

UNITED STATES DISTRICT COURT  
DISTRICT OF MAINE

ROBERT HAGOPIAN, et al.,	)	
	)	
Plaintiffs,	)	
	)	Case No.: 1:20-cv-00257-LEW
v.	)	
	)	
MATTHEW DUNLAP, et al.	)	
	)	
Defendants,	)	

**BRIEF OF *AMICUS CURIAE***  
**PRINCETON ELECTORAL INNOVATION LAB**  
**IN OPPOSITION TO PLAINTIFFS’ MOTION**  
**FOR PRELIMINARY INJUNCTION**

Applicant *Amicus Curiae* Princeton Electoral Innovation Lab (“PEIL”) respectfully asks this Court to deny Plaintiffs’ motion for preliminary injunction because – as this Court held in *Baber v. Dunlap*, 376 F. Supp. 3d 125, 143 (D. Me. 2018) – Maine’s Ranked Choice Voting Act is constitutionally sound and does not deter voter participation. Even so, Plaintiffs and their expert claim that this system unlawfully disenfranchises voters, particularly the elderly and those without college educations. PEIL disagrees with the analysis of the Plaintiffs’ and their expert, and submits this *amicus* brief to contextualize Nolan McCarty’s expert report by providing the Court with additional data supporting the established fact that ranked-choice voting *does not* disenfranchise voters more than the previous plurality voting system. Plaintiffs’ claims are both unsupported by legal precedent *and* likely unsupported by the testimony of their expert witness who presents incorrect statistical conclusions regarding voter behavior.

**INTEREST OF AMICUS CURIAE<sup>1</sup>**

PEIL is a nonpartisan organization hosted at Princeton University that provides quantitative analysis to understand problems and provide solutions to perceived problems in elections. PEIL has experience in providing data, legal, and statistical analysis, and advocating for electoral reforms in a wide variety of election-related domains that include redistricting, open primaries, ranked-choice voting, and the Electoral College. PEIL is focused on electoral policies that increase participation and effectiveness of voters in American democracy. PEIL studies ranked-choice voting and other alternate election systems as one means by which the power of an individual's vote is increased.

**ARGUMENT**

**I. PLAINTIFFS' CLAIMS ARE UNSUPPORTED BY PRECEDENT.**

Courts across the country have broadly recognized that an exhausted ballot is a valid ballot, and that exhausting a ballot *does not* equate to a voter's disenfranchisement. *See e.g., Dudum v. Arntz*, 640 F.3d 1098, 1110 (9th Cir. 2011) (“[E]xhausted’ ballots are counted in the election, they are simply counted as votes for losing candidates, just as if a voter had selected a losing candidate in a plurality or runoff election”); *McSweeney v. City of Cambridge*, 665 N.E.2d 11, 14 (Mass. 1996) (“[Exhausted ballots] too are read and counted; they just do not count toward the election of any of the . . . successful candidates. Therefore it is no more accurate to say that these ballots are not counted than to say that the ballots designating a losing candidate in a two-person, winner-take-all race are not counted.”).

Moreover, Courts considering arguments challenging ranked-choice voting systems in other states have rejected arguments that the potential for ballot exhaustion or uneven ballot

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<sup>1</sup> No counsel for a party authored this brief in whole or in part, and no one other than PEIL made a monetary contribution intended to fund its preparation.

weighting in subsequent rounds undercut a voter's right to have his or her ballot counted. For example, *Minnesota Voters Alliance v. City of Minneapolis*, 766 N.W.2d 683 (Minn. 2009) rejected the argument that voters whose candidate preference was repeated in secondary vote-tally rounds was somehow undercounted. *Minnesota Voters Alliance* held: "Just because the vote is not counted for a different candidate in the new round . . . does not mean that the ballot was exhausted, that the vote for the continuing candidate is not counted in the subsequent rounds, or that the voter has lost the ability to affect the outcome of the election." 766 N.W.2d at 690. *See also Stephenson v. Ann Arbor Bd. of Canvassers*, No. 75-10166 AW (Mich.Cir.Ct. Nov. 1975)("Each voter has the same opportunity as the next voter in deciding whether or not to list numerical preferences for his or her candidate and has the same equality of opportunity as any other voter if his or her candidate is eliminated as the lowest vote-getter, and his or her second choice preference becomes the viable vote")(available at <http://archive.fairvote.org/?page=397>).

Indeed in 2018, this Court said as much in the near-identical *Baber* case, in which another expert witness hired to challenge Maine's ranked-choice voting law, professor James Gimpel, conceded that "[p]laintiffs' votes were not rendered irrelevant or diluted by this process. They remained and were counted." *Baber*, 376 F. Supp. 3d at 141. This Court went on to rule against similar claims in *Baber*, holding that: (i) "[RCV] does not violate the Equal Protection Clause," *id.* at 143; (ii) "[p]laintiffs] have not . . . demonstrated that RCV deprived them of due process," *id.*; and (iii) the Court "fail[ed] to see how [voters'] first amendment right to express themselves in this election were undercut in any fashion by the RCV Act. They expressed their preference for Bruce Poliquin and none other, and their votes were counted," *id.* at 145. Similar conclusions are warranted in the case at bar.

**II. PLAINTIFFS’ EXPERT PRESENTS MISLEADING STATISTICAL CONCLUSIONS REGARDING VOTER BEHAVIOR IN RANKED-CHOICE ELECTIONS.**

The main difference between *Abner* in 2018 and the Plaintiffs’ case here is Professor Nolan’s McCarty proposed statistical analysis erroneously claiming that ranked-choice voting systems deter voter participation and causes voter confusion. *See* Pls.’ Ex. A. PEIL, however, finds that Professor McCarty’s expert report contains claims and conclusions likely to mislead or be misconstrued by the Court.

**A. A very small percentage of Mainers’ votes were exhausted in 2018.**

Plaintiff’s expert report relies heavily on the concept that ranked-choice voting causes an exhausted vote. In a ranked-choice election, a ballot is said to be exhausted if the choices it lists do not include either of the candidates that make it to the final round of voting. For example, in Maine’s 2nd Congressional District election of 2018, the following ballot would have been exhausted because its two choices, Tiffany L. Bond and William R.S. Hoar, did not advance to the final round, which consisted of Representative Bruce Poliquin and the eventual winner, Jared Golden:

<b>Cast Vote Record</b>	<b>Precinct</b>	<b>Ballot Style</b>	<b>Rep. to Congress 1st Choice District 2</b>	<b>Rep. to Congress 2nd Choice District 2</b>	<b>Rep. to Congress 3rd Choice District 2</b>	<b>Rep. to Congress 4th Choice District 2</b>	<b>Rep. to Congress 5th Choice District 2</b>
890	Fayette	CAN Ballot Style 130	Bond, Tiffany L.	Hoar, William R.S.	undervote	undervote	undervote

Overall, in the 2018 2nd Congressional General Election, just 4.97 % of all ballots were exhausted by the second and final round of voting. *See Baber*, 376 F. Supp. 3d at 130-31 n.4, 6 (citing Dunlap

Ex. F-2, ECF No. 44-3). This total represents a very small fraction of the total votes cast in Maine’s first use of ranked-choice voting in a federal general election.

**B. The rate of full participation was considerably higher than suggested.**

According to Prof. McCarty’s report, in past RCV elections in other jurisdictions, the average fraction of exhausted votes in a 4-candidate election was about 7% of all votes. *See* Pls.’ Ex. A at 6, fig. 2. However, the claim that such exhausted votes are an indictment of RCV is questionable. When testifying against RCV, the *Baber* plaintiffs’ expert, Professor Gimpel, “opined that when one considers [p]laintiffs individually, the reasonable conclusion is that **they were not disenfranchised by RCV, but rather were full participants in the election.**” *Baber*, 376 F. Supp. 3d at 133 (emphasis added). There, the plaintiffs in that case ranked Poliquin first, a candidate who continued on to the next and final round, and the Plaintiffs here have all done the same. *See* Pls.’ Compl. ¶¶ 178, 193, 211, 223.

Indeed, by the Plaintiffs’ logic, in a traditional single-choice-vote (SCV) election, all votes cast for anyone but the eventual winner should also be considered to be vitiated. A recent article by New York University School of Law professors Richard H. Pildes and G. Michael Parsons addresses the flawed logic of such an argument:

The notion of “exhausted” or “inactive” ballots appearing to fall out of the tabulation process over successive rounds may strike some as concerning at first glance, but exhausted ballots are perhaps most usefully analogized to casting a vote for a losing candidate in an SCV election. In SCV elections, ballots cast for losing candidates are considered “wasted votes.” These wasted votes—like RCV’s exhausted votes—are still counted in the tabulation process; they simply do not go towards electing a winning candidate.

In fact, RCV produces fewer wasted votes than SCV. Because votes are transferrable, votes that might otherwise be cast for losing candidates are reassigned to candidates with a greater chance of winning. Thus, more voters have a greater say in the ultimate outcome of the race. **This ability to minimize “wasted” votes has earned transferrable voting systems—such as RCV—support from notable democratic theorists, such as John Stuart Mill.**

Richard H. Pildes & G. Michael Parsons, *The Legality of Ranked-Choice Voting*, at 14-15 (Mar. 27, 2020) (available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3563257](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3563257)). Maine’s 2nd Congressional District 2018 election provides a strong example. There, the first-choice round of voting produced 46.3% of votes for Poliquin, 45.6% for Golden, 5.7% for Bond, and 2.4% for Hoar. In an SCV election, Poliquin would be declared the winner. But the other 53.7% of votes would not count at all toward determining that winner.

Professor McCarty’s cited statistic that “Only 36 % of voters in [the 2nd District Congressional] election satisfied the most stringent version of [participation] criteria by using ballot ranks 1-3 to rank three distinct candidates” is distressing at first glance. However, that criterion entirely omits a prevalent type of well-informed voter: One whose second choice is either of the two major-party candidates, rather than a second independent candidate. For example, the following three ballots from the Secretary of State records would not meet such a “stringent” criterion of participation:

<b>Cast Vote Record</b>	<b>Precinct</b>	<b>Ballot Style</b>	<b>Rep. to Congress 1st Choice District 2</b>	<b>Rep. to Congress 2nd Choice District 2</b>	<b>Rep. to Congress 3rd Choice District 2</b>	<b>Rep. to Congress 4th Choice District 2</b>	<b>Rep. to Congress 5th Choice District 2</b>
653	Fayette	CAN Ballot Style 130	Bond, Tiffany L.	DEM Golden, Jared F.	undervote	undervote	undervote
3565	Houlton	CAN Ballot Style 153	Hoor, William R.S.	REP Poliquin, Bruce	undervote	undervote	undervote
2709	Houlton	CAN Ballot Style 153	Bond, Tiffany L.	REP Poliquin, Bruce	undervote	undervote	undervote

These three voters do not meet Prof. McCarty’s standard contributing to his misleading 36% participation figure. Yet, it cannot be said that those voters did not participate. Indeed, they did

exactly as proponents of RCV intended: They expressed a preference for a minor candidate, but also expressed a preference for a candidate who made it to the final round of tabulation.

All told, over 95% of ballots indicated either Golden or Poliquin as a valid choice, and therefore made sufficient use of the RCV system to have their influence felt in the final round. The remaining 4.97% of ballots included a variety of patterns, including votes for only minor candidates, combinations of overvotes and undervotes (*i.e.* miscast ballots), and ballots that were entirely undervotes. In sum, RCV wasted fewer votes (4.97%) than would have been wasted in an SCV system (8.1%, the sum of first choice support for Bond and Hoar).

Another apt comparison analyzes how, in RCV elections outside Maine, voters have behaved when presented with four candidates. Figure 2 of Prof. McCarty's statement shows that about 7% of ballots are typically exhausted in such a situation. Pls.' Ex. A at 6, fig. 2. At a rate of just 4.97% wasted votes, Maine voters performed better than the national average in their very first encounter with RCV in a general election.

The foregoing analysis demonstrates that the vast majority of Maine voters—over 95% of those casting a ballot—made full use of the power afforded to them by RCV. Some of them did so by making a single choice. In addition to the fact that those voters had full influence over the outcome, it is also a standing legal precedent that **RCV ballots cast for a single choice and no other are considered properly cast.** *See Baber*, 376 F. Supp. 3d at 141 (emphasis added). *See also Dudum*, 640 F.3d at 1110; *Minnesota Voters Alliance*, 766 N.W.2d at 690-91; *McSweeney*, 665 N.E.2d at 14; *Stephenson*, No. 75–10166 AW.

**C. Maine voters used their ranking strategically, truncating ballots in a rational manner.**

Prof. McCarty claims that logically speaking, there is no reason to cast an undervote. Why, he asks, would a voter ever stop at making just two (or three) choices? But in terms of neuroscience

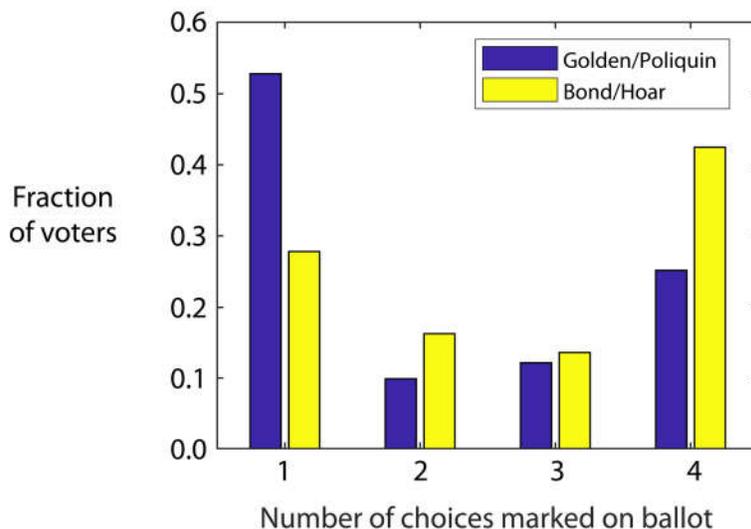
and cognitive science, the reason is plain: once a voter has named one of the two likely finalists, nothing further is gained by naming more choices.

In cognitive neuroscience, it is considered that all mental actions come at some “cost,” i.e. the use of cognitive resources to make a choice or decision. Choices to act are made in light of the possible benefits that may accrue. In a formal theory, it is possible to engage in a cost-benefit computation as the mechanism underlying what choice to make. Once the incremental benefit that comes from making choices goes to zero, further actions are pointless.

To put it another way, voters are not theoretical constructs rooted in political science. Voters have other things to do: go to work, get to daycare before closing time, cook dinner, spend time with friends. (It is an interesting irony that the technical term for ballots deemed insufficiently complete is “exhausted.”) By making just enough choices to make sure his or her vote is counted in the final round, a citizen has expended the right amount of effort—and can get on with other activities. In terms of foraging theory, the citizen has maximized the return on time invested.

Further, a voter may have politically strategic reasons for casting an undervote. Consider, for example, a voter who is a single-issue voter. He or she is presented with six candidates for office, two of whom are acceptable and four who are not. That voter may choose to rank the acceptable candidates as 1 and 2 and leave the rest blank because he or she does not distinguish between them if they do not agree on the voter’s single issue. That is a legitimate way to vote, but according to Professor McCarty, that voter has been denied a voice if one of their two choices was not in the final round. But this is not an accurate statement. Rather, the voter has the right, not the obligation, to rank. The choice to not rank or to partially rank does not mean that the voter was denied a voice. In fact, it is an entirely valid way for the voter to express himself or herself at the ballot box.

The analysis can probe further into whether voters behaved strategically by asking whether supporters of major candidates (Golden and Poliquin) behaved differently from minor candidates (Bond and Hoar). Applying the same rules for tabulating votes as listed by Secretary of State Matt Dunlap yields a list of ranked-choice voter preferences for every ballot cast in the 2018 election at issue in the *Barber* case. PEIL used this list to ask if supporters of major and minor candidates made differential use of the second-choice option, as would be expected for strategic voting behavior. PEIL calculated how often supporters of each candidate listed one choice (i.e. their preferred candidate only), two choices (i.e. one alternative), and so on. The evidence showed that voters whose first choice was Golden or Poliquin would truncate their ballots to a greater extent than voters whose first choice was Bond or Hoar,<sup>2</sup> as evidenced by the following histogram PEIL prepared:



<sup>2</sup> In recent work on RCV, Andrew C. Eggers has analyzed strategic voting in the Maine 2nd Congressional District election of 2018, and finds that 19.2% of Golden voters listed no additional choices, and 32.3% of Poliquin voters listed no additional choices. In sharp contrast, only 2.1% of Bond voters listed no additional choices. This difference exemplifies strategic voting on the part of Bond voters - the very point of RCV legislation. Andrew C. Eggers, *A diagram for analyzing ordinal voting systems*, Soc. Choice & Welfare at 21, 23 tbl. 5, fig. 9 (July 2020), available at <https://link.springer.com/content/pdf/10.1007/s00355-020-01274-y.pdf#page=21>.

This figure shows that 53% of Golden/Poliquin voters marked only a single preference on their ballots, while 28% of Bond/Hoar voters marked a single preference. Conversely, 42% of Bond/Hoar voters ranked all four candidates, while only 25% of Golden/Poliquin voters went to the trouble of doing so. In short, ballot truncation was most common for supporters of major-party candidates, consistent with the idea that voters overall understood how to use RCV strategically.

PEIL's analysis is relevant to Plaintiffs' expert's citation to the work of Kilgour and colleagues, who investigated whether RCV elections may theoretically fail to produce a winner who would prevail in a two-candidate contest against every other candidate (a "Condorcet winner"). That analysis was done using random simulations of elections. However, those random simulations did not take into account the possibility that voters are sufficiently well-informed to truncate their ballots in an intelligent manner. Instead, PEIL's analysis on ballot truncation demonstrates that Maine voters were generally strategic in their use of RCV rankings.

**D. Conclusions regarding populations purportedly confused by RCV rely upon indirect statistical measures that are subject to ambiguous interpretation.**

On the issue of voter confusion, Professor McCarty uses indirect statistical arguments to contend that older and less-educated voters have a greater tendency to cast exhausted ballots. The statistical analysis suffers from several weaknesses.

First, the conclusion is based on what is called "ecological inference." Ecological inference is a well-established method in social sciences. The basic logic is as follows: if an event X happens more often in communities with more of trait Y, then individual people with trait Y must be linked with event X.

Flaws with such inference are enumerated in a foundational reference in this field by Gary King to include: (a) aggregation bias, (b) incorrect distributional assumptions, and (c) spatial dependence. *See* GARY KING, A SOLUTION TO THE ECOLOGICAL INFERENCE PROBLEM, 158-68

(Malcolm Litchfield & Peter Dougherty 1997). Examining Figure 7 of McCarty’s report, Pls.’ Ex. A at 18, it appears that towns with more non-college voters cast a higher fraction of exhausted ballots. But it is not necessarily the non-college voters who are responsible for the trend. It could also be some other variable that correlates with not going to college. In this case, one obvious alternative is apparent by inspecting the Figure: the population of the town. In fact, larger towns demonstrated a lower rate of truncated ballots.

Second, this section makes use of terminology that does not appear to be consistent with the usual standards of statistical practice. According to this section, an increase in older voters “increases” exhausted votes, and a increase in the senior population “leads to” an increase in the number of truncated ballots. Since no causal relationship has been demonstrated, it would be highly speculative to claim such a relationship.

### **III. PLAINTIFFS’ EXPERT’S MISLEADING CONCLUSIONS DO NOT BEAR ON THE CONSTITUTIONAL ISSUES PLAINTIFFS CLAIM.**

Professor McCarty’s report ends with four claims regarding the normative values of ranked choice voting, specifically (i) RCV’s effect on smaller parties, (ii) its effect on turnout and engagement, (iii) its limitation of the spoiler effect, and (iv) its limitation upon non-majority vote winners. It is questionable whether these claims, which concern the benefits of RCV, have any relevance to the question of whether RCV is constitutional. As noted by this Court in *Baber* following the 2018 RCV election: “[T]he freedoms and burdens of self-governance leave normative questions of policy to be worked out in the public square and answered at the ballot box[,] . . . but . . . such criticism [of RCV] falls short of constitutional impropriety.” *Baber*, 376 F. Supp. 3d at 135.

### **CONCLUSION**

The new data provided by Plaintiffs should not convince the Court to resolve this case any differently than it resolved *Baber* in 2018. The controlling legal precedent remains unchanged, and overall, the voting record is clear that RCV has not created the crisis of disenfranchisement that Plaintiffs and their expert claim. Rather, nearly all Mainers' votes were counted in the final round of tabulation in 2018. Accordingly, most voters "fully participated" in Maine's first ranked-choice voting general election. If a voter's ballot became exhausted, their undervote was a strategic choice and likely was counted in the final round anyway. Further, the correlation between towns with less college-educated voters and elderly voters and truncated ballots is likely based on known potential flaws in ecological inference analysis.

In any case, the voters of Maine have voted in favor of using RCV *twice*. And "[i]f the people . . . want to try [a new] system, make the experiment, and have voted to do so, [courts] should be very slow in determining that the act is unconstitutional, until we can put our finger upon the very provisions of the Constitution which prohibit it." *The Legality of Ranked-Choice Voting* at 15; *see supra*, at 5-6. Accordingly, PEIL respectfully requests that the Court give little weight to Plaintiff's expert witnesses testimony and deny Plaintiffs' Motion for a Preliminary Injunction.

Dated at Portland, Maine, this 5<sup>th</sup> day of August, 2020.

Respectfully submitted,

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\*Certification for admission *pro hac vice*  
filed separately

**CERTIFICATE OF SERVICE**

I hereby certify that on August 5, 2020, I electronically filed the foregoing with the Clerk of the Court through the CM/ECF system, causing service to be effected on counsel of record for all parties.

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