7%
Palin	48.1%
Peltola	50.3%

Begich wins. However, Peltola would win if her supporters had all “bullet voted” with no 2nd choice:

Begich	46.6%
Palin	45.6%
Peltola	50.3%

Voters can increase the chance of their favorite winning (i.e. increase their influence on the election) by withholding support for other candidates. This is unfair and defeats the purpose of ranked ballots.

STAR Voting

(Assume 1st choice = 5 pts, 2nd choice = 3 pts)

Candidate	Avg. Score
Begich	2.72
Palin	2.07
Peltola	2.31

Begich and Peltola have the two highest average scores.

Begich defeats Peltola 46.6% to 42.1% in runoff.

If Peltola supporters “bullet voted” with no 2nd choice:

Candidate	Avg. Score
Begich	1.97
Palin	1.99
Peltola	2.31

Now Palin and Peltola have the highest average scores. Peltola defeats Palin 48.4% to 45.6% in the runoff.

Voters can unfairly increase the chance of their favorite winning by withholding support for others.

Condorcet Round Robin

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(Minimax version)

Begich 53.7%, Palin 33.7% (87.4% of voters expressed a preference)
Begich 46.6%, Peltola 42.1% (88.7% of voters expressed a preference)
Peltola 48.4%, Palin 45.6% (94.0% of voters expressed a preference)

Begich is the Minimax winner with the best runoff result against his strongest opponent (+4.5% margin versus Peltola).

The “Condorcet Principle” states that any candidate who would defeat each of the others in head-to-head runoffs should be elected.

Begich is such a “Condorcet winner”.

If voters “bullet vote” with no 2nd choice, that would not affect head-to-head runoffs involving their favorite candidate, but it would definitely harm their second-favorite.

Summary

- Alaska's Top-4 primary advanced two candidates (Gross and Begich) who would not have been nominated in closed party primaries. Begich is in fact the strongest candidate since he would defeat each of the others in head-to-head runoffs.
- The "Successive Elimination" method treats ballots unequally and resulted in a relative majority of voters favoring a losing candidate (Begich) to the winning candidate (Peltola).
- Approval and STAR voting incentivize voters to "bullet vote" for their favorite candidate, defeating the purpose of ranked ballots.
- Condorcet methods are not vulnerable to strategic voting because they only consider voter preferences between each pair of candidates. Minimax satisfies the "Condorcet Principle" by electing any candidate who defeats all others head-to-head. In rare elections with no Condorcet winner, any candidate who defeats the Minimax winner head-to-head suffers a worse runoff defeat to a different candidate and hence has no claim to victory.