Proportional Representation In The USA

This document describes how *proportional representation*, which is abbreviated as *PR*, can be used in the United States to elect the state representatives (also called legislators) in a state's legislature. If allowed, also it could be used to elect that state's representatives in the US House of Representatives.

The PR method recommended in this document, which does not have a name, uses the best elements from the most popular PR methods already in use by various nations. Yet the recommended combination differs from what any nation currently uses. A later section (*Why Many Nations Still Use Primitive PR Methods*) explains why this gap occurs.

The general goal of any PR method is to elect representatives who better represent *most* of the voters – such as 80 percent or more – instead of just the 51-percent *majority* of voters. The method recommended here achieves this PR goal.

Step One: Ranked Ballots, And More Nominees

Three election-method changes are needed before the United States can adopt a well-designed PR method.

- **Ranked ballots**. Voters and election officials need to gain experience marking and counting ranked ballots in both *primary* elections and *general* elections. On a ranked ballot the voter indicates their *first choice*, *second choice*, *third choice*, and so on.

- **Good vote-counting method**. *Ranked Choice Including Pairwise Elimination* (RCIPE) or some other good vote-counting method (possibly a Condorcet method) needs to be used to count the ranked ballots. *Instant-runoff voting* (IRV) does not qualify because it too often yields unfair results. (STAR voting does not qualify because it uses *rating* ballots, not ranked ballots.)

- **Multiple nominees**. The Republican and Democratic *primary* elections must nominate two (or more) candidates per party to compete in the general election. If the RCIPE vote-counting method is used, the candidate who is eliminated last (just before identifying the single remaining candidate) deserves to be the party's second nominee.

Step Two: Two Representatives Per District Plus Statewide Representatives

After voters and election officials have gained experience using ranked ballots in both primary elections and general elections, three more changes are needed.

- **Two representatives per district**. Each district will elect two representatives. Both winners will represent the citizens in their district. Typically the two representatives will be from different political parties.

- **Favorite party**. Each voter will answer the question "*Which political party is your favorite?*" This easy-to-answer ballot question is common in many nations, but it will be a new concept for US voters.

- **Statewide representatives**. Some *statewide* representatives will be elected to represent voters who, according to their favorite-party ballot marks, are not well-represented by the district-specific representatives. The choice of representatives to fill these party-specific seats will be done using the available ballot information, without any influence from political-party insiders.

Legislature Changes

To accommodate two representatives per district plus statewide representatives, legislative district boundaries must be redrawn to produce fewer, larger districts. Specifically each district will be *between two and three times* the size of a current district. The total number of legislative seats will not significantly increase or decrease.

After the PR changes, the legislature will have two kinds of legislative seats.

- **District-specific seats**. Most representatives (about 80 to 85 percent) will get elected to this kind of seat.

- **Statewide seats**. These seats compensate for any political parties that fail to win as many district-specific seats as would be expected based on how many voters prefer each political party.

Second-Most Representative Versus Second-Most Popular

The most confusing part of understanding PR is that there are two different kinds of "popularity."

- **Runner-up candidate**. A candidate who is second-most popular in a *primary* election is the *runner-up* candidate who could replace the winning candidate if the winner was disqualified or became unavailable.

- **Second-most representative candidate**. A candidate who is second-most popular in a *general* election is the strongest opponent to the winning candidate, and represents an entirely different group of voters compared to the winner. This kind of popularity is named *second-most representative* to distinguish it from the ambiguous term *second-most popular*.

The math behind identifying the second-most representative candidate is explained here and implemented in open-source software here. Unlike STV and similar methods, this counting method resists tactical voting.

In a primary election, the runner-up candidate is the last candidate to be eliminated before the winner remains. This candidate deserves to become the party's second nominee. Importantly this kind of popularity ranking *cannot* be used to fill the second seat in a two-seat district.

Filling The Legislative Seats

Within each district, the winner of the first *district-specific seat* will be the candidate who is most popular in that district.

The winner of the second *district-specific seat* will be the *second-most representative* candidate. This is the candidate who is most popular among the voters who are not well-represented by the first-seat winner.

The *statewide* seats are awarded to candidates who were not popular enough to win a district seat, yet are the most popular candidates associated with the political parties that did not win enough district-specific seats. (Specifically a statewide seat is awarded to any qualifying candidate in any district who received the most first-choice votes from voters who also marked the seat-winning party as their favorite party.)

A statewide representative is expected to represent that party's voters across all the districts. This differs from district-specific representatives who are expected to represent their party's voters primarily in their own district.

Both Kinds Of PR

There are two kinds of PR, and the recommended PR method implements both kinds.

- **Party-based PR** asks voters to indicate their favorite political party, and then fills legislative seats in ways that improve the match between party popularity and the number of elected representatives from each party.

  The goal of party-based PR is to enable small ("third") parties to more easily win elections, and to defeat the tactic of gerrymandering district boundaries.

- **Candidate-specific PR** elects multiple (two or more) candidates who, as a group, best represent the voters. Specifically each winner represents a different group of voters. For example, a two-seat version of candidate-specific PR used in an "average" district in the United States would elect one Republican and one Democrat.

  The goal of candidate-specific PR is to give representation to the large number of voters who are not represented when a district is represented by just one representative.

The following table shows the correlation between PR types and the seat types.

Seat type	PR type
District-specific	Candidate-specific PR
Statewide	Party-based PR

Why Not More Than Two Seats Per District?

Fans of the single-transferable vote, which is abbreviated *STV*, and fans of improved versions of STV (such as CPO-STV and Schulze-STV), promote the idea of using five or more seats per district, but that election method would not work in the United States for many reasons.

- It's not compatible with other US elections that still use plurality (first-past-the-post) voting.

- It's not compatible with how US Presidents are elected (nor with how they *should* be elected).

- It would lead to the need to form "ruling coalitions." They are negotiated in secret and often involve compromises that would be recognized as corrupt if the negotiations were done transparently. Also, unlike a parliament, a state legislature cannot request a new election when the parties fail to form a ruling coalition.

- It would not be compatible with how state representatives currently vote on proposed laws. (The NegotiationTool.com website demonstrates how legislative voting *should* be done.)

Improved STV Methods For City Council Elections

As a clarification, improved versions of STV such as CPO-STV or Schulze-STV *would* be suitable for electing members to a city council or other similar *non-partisan* group of elected members.

Unfortunately all the improved versions of STV are difficult to understand in terms of how they count ballots and assign seats.

The reason plain STV is not suitable for any kind of government election is that it mistakenly assumes a strong correlation between "fewest votes" and "least popular." It shares this flaw with instant-runoff voting (IRV). The FairVote organization heavily promotes plain IRV because it would serve as a stepping stone to their hidden agenda of adopting plain STV.

Ballot Simplicity, Counting Simplicity, And Fairness

The following table of PR methods shows that there are tradeoffs between ballot-marking simplicity, vote-counting simplicity, and fairness. In particular it shows that a loss of vote-counting simplicity can yield the best fairness and only a modest loss of ballot-marking simplicity. As a useful analogy, an automobile is relatively easy to learn to drive, but not every driver needs to understand the technology hidden under the car's body and hood. In a similar way, ranked ballots are relatively easy to learn to mark, but not every voter needs to understand the details about how the ballots are counted.

Method	Ballot simplicity	Counting simplicity	Fairness
Plurality (what we use now)	Yes for "mark one candidate," but *no* when have to choose between favorite or lessor of two evils	Yes, "most votes wins"	Worst
Closed party list	Yes, a single mark for a favorite party	Yes, seats assigned to parties proportionally	Bad, political-party insiders control which candidates fill seats
Open party list	Somewhat, favorite party plus approval marks for limited number of candidates	Yes, seats assigned proportionally, party list is counted in various simple ways	OK, still uses single-choice ballot for candidates
Mixed member proportional	Yes, favorite party plus one mark for favorite candidate	Yes, seats assigned proportionally, party list is plurality counted	OK, still uses single-choice ballot for candidates
PR method recommended in this document	Somewhat, favorite party plus *rank* candidates, but rewards honest voting rather than tactical voting	No, some counting must be done using spreadsheet or software	Much better
VoteFair Ranking (full system)	Somewhat, asks voter to *rank* candidates *and rank* political parties, but rewards honest voting	No, counting must be done using software	Best

Why Many Nations Still Use Primitive PR Methods

It's not possible to point to a nation and say "*they are doing PR correctly*" because feedback loops block the reforms that will lead to the well-designed method described in this document.

To understand why better election methods are opposed, consider that powerful political parties do not give permission to their politicians to approve a new election method unless the same party insiders will still have control after the new method is adopted. In turn, the party insiders serve the biggest campaign contributors, and together they block election-method reforms that would reduce the influence of money on election results. A well-known USA example of this feedback loop is that owners of gun-and-ammunition businesses give money to politicians who oppose gun-control laws designed to reduce mass shootings in schools because such laws would reduce their business profits.

As a further barrier to meaningful election-method progress, governments rarely fund research into significantly better vote-counting methods, which means that relatively few professors write academic journal articles on this subject. Academic references are required for Wikipedia articles, so this lack of

funded research also limits coverage of election methods on Wikipedia. The election-methods wiki at Electowiki.org serves as a prototype for articles that are missing from Wikipedia (such as [pairwise vote counting](#)). Only after a government adopts a new election method does Wikipedia allow coverage because adoption causes the method to become "notable."

In other words, voters have difficulty learning about new computer-dependent ways of counting ranked ballots because nations do not yet use these methods, and because academic journals and Wikipedia do not yet supply much information about these better vote-counting methods.

How Money Exploits Our Current Primitive Voting Method

Here's a table that clarifies which election-method reforms will defeat which money-based tactics.

Money-based tactic	Reason tactic works	Election-method reform that will defeat tactic
Gerrymander district boundaries	Single-seat districts, plus lack of statewide seats	Voters mark favorite party, use statewide seats to match party balance
Financially persuade party insiders to cut off party funds from non-puppet candidates	Closed party lists put insiders in control; open party lists use single-choice ballots	Choose politicians for statewide seats based on counts of ranked ballots, not party lists
Blocking during primary	Only one nominee per party	Two or more nominees from each primary
Exploit vote splitting by funding "spoiler" candidate(s) in either primary or general election	Voters cannot mark both favorite and alternative(s)	Ranked ballots (which eliminate vote-splitting disadvantage)
Concentrate funds on one candidate per race by arranging with other wealthy campaign contributors to not fund any candidate who would split votes away from the heavily funded candidate	Concentration of votes is opposite of vote splitting	Ranked ballots (which eliminate vote-splitting disadvantage and vote-concentration advantage)
Contribute money to candidates in both Republican and Democratic primaries	Unlike votes, money can be given during primary to candidate(s) in "other" (disliked) party	Ranked ballots and more nominees (give voters full control over who wins)
Fund popular yet vulnerable candidate in primary of disliked party	Combines "blocking" and "money to candidates in both primaries" tactics	Two or more nominees from each primary
Hire election-method experts to develop funding strategy	Wealthy people can afford to buy strategic advice and even conduct their own polls	Ranked ballots (which eliminate vote-splitting and vote-concentration tactics)

A dramatic example of combining the *blocking during primary* tactic and the *fund popular yet vulnerable candidate in primary of disliked party* tactic occurred in the 2008 presidential election. Some wealthy conservatives, who wanted a Republican president, gave money to Barack Obama to block Hillary Clinton from reaching the general election. They mistakenly assumed that Obama could not possibly win the general election. This tactic would not have been attempted if the Democratic party had nominated both Obama and Clinton and ranked ballots had been used in the general election. (Yes this example is not state-specific, but it's more widely known than state-specific examples.)

Economic Prosperity

Widespread economic prosperity will increase for states that adopt these recommended election-method reforms. Why will the state's prosperity increase?

Currently the largest campaign contributions flow to politicians who protect tax breaks, subsidies, and legal monopolies that financially benefit the people who give these contributions. As a result, too many businesses (especially out-of-state businesses) are squeezing too much money from consumers, essential workers, employees, and (at least through IRAs) investors. When too many businesses each take a too-big slice of economic pie, not much pie remains for the employees and customers of that state's businesses.

In opposition, most voters want politicians to reduce such corruption, which undermines the state's economy. When money-based tactics have less influence on election results, politicians will dramatically shift their allegiance from the biggest campaign contributors to us, the voters. What most of us want is less corruption, wiser solutions to the problems that governments are expected to solve, and full democracy.

Political Changes

Initially after a state adopts the PR method recommended here, the number of elected representatives from third parties will increase. This is the intended goal of PR.

Yet in response the state's Republican and Democratic parties can change their actions and platforms to win back at least some of the third-party voters. But if these reforms are not sufficient, it's likely that either a third party will grow or either the Republican or Democratic party will split.

The party that suffers the biggest decline will be whichever party fails to offer candidates who voters like. This is the change that will take us to higher levels of democracy, where voters will have more influence and campaign contributors will have less influence.

Where To Find Calculation Details

The book *Ending The Hidden Unfairness In U.S. Elections* can serve as a reference for some calculation details recommended in this document. The book's author, Richard Fobes, is also the author of this *Proportional Representation In The USA* document.

That book recommends a voting system named *VoteFair Ranking*. It uses the *Condorcet-Kemeny* method as the underlying single-winner vote-counting method, yet any good single-winner vote-counting method can be used instead. For ease of understanding (without sacrificing much fairness), the *Ranked Choice Including Pairwise Elimination* (RCIPE) method (described here and implemented in open-source software here) would work well as the replacement. Instant-runoff voting (IRV) would not work because it too often yields the wrong winner. STAR voting would not work because it uses *rating* ballots instead of ranked ballots. As a clarification, the phrase *Ranked Choice Voting* refers to the use of ranked ballots without clarity about how the ballots are counted.

Purpose Of This Document

This document was written to answer the question "*Which PR methods do you recommend?*" which arose because another document written by this author says "*the single-transferable vote (STV) will be recognized as too primitive compared to much better proportional-representation (PR) methods.*"

Author

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http://www.votefair.org/proportional_representation_usa.pdf

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