

A Case for Ranked Choice Voting
An Examination the Impact on Voters and Candidates

By Eric Spencer

I. Introduction

At a time when Americans need and desire strong leadership and effective representation, most are deeply dissatisfied with their political leaders. Congress' approval rating is under 20 percent¹. President Donald Trump's approval rating is just over 40 percent. Despite this discontent, there is remarkably little turnover. In 2018, 91 percent of members of the House of Representatives were reelected, and over 84 percent of incumbent Senators kept their seats². The 2016 election put forth two of the least popular presidential candidates in modern history, according to public opinion surveys³. Four years later, Trump remains unpopular, and 73 percent of presumptive Biden voters say that the main reason they are supporting him is that they oppose Trump or want to back the Democrats, not because they like Biden⁴.

Clearly Americans have an appetite for change and for new leadership. Incumbents are reelected at such a high rate that voters who do not support their district's or state's partisan majority often feel discouraged and that their vote doesn't really matter. Some feel that the lawmakers responsible for the political agenda do not look like them and are not truly representative of their community. Many voters feel that rather than voting for their favorite candidate who may be unlikely to win, they must strategically vote for the "lesser of two evils" among the frontrunners to avoid electing the one they like least.

The problem of “strategic voting” points to larger issues within our electoral system. Last year's mayoral recall and election in Fall River, Massachusetts is a glaring example. In 2019, Fall River Mayor Jasiel Correia faced a recall election after facing numerous criminal charges for bribery, extortion, conspiracy, and tax fraud⁵. Over 60 percent of voters voted to recall Correia on the first question on the ballot. Voters then selected their next mayor from a field that included Correia and four other candidates. In this election, those voters opposed to Correia split their votes between the other four candidates. This led to Correia winning the election with only 35 percent of the vote—on the same day he had been recalled from office by a majority of voters⁶. Correia won the election despite the fact that the majority of voters (60 percent) clearly opposed him. The vote splitting in Fall River—where an unpopular candidate won with far less than majority support—highlights the problems with our standard single-winner plurality (or first-past-the-post) election system.

Although there is no simple solution to address every problem or dissatisfaction with our democracy, there is one electoral reform that could address many of these issues. This reform is ranked choice voting. On November 3, 2020, Massachusetts residents will vote on ballot Question 2—whether to implement a ranked choice voting (RCV) system for state and federal races beginning in 2022.

II. How Ranked Choice Voting Works

In a ranked choice voting system, voters rank their preferred candidates on the ballot, rather than just selecting their first choice. The first choice selections are counted first. If a candidate receives a majority (over 50 percent of the vote), that candidate wins the election, just

as in our current elections. However, if no candidate receives a majority, the election enters an “instant runoff.” In an instant runoff, the candidate with the least number of votes is eliminated and the voters who picked this candidate as their first choice have their votes redistributed to their second choice candidates. This process continues with candidates being eliminated and votes being redistributed until a candidate reaches the 50 percent threshold. This candidate, having earned a majority of the voters’ support, is declared the winner.

City Council						
Rank up to 6 candidates. Mark no more than 1 oval in each column.	First choice	Second choice	Third choice	Fourth choice	Fifth choice	Sixth choice
	1st	2nd	3rd	4th	5th	6th
Valarie Altman Orange Party	<input type="radio"/>					
George Hovis Yellow Party	<input type="radio"/>					
Althea Sharp Purple Party	<input type="radio"/>					
Mary Tawa Lime Party	<input type="radio"/>					
Joe Li Tan Party	<input type="radio"/>					
Phil Wilkie Independent	<input type="radio"/>					

Here is an example of a ranked choice voting ballot⁷.

Ranked choice voting (RCV) is currently used in states, towns, and municipalities across the country. Maine is the first state to use RCV at the statewide level. They use the system for federal and state-level primary elections, as well as for general elections for Congress. Starting in 2020, the system will be used in Maine for the presidential general election⁸. In eight other states (including Massachusetts), RCV is used for elections in a number of cities and towns, from Minneapolis to Santa Fe⁹. The Bay Area region of California has used RCV in a number of major cities including San Francisco, Oakland, and Berkeley for over a decade. A handful of other cities—including New York City—are planning to implement the system in the next few years. In Massachusetts, Cambridge currently uses RCV and Easthampton and Amherst will start

using the system in 2021¹⁰. Internationally, RCV has been used for decades by voters in Australia, Ireland, New Zealand, and Scotland, as well as by major parties in the United Kingdom⁸.

Although ranked choice voting is most commonly used in the United States for single-winner elections, it can also be used for multi-winner elections under systems of proportional representation. Under proportional representation, candidates and parties gain seats in proportion to the number of votes cast for them. Cambridge, Massachusetts has used this multi-winner form of ranked choice voting since the 1940s. In these cases, a threshold (or quota) is established for a candidate to win. Candidates who reach the threshold are elected, and that candidate's excess votes are counted for the voters' second choice⁷. After the excess votes are counted, the process proceeds in a similar manner as in the single-winner RCV system; the candidates with the fewest first-choice votes are eliminated and those who preferred this candidate have their second choices counted. This process of elimination and redistribution continues until all the seats are filled.

Evidence suggests that ranked choice voting offers four major advantages over our current system. Each serves not only to eliminate many of the flaws of our current plurality election system, but also to make our democracy more inclusive. The RCV system ensures majority support for candidates, minimizes strategic voting, encourages more civil campaigning, and increases candidate diversity in elections. Two concerns that have been raised about RCV are whether the system is too difficult to understand and whether it will decrease voter turnout. Studies show that neither of these concerns has posed problems in practice where RCV has been implemented in the U.S. This paper will explore each of these issues. The first section will focus

on how an RCV system affects voters and voter behavior. The latter portion will examine the effects of RCV on candidates, specifically with a focus on campaign strategy and which types of candidates run for office. Each of these sections will examine how the findings are relevant to the state of Massachusetts amid the Commonwealth's push to adopt ranked choice voting at a statewide level.

III. How Ranked Choice Voting Impacts Voters and Voter Behavior

One of the main advantages of ranked choice voting is that it provides greater choice for voters, ensuring that everyone's voice is heard in the most equitable way possible. The system does this in two key ways. First, RCV ensures that the winning candidate has a majority of support. In the plurality election system, a candidate can win with the most votes, even if he/she has less than 50 percent (the majority) of the electorate's support. As was highlighted earlier, Fall River mayor Jasiel Correia won his seat with only 35 percent of the vote. Earlier in 2020, Jake Auchincloss won the MA-04 Congressional Democratic primary race with 22.4 percent of the vote¹¹. In 2010, Maine Republican Governor Paul LePage won the election with under 40 percent of the vote¹². In 2014, LePage won reelection, again with less than 50 percent of the vote.

One of the primary reasons for these outcomes is vote splitting, in which votes are divided between similar candidates, allowing a different candidate to win with less than a majority. Because of vote splitting, third-party candidates are often labeled as spoilers if they hold similar views as one of the two favorites to win the election. In fact, in the 2014 Maine gubernatorial race, the Republican Governors Association ran advertisements for the third party candidate (Eliot Cutler) hoping that vote splitting between Cutler and the Democrat Mike

Michaud would allow the Republican Paul LePage to win the race¹³. The strategy worked and LePage won. RCV eliminates vote splitting and can ensure majority support. If no candidate gains 50 percent of first-choice votes, second choices are considered and candidates are eliminated until a candidate has a majority of the support of the electorate. Evidence of this was seen in Maine's 2nd District in 2018, where Bruce Poliquin received 46.2 percent of first-choice votes compared to Jared Golden's 45.5 percent¹⁴. However, once the candidates with the least support were eliminated (with about 8 percent of votes), Golden won the election. He had received more second choice votes from those who had voted for an independent and thus had a majority of the support. On the national level, RCV could have potentially mitigated the effects of "spoiler" candidates such as Ralph Nader in 2000 and Ross Perot in 1992¹⁵. In order to sustain a functioning democracy that considers the voices of all voters we must ensure that the winning candidates have the support of a majority of voters.

Second, RCV minimizes the need for strategic voting. All too often, voters feel that they must vote strategically for "the lesser of two evils," rather than their favorite candidate. If their preferred candidate is unlikely to win, they will vote for one of the two front-runners, to try to ensure the other front-runner (who they like the least) does not get elected. RCV eliminates this dilemma by assuring voters that if their first choice does not win, their vote will still be counted for their next choice. They can vote for the candidate they most support and still have their voice heard (in favor of their second choice) even if their preferred candidate loses.

As with any new electoral reform, it is important to consider the potential drawbacks of implementing a new system. One of the concerns about many electoral reforms, including ranked choice voting, is whether the change will depress voter turnout, particularly as turnout in the

United States is already very low. In 2016, just over half of the U.S. voting-age population voted in the presidential election¹⁶. Voter turnout in the United States lags far behind other developed countries and democracies around the world¹⁷. The majority of Americans and many experts view voter turnout as a key indicator of a healthy and well-functioning democracy¹⁸.

Where it has been implemented, ranked choice voting has not been shown to have a strong impact on voter turnout. A 2016 study by David Kimball (University of Missouri-St. Louis) and Joseph Anthony (PhD candidate; University of Missouri-St. Louis) compared voter participation in a “treatment” group of cities that had implemented RCV with participation in a “control” group of demographically similar cities that used the plurality system¹⁹. The researchers controlled for factors including “timing of the election, the number of contests on the ballot, and the level of competition in the mayoral campaign” (Kimball 11)¹⁹. The study found that RCV does not have a strong impact on voter turnout and participation in elections. It may even have an advantage in some circumstances: in plurality cities with a primary election followed by a runoff election, RCV reduces the drop in voter turnout that usually occurs with the runoff election. Therefore, when compared to an election with a primary and a runoff, RCV increased turnout by 10 points. Because it is an instant runoff system, RCV eliminates the need for the separate costly (and often low-turnout) runoff election. Furthermore, in a case study of Minneapolis (a ranked choice voting city), Kimball and Anthony found “similar levels of socioeconomic and racial disparities in voter participation” in plurality and RCV elections¹⁹. Despite being a new system for voters, RCV did not exacerbate the socioeconomic or racial discrepancies in voter participation.

Another concern arising from the implementation of ranked choice voting is the potential that the system could “accentuate racial/ethnic biases in voting” as some may view the system as more complex and difficult to understand than the traditional plurality system²⁰. Some worry that this complexity could reduce turnout for historically disadvantaged communities due to a lack of understanding of the system. In their study examining ballots cast in four elections, Craig Burnett (University of North Carolina, Wilmington) and Vladimir Kogan (The Ohio State University) claim that ranking candidates can be “a cognitively laborious task for voters who often seek to minimize the time and effort needed to make political decisions.”²¹ Burnett and Kogan also documented a trend of “ballot exhaustion” with RCV. They define a ballot as “exhausted” when during the runoff process of RCV, “all of the choices on the voter's ballot have been eliminated,” and therefore the person’s ballot is eliminated and does not affect the final outcome of the election²¹. The authors identify two possible causes for ballot exhaustion in RCV. The first is informational barriers and voters lacking significant information on the candidates. The second is that RCV “reduces the incentives for strategic voting by making it more difficult for voters to determine which candidates are likely to be eliminated in early rounds of vote redistribution.”²¹ The authors assert that lower levels of strategic voting in the system can mean that more voters are likely to “waste their votes” by supporting candidates with low chances of winning (48)²¹.

Studies and polls suggest that voter understanding is not a major problem: voters largely support the RCV system and find it relatively easy to understand. Furthermore, studies found minimal disparities between racial groups in their understanding of and confidence in RCV. Academic research also underscores the importance of voter outreach and education to ensure that the electorate is fully informed about how the process works. These findings highlight the

need for a comprehensive voter education system to maximize voter participation, understanding, and confidence in the RCV system.

Exit polls conducted by researchers and civic organizations offer us some of the clearest insight into voters' understanding and support for RCV. A review of exit polls conducted by groups including North Carolina State University, University of New Mexico, Bangor Daily News, and Colby College provides a number of interesting findings. A San Francisco State University found that 87 percent of San Francisco voters understood the RCV system "well or fairly well."²² Similar studies in Takoma Park, MD; Cary, NC; Portland, OR; Santa Fe, NM; and Maine found that 88 percent, 95 percent, 94 percent, 84 percent, and 78 percent of voters respectively understood RCV "well or fairly well."²³ Across all six surveys, the average number of voters who reported understanding the system "well or fairly well" was over 87 percent²³. These surveys also found an overwhelming majority of voters supported the system and had knowledge of the system prior to voting. Across all these surveys, over 72 percent of voters "prefer RCV to the old system" and over 74 percent of voters "knew how to rank candidates before coming to vote."²³

Regarding racial disparities in understanding the system, a survey of over 2,000 voters in RCV and non-RCV cities found "no differences in RCV cities in how whites, African Americans, and Latinx respondents reported understanding RCV."²⁰ Older voters were those most likely to report understanding of the RCV system. The study by Donovan, Tolbert, and Gracey also found that understanding of RCV (and other election systems) is strongly associated with formal education levels.

Burnett and Kogan's findings about informational barriers are important to consider. However, exit polls surveying actual voters (rather than just ballots) have overwhelmingly shown that voters understand the RCV system well. The results of these exit polls in RCV cities are presented above. Furthermore, although the authors make a valid point about the potential for exhausted ballots and wasted votes, this problem also exists in our current plurality election system where a vote for a losing candidate can be considered equivalent to an exhausted ballot.

This research points to a number of important conclusions. Although exit polls show that the majority of voters understand the RCV system and many prefer the system, these studies highlight the importance of a comprehensive public education program for any state or municipality preparing to implement RCV. Primarily, a strong voter outreach and education program would help address many of the concerns that RCV is too complicated for voters—including underrepresented and minority voters—to understand. This voter education and outreach must inform voters about how to rank their candidates, as well as explain how the ballots are counted. Effective outreach could not only help voters understand the system and how to vote, but also increase voter confidence and support for RCV and the electoral system as a whole. The Donovan, Tolbert, and Gracey study found that there is a strong association between formal education and voter understanding of the system.

In Massachusetts, the key takeaway from the Kimball and Anthony study is that RCV would likely have a limited effect on voter turnout in the state. The Bay State does not use runoff elections, thus the increases in turnout associated with RCV would not be applicable in Massachusetts. Currently, 10 states use runoff elections if a candidate does not win a majority in

the primary²⁴. Most of these states are in the South. Coupling the RCV system with other electoral reforms—including same-day and election day voter registration, expanded early voting, and no-excuse absentee voting—could potentially lead to an increase in voter turnout in Massachusetts²⁵. Despite the fact that RCV has not been shown to lead to significant changes in voter participation, it provides a number of clear advantages over our current system that would make our elections more inclusive and equitable.

III. How Ranked Choice Voting Affects Candidates

In addition to providing increased choices for voters, ensuring majority support, and eliminating the need for strategic voting, ranked choice voting can lead to positive changes in candidate behavior and strategies. Evidence indicates that the ranked choice voting system promotes more civil campaigning and increases the diversity of candidates that run for, and win, office.

Particularly in the current polarized political climate in the United States, ranked choice voting can promote civil dialogue and reduce negative campaigning. With candidates not only vying for voters' first-choice votes but also second and third choices, the campaign focus can shift toward appealing to a broader range of potential supporters and using more inclusive discourse, as candidates would not want to alienate the supporters of another candidate. A study comparing campaign civility in the two systems (plurality and RCV) by Todd Donovan (Western Washington University), Caroline Tolbert (University of Iowa), and Kellen Gracey (University of Iowa) found that the plurality system offers candidates “weak incentives to make positive appeals to voters who are probable supporters” of the opposing candidate²⁶. Given the fact that voters can only cast one non-transferable vote, candidates often turn toward negative

campaigning against the opposing candidate. The authors reference previous studies to explain the potential downsides of negative campaigning, including the fact that voters may be “less satisfied with the candidates who competed for their support” and that “negative campaigns were associated with lower feelings of political efficacy, [and] less trust in government” (158)²⁶.

To study the differences in candidate civility, the authors conducted a survey of thousands of voters in multiple plurality cities and similarly matched RCV cities to gauge public perceptions. The survey also interviewed some of the candidates in each race. Among the candidates surveyed, the survey found that in the plurality system, 40 percent of candidates “reported their rival described them in negative terms.” This number decreased to 28 percent in the RCV cities (159)²⁶. Additionally, 36 percent of candidates in the RCV election “reported that their own campaign described a rival positively” while only 20 percent of candidates in plurality elections said they described their rival positively. Among the survey of voters in the plurality cities, 59.98 percent of voters reported candidates criticizing each other “a great deal of the time” or “some of the time,” while this number was only 28.98 in the RCV cities²⁶. Similarly, 10.02 percent of voters in the plurality election said they saw “a lot more” negative campaigning than the previous election, while only 1.84 percent of voters in the ranked choice election saw this. Voters also reported being more satisfied with the “Conduct of Candidate Campaigns” in the RCV elections than the plurality elections²⁶. The results of this study—showing that ranked choice voting “corresponded with voters perceiving campaigns as being less negative, with voters saying that candidates criticized each other less, and with voters having greater satisfaction with the conduct of campaigns”—are striking, given that previous electoral reforms “have minimal, if any, effects on how people view politics” (162)²⁶.

A similar survey design was carried out by the Rutgers-Eagleton Institute of Politics, examining 11 California cities (four ranked choice voting and seven plurality/control cities). The study found similar trends. In the plurality cities, 65 percent of respondents reported candidates criticizing one another, compared with 53 percent in ranked choice voting cities (11)²⁷. Furthermore, “all socioeconomic and demographic groups in RCV cities—with the sole exception of those who had attended some college (but not completed their degree)—reported lower perceptions of candidate criticism than did the same demographic groups in plurality cities,” and in the RCV cities, “a higher proportion of respondents in most socioeconomic and demographic groups—including African Americans, Latinos and Asian Americans—reported noticing lower levels of negativity in 2014 compared to prior local contests” (7)²⁷. The same trends continued despite partisan divides, with all “partisan groups—Democrats, Independents and Republicans” reporting less criticism of candidates in the RCV system²⁷.

The results from these two studies indicate that that in the eyes of candidates and voters from a diverse range of socioeconomic, racial, and political backgrounds, ranked choice voting leads to more civil campaigns and a reduction in negative campaigning when compared to elections in the traditional plurality system. Media and social media are also often more positive. A study by Martha Kropf (University of North Carolina at Charlotte) analyzing three RCV cities and seven plurality cities found that newspaper coverage of local elections in RCV cities contained far more positive language than negative language when compared with the plurality cities²⁸. Kropf’s study found similar trends with Twitter. In the RCV cities, candidates referenced each other on Twitter more often and usually in positive terms, compared to plurality cities, in

which there were fewer Twitter mentions, and references to other candidates were “usually to attack or discredit” the opposing candidate²⁸.

Ranked choice voting also increases candidate diversity among those running for, and winning, elected office. A study examining RCV cities and plurality cities before and after RCV was introduced found that over 34 percent of candidates in RCV elections were women, while in the plurality elections this number was 30.2 percent²⁹. In the cities that implemented RCV, the percentage of candidates of color running for office increased five percentage points, while there was only a 0.3 increase in the plurality cities in the time period examined²⁹. The percentage of female candidates of color also rose at a far greater rate in the RCV cities than in the cities that used the plurality system.

In terms of winning elections, the number of offices won by women in the cities that implemented ranked choice voting increased during this time, while this number decreased in the plurality cities. The percentage of people of color winning office increased by 18 points in the ranked choice cities, compared with a three point increase in the non-RCV cities during the time studied²⁹. The trends were similar for women of color, with a nearly nine point increase in RCV cities and a nearly six point decrease in the plurality cities²⁹. Even after accounting for possible differences and other factors, “we see that the use of RCV was associated with a 20-point improvement in the probability of a female candidate winning compared to not using RCV” (23)²⁹. RCV also led to a 13 point increase in women of color winning office during the time period studied²⁹.

These studies on candidate behavior suggest that RCV not only gives voters more choices but also increases candidate civility and the diversity of candidates running for office. In Massachusetts—a state with one of the least diverse legislatures in the country—this may be especially important³⁰. In 2018, only 9 percent of seats were filled with members of color, despite the fact that the state population is 28 percent minority³⁰. RCV would likely bring more diversity and more representation to Massachusetts. In Cambridge, Massachusetts, a city with RCV, African-Americans “have formed a cohesive voting block” and are well-represented in Cambridge civic and political life³¹. The voting system in Cambridge has lowered the barriers to participation and also led to solid representation for women and members of the LGBTQ+ community³².

Although it is not a perfect system, the evidence suggests that ranked choice voting offers a number of clear advantages over the current plurality system in Massachusetts. For voters, RCV minimizes the need for strategic voting and ensures that the candidates elected have the support of the majority. Public polling has consistently shown that voters understand RCV and the system is popular. It provides voters with more choice. For candidates, ranked choice voting can encourage more civil campaigning and increase the diversity among candidates running for (and winning) office. Additionally, the evidence emphasizes the importance of voter education with the RCV system. Local leaders must implement a comprehensive voter education and messaging system for RCV to be effective, especially at the statewide level. Given the evidence presented in this paper, a shift to a RCV system with a strong voter education and messaging

campaign would be a major step toward making our democracy more inclusive for both voters and candidates in the Commonwealth of Massachusetts.

Endnotes

¹Brenan, Megan. “Congress' Approval Drops to 18%, Trump's Steady at 41%.” Gallup.com.

Gallup, July 30, 2020.

<https://news.gallup.com/poll/316448/congress-approval-drops-trump-steady.aspx>.

²“Reelection Rates Over the Years.” OpenSecrets. The Center for Responsive Politics. Accessed

October 30, 2020. <https://www.opensecrets.org/elections-overview/reelection-rates>.

³Saad, Lydia. “Trump and Clinton Finish With Historically Poor Images.” Gallup.com. Gallup,

November 8, 2016.

<https://news.gallup.com/poll/197231/trump-clinton-finish-historically-poor-images.aspx>.

⁴Pindell, James. “The Numbers Show It: Joe Biden Is Winning the Presidential Race by Not

Really Running.” BostonGlobe.com. The Boston Globe, July 31, 2020.

<https://www.bostonglobe.com/2020/07/31/metro/numbers-show-it-biden-is-winning-presidential-race-by-not-really-running/>.

⁵Buell, Spencer. “Fall River Mayor Jasiel Correia Has Been Arrested... Again.” Boston

Magazine. Boston Magazine, September 6, 2019.

<https://www.bostonmagazine.com/news/2019/09/06/fall-river-mayor-jasiel-correia-arrested-marijuana/>.

⁶Crimaldi, Laura. "Correia Remains Fall River Mayor in Election Stunner." BostonGlobe.com.

The Boston Globe, March 12, 2019.

<https://www.bostonglobe.com/metro/2019/03/12/correia-remains-fall-river-mayor-election-stunner/0YA2M7nQxNNJNIMxc9nu3K/story.html>.

⁷"How RCV Works." Ranked Choice Voting 101. FairVote. Accessed October 31, 2020.

<https://www.fairvote.org/rcv>.

⁸"Ranked Choice Voting 101." Where is Ranked Choice Voting Used? FairVote. Accessed

October 31, 2020. <https://www.fairvote.org/rcv>.

⁹"Ranked-Choice Voting (RCV)." Ballotpedia. Accessed October 31, 2020.

[https://ballotpedia.org/Ranked-choice_voting_\(RCV\)](https://ballotpedia.org/Ranked-choice_voting_(RCV)).

¹⁰"Where It's Used." Ranked Choice Voting Resource Center. Ranked Choice Voting Resource

Center. Accessed October 31, 2020. https://www.rankedchoicevoting.org/where_used.

¹¹Ackley, Kate. "Auchincloss Wins Primary in Massachusetts' 4th District." Roll Call. Roll Call, September 4, 2020.

<https://www.rollcall.com/2020/09/04/massachusetts-primary-results-jake-auchincloss-4th-district/>.

¹²Walcott, Eric. "Plurality Voting Isn't the Only Option for Elections." MSU Extension.

Michigan State University, February 2, 2017.

https://www.canr.msu.edu/news/plurality_voting_isnt_the_only_option_for_elections.

¹³Higgins, A.J. "Republican Gov's Association Touts Cutler in New Ad for LePage." Maine

Public, October 28, 2014.

<https://www.mainepublic.org/post/republican-govs-association-touts-cutler-new-ad-lepage>
e.

¹⁴Pathé, Simone. “Poliquin Sues to Stop Maine's Ranked Choice Voting.” Roll Call, November 13, 2018.

<https://www.rollcall.com/2018/11/13/poliquin-sues-to-stop-maines-ranked-choice-voting/>

¹⁵Hill, Steven, and Robert Richie. “Success for Instant Runoff Voting in San Francisco.”

National Civic Review 94 (2005): 65–68. <https://doi.org/10.1002/ncr.85>.

¹⁶Wallace, Gregory. “Voter Turnout at 20-Year Low in 2016.” CNN. Cable News Network, November 30, 2016.

<https://www.cnn.com/2016/11/11/politics/popular-vote-turnout-2016/index.html>.

¹⁷DeSilver, Drew. “U.S. Voter Turnout Trails Most Developed Countries.” Pew Research Center. Pew Research Center, May 21, 2018.

<https://www.pewresearch.org/fact-tank/2018/05/21/u-s-voter-turnout-trails-most-developed-countries/>.

¹⁸“3. Elections in the U.S.: Priorities and Performance.” Pew Research Center - U.S. Politics & Policy. Pew Research Center, April 26, 2018.

<https://www.pewresearch.org/politics/2018/04/26/3-elections-in-the-u-s-priorities-and-performance/>.

¹⁹Kimball, David C, and Joseph Anthony. “Voter Participation with Ranked Choice Voting in the United States.” umsl.edu. Department of Political Science University of Missouri-St. Louis, October 2016. <https://www.umsl.edu/~kimballd/KimballRCV.pdf>.

- ²⁰Donovan, Todd, Caroline Tolbert, and Kellen Gracey. “Self-Reported Understanding of Ranked-Choice Voting.” *Social Science Quarterly* 100, no. 5 (2019): 1768–76.
<https://doi.org/10.1111/ssqu.12651>.
- ²¹Burnett, Craig M., and Vladimir Kogan. “Ballot (and Voter) ‘Exhaustion’ under Instant Runoff Voting: An Examination of Four Ranked-Choice Elections.” *Electoral Studies* 37 (2015): 41–49. <https://doi.org/10.1016/j.electstud.2014.11.006>.
- ²²Neely, Francis, Lisel Blash, and Corey Cook. Rep. *An Assessment of Ranked-Choice Voting in the San Francisco 2004 Election*, 2005.
- ²³“Exit Surveys: Voters Evaluate Ranked Choice Voting.” Fairvote.org. FairVote. Accessed October 31, 2020. <https://fairvote.app.box.com/v/ExitPollsSummary>.
- ²⁴Primary Runoffs. National Conference of State Legislatures, May 8, 2017.
<https://www.ncsl.org/research/elections-and-campaigns/primary-runoffs.aspx>.
- ²⁵Root, Danielle, and Liz Kennedy. “Increasing Voter Participation in America.” Democracy and Government. Center for American Progress, July 11, 2018.
<https://www.americanprogress.org/issues/democracy/reports/2018/07/11/453319/increasing-voter-participation-america/>.
- ²⁶Donovan, Todd, Caroline Tolbert, and Kellen Gracey. “Campaign Civility under Preferential and Plurality Voting.” *Electoral Studies* 42 (2016): 157–63.
<https://doi.org/10.1016/j.electstud.2016.02.009>.
- ²⁷John, Sarah, and Caroline Tolbert. “Socioeconomic and Demographic Perspectives on Ranked Choice Voting in the Bay Area.” FairVote: The Center for Voting and Democracy. FairVote, April 2015. <https://fairvote.app.box.com/v/perspectives-on-rcv-bay-area>.

²⁸John, Sarah. Rep. *Ranked Choice Voting in Practice: Content Analysis of Campaign Tone in Newspapers and Twitter Feeds in 2013 RCV Elections*. Ranked Choice Voting Civility Project–FairVote, February 2015.

<https://fairvote.app.box.com/v/rcv-kropf-content-analysis>.

²⁹John, Sarah, Haley Smith, Elizabeth Zack, Cynthia Terrell, Michelle Whittaker, Jennifer Pae, and Rob Richie. Rep. *The Impact of Ranked Choice Voting: How Ranked Choice Voting Affects Woman and People of Color Candidates in California*. Representation2020, August 2016.

<https://voterchoice.org/wp-content/uploads/2020/01/RCV-Representation-BayArea.pdf>.

³⁰Halper, Jamie. “The Mass. Legislature Is Not Diverse, and That's Probably Not Changing next Year.” BostonGlobe.com. The Boston Globe, August 7, 2018.

<https://www.bostonglobe.com/metro/2018/08/07/the-mass-legislature-not-diverse-and-tha-t-probably-not-going-change-next-year/zQERUxRQ0A8Z4VLYI1pjAM/story.html>.

³¹“History of Minority Representation in Cambridge.” FairVote, December 9, 2008.

https://www.fairvote.org/history_of_minority_representation_in_cambridge.

³²Douglas, Andrew. “Cambridge, Massachusetts Elections a Model for America.” FairVote, November 1, 2013.

<https://www.fairvote.org/cambridge-massachusetts-elections-a-model-for-america>.