Limited Ballot Participation After a Top-Two Primary[†]

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Abstract

A top-two primary can leave a major party out of the general election for a race—a lockout. Earlier studies show that lockouts raise the share of voters who skip the race while turnout is unchanged. I add three findings. First, precinct returns show that about a third of the excluded party's voters skip the race while the advancing party's voters do not. Second, neither California's nor Washington's adoption of the top-two measurably raised the share of voters who skipped legislative races, because lockouts were a minority of contests. Third, close races for second place show that a lockout raises the share of voters who skip the race by 10.2 percentage points in California from 2012 to 2024 and 6.8 in Washington from 2008 to 2024. Holding primary results fixed, a top-four primary would have avoided more than half of California's lockouts. The cost falls on minority partisans in one-party districts, and averages over the reform hide it. This paper will be of interest to scholars concerned about how electoral rules condition participation along partisan lines.

Key words: Top-two primary; Electoral rules; Partisanship; Abstention; Roll-off; State legislative elections; Regression discontinuity.

1. INTRODUCTION

Political science has long shown that party systems reflect both the social divisions in an electorate (Lipset and Rokkan, 1967) and the rules that count its votes (Duverger, 1954; Cox,

[†]Claude (Anthropic, Opus 5.5, used through claude.ai and Claude Code) was used in 2026 to revise and proofread the text, prepare tables and figures, and compile the replication archive. Its uses for data collection and analysis are described in Section 3. The author reviewed all of its output and is responsible for the content.

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1997). The two also interact (Amorim Neto and Cox, 1997). These are also simultaneously affected by political institutions. A counting rule from a primary decides which choices different groups of voters find on the ballot, and in this case, the groups are determined by partisanship. I ask how partisans react, in their participation on the whole ballot, when one of the races excludes their party.

The top-two primary has been used in Washington since 2008 and in California since 2012. Candidates still run under party labels, and voters still identify with parties. However, all candidates share one primary ballot, so all voters face the same choices. The two with the most votes advance to November whatever their party. When both belong to the same party, the other party's voters face a general election without a candidate of their own. This is called a lockout. Other states are weighing the same kind of rule. Alaska adopted a top-four primary in 2020 and kept it by fewer than 800 votes in 2024. In the same year, voters in Colorado, Idaho, Montana, Nevada and South Dakota rejected measures for top-two, top-four or top-five primaries.

In California, 171 of the 1,069 regular congressional and state legislative general elections from 2012 to 2024 were lockouts. Same-party generals arise mostly in districts where one party is dominant (Crosson, 2021). Critics say lockouts disenfranchise the excluded party's voters, and supporters say they bring every voter into the race that decides the seat (see Alvarez and Sinclair, 2015). The excluded voters can exit the race or stay and choose between two candidates of the other party. This paper is concerned with when voters abstain from their locked-out race while still participating on the rest of the ballot.

Precinct returns show which voters skip a locked-out race. In a lockout, the share of voters who vote for president or governor while skipping the locked-out race[1] is highest in the precincts where the excluded party is strongest. Read as ecological regressions, the returns say that about a third of the excluded party's voters skip the race, and the advancing party's voters do not.

[1]This is referred to elsewhere in the paper as "roll-off."

Close races for second place show that the lockout causes this. A lockout raises roll-off by 10.2 percentage points in California—increasing from about 5 to about 15 percent—and by 6.8 points in Washington. Turnout in federal and state executive races shows no detectable change, and the increase grows with the size of the excluded party's electorate. However, county returns show no measurable rise in legislative roll-off statewide. Lockouts were a minority of contests, and in Washington most of the lockouts replaced races that would have had no contest in the general election before the top-two primary reform.

This paper builds on two earlier findings. Using the same regression discontinuity in both states through 2018, Patterson (2020) found that a lockout raises roll-off by about 7 percentage points and leaves turnout unchanged. In survey data, Fisk (2020) found that voters without a candidate of their own party skip their congressional race far more often than other voters. The increase reported here confirms Patterson's with three more election cycles and a data-driven bandwidth, and it is larger in California (10.2 against 7.2 points).

The paper adds three results that previous studies did not test. First, it shows from election returns rather than surveys who leaves. The increase in roll-off grows with the size of the excluded party's electorate, and precinct returns show that the excluded party's voters skip the race while the advancing party's voters do not. Second, it tests the reform as a whole. Patterson concludes that the top-two is likely to depress participation, but neither state's adoption measurably raised legislative roll-off. Third, it answers the argument that the top-two carries little participatory cost because a general election draws far more voters than the primary it replaces (Sinclair, O'Grady, Miller, and Murphy, 2026). That is true of the size of the electorate, and Section 5 confirms it. The cost is in the electorate's composition: the voters who leave are the ones whose party the count removed from the ballot. Finally, for states weighing such reforms, Section 6 counts how many lockouts a top-four or top-five primary would have avoided. Together, these results show why evaluations of a reform as a whole can miss a cost that falls on minority partisans in one-party districts while the average barely moves.

2. DIVIDING AND COUNTING

Under partisan primaries, voters are divided by party before their votes are counted towards candidates. Each party's voters choose a nominee, and the general election offers one candidate from each party that fielded one. Under the top-two primary, votes are counted towards candidates before any partisan division. Either rule can leave a party's voters without a candidate in November. Under partisan primaries, this happens when a party fields no nominee, which produces an uncontested race. The top-two adds a second route, where two candidates of one party finish first and second.

Partisanship is a durable social identity (Green, Palmquist, and Schickler, 2002). A count that ignores party labels will not change how voters identify with parties. Voters whose party is absent can choose between two candidates of the other party or skip the race.

Survey evidence also shows that voters without a candidate of their own party skip their congressional race at rates about 20 points higher than other voters (Fisk, 2020). In same-party races, where the party label no longer separates the candidates, voters fall back on other cues, such as the candidates' gender (Stauffer and Fisk, 2022).

Three literatures are relevant to this study. The first literature is on roll-off. It finds that voters skip races low on the ballot as well as races about which they know little (Bullock and Dunn, 1996; Wattenberg, McAllister, and Salvanto, 2000). We also know that a race's position on a long ballot alone raises abstention (Augenblick and Nicholson, 2016). These explanations predict roll-off common to all voters in a race.

The second literature is on runoffs, which offer the closest parallel to a lockout. In French elections, a third candidate who qualifies for the runoff raises turnout and reduces blank and null ballots (Pons and Tricaud, 2018). A lockout is the reverse case, in which a party's candidate is removed from the final round.

The third literature is on close-election regression discontinuities. These designs have been questioned because the winners of close U.S. House races differ from the losers in ways

that predate the election (Caughey and Sekhon, 2011), an imbalance not found in most other close elections (Eggers, Fowler, Hainmueller, Hall, and Snyder, 2015). The threshold here is a race for second place in a primary, and Section 4 and the supplementary material report its balance and density tests.

If partisans exit when their party is absent, a lockout should raise roll-off in the race and leave turnout in the executive race at the top of the ballot unchanged. The added roll-off should also grow with the size of the excluded party's electorate. A rise that did not grow with the size of the excluded electorate would point instead to a general loss of interest in a less competitive race. For the reform, the effect on average roll-off depends on what lockouts replace. A lockout that replaces a two-party race should raise roll-off, and one that replaces an uncontested race should lower it.

3. DESIGN AND DATA

For each contest, let L be the primary leader, A the best-placed candidate of L's party other than L, and B the best-placed candidate of any other party. L always advances, and A advances when A finishes ahead of B. The general election is therefore same-party exactly when the margin

$$r = 100 \times \frac{\text{votes for } A - \text{votes for } B}{\text{all primary votes}} \tag{1}$$

is positive, as it is in all 413 California contests from 2012 to 2024 in which both A and B exist. Near $r = 0$, which of the two candidates advances is as good as random (Lee, 2008).

I estimate local-linear regressions on each side of the threshold with a triangular kernel and the bandwidth of Imbens and Kalyanaraman (2012). Standard errors are clustered by seat.[2] Section 4 reports the tests of the design.

[2]The supplementary material reports every specification, the robust bias-corrected intervals of Calonico, Cattaneo, and Titiunik (2014), and the balance and density tests for both states.

Roll-off in a contest is

$$100 \times \left(1 - \frac{\text{votes cast in the contest}}{\text{votes cast in the top-of-ticket race in the same district}}\right), \tag{2}$$

where the top of the ticket is the presidential race or, in midterms, the governor's race. The California data cover the 1,069 regular congressional and state legislative contests from 2012 to 2024, from the Secretary of State's Statements of Vote.[3]

To study contests away from the threshold and the adoption of the top-two, I add county returns from 2002 to 2024 for every U.S. House and lower-chamber race in Washington and California. County boundaries do not change, and county roll-off is therefore exact.

Each of the two states serves as the other's comparison: California for Washington's switch over 2004–2010, and Washington for California's switch over 2008–2018, before California began mailing a ballot to every voter in 2020. Washington's 1,199 regular legislative and congressional contests from 2008 to 2024 come from the Secretary of State's statewide files, with the same definitions. The top-of-ticket votes for these Washington contests come from precinct returns (OpenElections for 2010–2020, the MIT Election Data and Science Lab for 2022 and 2024, and King County Elections for King County in 2024) and, for 2008, from the Secretary of State's breakdown of the presidential vote by legislative and congressional district. Washington elects its governor in presidential years, so in midterms the top of the ticket is the U.S. Senate race or, in 2014, when no statewide partisan office was on the ballot, Initiative 594, which led it. Precinct returns for California's 2016 and 2020 general elections (OpenElections) give the presidential vote by precinct for the analysis of which voters leave the race.

Table 1 describes the contests. In both states a general election between a Democrat and

[3]The California contest results were transcribed from the Statements of Vote with Claude Opus (Anthropic), a generative AI model, in 2026, with Wikipedia and Ballotpedia result tables as a second source where available. Every race was checked: primary shares sum to 100, candidate votes add to the printed totals, the general-election finalists are the primary's top two, and every disagreement between sources was resolved in favor of the Statement of Vote. The same tool was used to write the data-processing code. The replication archive documents the checks race by race.

Table 1: Roll-off by type of general election

	California, 2012–2024			Washington, 2008–2024		
General election	Contests	Mean	SD	Contests	Mean	SD
Democrat vs Republican	829	3.9	2.6	789	4.1	2.6
Democrat vs Democrat	138	12.4	3.8	54	14.6	4.1
Republican vs Republican	33	14.7	4.0	44	12.7	4.7
With a minor-party or independent finalist	49	7.7	3.1	117	7.8	3.7
One candidate	20	23.4	5.4	195	26.6	4.1
All	1,069	5.9	5.1	1,199	8.9	8.8

Note: Roll-off in percent. Regular U.S. House and state legislative general elections. Means and standard deviations (SD) are over contests with top-of-ticket votes, 995 of 1,069 in California and all 1,199 in Washington.

a Republican has roll-off of about 4 percent. Same-party generals have roll-off of 12 to 15 percent, three to four times as high, and races with a single candidate have roll-off of 23 to 27 percent. California has more same-party generals (171 against 98), and Washington far more uncontested races (195 against 20). These differences mix the effect of a lockout with the kinds of districts in which lockouts occur, which is why the analysis turns to close races for second place.

4. EXIT AT THE THRESHOLD

Figure 1 shows the main result. Just below the threshold, where B advances and the general is cross-party, about 4.8 percent of the voters at the top of the ticket (federal and state executive races) skip the cross-party race. Just above it, where A advances, about 15.0 percent skip making a choice. Roll-off is 10.2 percentage points higher just above the threshold than just below it (seat-clustered SE 1.2, 95 percent interval 7.9 to 12.5), estimated from 132 contests within 7.2 points of the threshold. Roll-off triples, and the estimate is stable across bandwidths and specifications (9.4 to 12.3 percentage points).

The estimate does not depend on how the threshold is approached. Halving the bandwidth gives 11.7 (SE 1.3), and doubling it gives 9.9 (SE 0.9). A local quadratic gives 11.6 (SE 1.4), as does the robust bias-corrected estimator of Calonico, Cattaneo, and Titiunik (2014). Dropping contests within a quarter point of the threshold gives 10.4 (SE 1.3), and adding

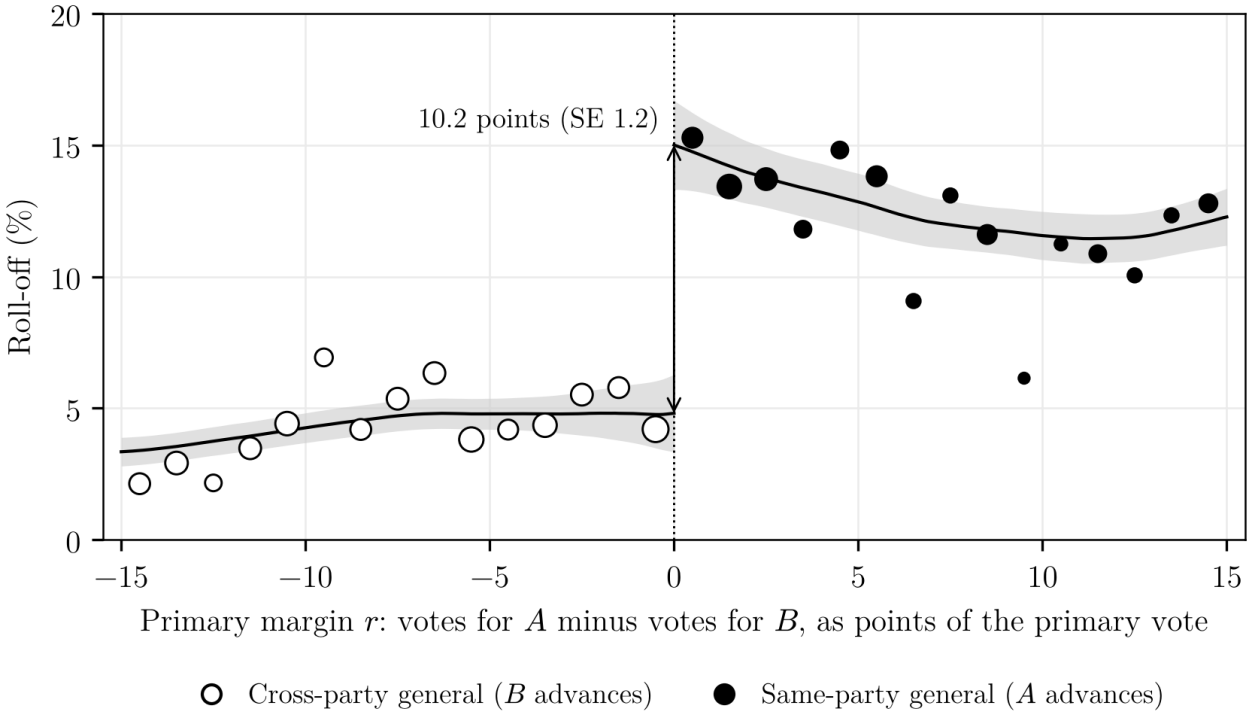


Figure 1: Roll-off at the threshold in California, 2012–2024. Means in 1-point bins of the primary margin, sized by the number of contests, with local-linear fits and 95 percent intervals (bandwidth 7.2) on each side of the threshold. The 369 design contests with top-of-ticket data, of which 230 lie within 15 points of the threshold. Circle sizes use the same scale as in Figure 2.

office and year fixed effects gives 9.4 (SE 0.8). At placebo thresholds where the rule changes nothing, at margins of −5, −2.5, 2.5 and 5 points, the estimates are −0.4, 2.0, −0.1 and 0.9, none distinguishable from zero.

The design also requires that contests just above and just below the threshold are alike in everything fixed before the general election. Thirteen such characteristics are tested, including the leader's party and primary share, incumbency, the number of primary candidates, each party's share of the primary vote, the office and the year. None differs significantly at the threshold, and jointly they are balanced ($\chi^2_{13} = 14.3$, $p = 0.35$). Roll-off in the same seat at the previous election, which the lockout cannot affect, does not differ either (−0.9, SE 2.8). Nor is there a sign that candidates sorted across the threshold. The density of r shows no break (McCrary, 2008, log difference −0.22, SE 0.24), and 44 percent of the contests within 2 points of the threshold lie above it.

Voters leave the race and participate in the remainder of the ballot. Top-of-ticket votes relative to primary votes show no detectable change at the threshold (−0.10 log points, SE 0.09). The lockout changes what voters do with their ballot in the one race that the count changed.

Supposing the added roll-off comes from the excluded party's voters, it should grow with their number, which the analysis shows. In the same 132 contests, the increase in roll-off at the threshold grows by 2.1 percentage points (SE 0.7) for every 10 percentage points of the excluded party's share of the two-party vote at the top of the ticket. It grows by 2.2 percentage points (SE 0.6) per 10 points of the excluded party's share of the primary vote, which is fixed before the matchup is known.

Precinct returns show which voters leave. For every precinct in a same-party general election, I regress roll-off on the excluded party's share of the two-party vote for president or senator in that precinct with contest fixed effects and weights by top-of-ticket votes. In the 50 California lockouts of 2016 and 2020 (16,016 precincts), roll-off rises by 0.28 percentage points (SE 0.03) for every point of the excluded party's share. In the 89 Washington lockouts of 2010–2024 (18,064 precincts), it rises by 0.31 (SE 0.03).[4] In Democrat-versus-Republican contests on the same ballots, the slope is −0.00 (SE 0.01) in California and 0.01 (SE 0.00) in Washington.

Read as ecological regressions (Goodman, 1953), the slopes say that roll-off among the excluded party's voters exceeds roll-off among the advancing party's voters by about 30 points. If the advancing party's voters skip the race at the 4 to 7 percent usual in a two-party race, about a third of the excluded party's voters skip it. This estimate rests on an assumption. A precinct's returns give only its total roll-off, not how much of it came from each party's voters. With no assumption about how each party's voters behave within a precinct, the returns limit the excluded party's abstention only to between 0 and 55 percent in California

[4]In 2014, when Washington's top of the ticket was an initiative, a precinct's party split comes from its U.S. House vote, which leaves out the one 2014 lockout for the House itself. Washington has 90 lockouts with precinct data, 49 Democratic and 41 Republican.

and between 0 and 45 percent in Washington (the method of bounds of Duncan and Davis, 1953). The regressions narrow this range by assuming that each party's abstention rate does not vary with the precinct's partisan mix within a contest.

A second test does not need that assumption. It compares precinct slopes on the two sides of the threshold. Within the bandwidth, I take the contests whose runner-up belonged to the other major party (44 in California and 43 in Washington). Where that party's candidate advanced and the general was cross-party, precinct roll-off barely varies with that party's share: the slope is −0.05 (SE 0.01) in California and 0.01 (SE 0.01) in Washington. Where that party was locked out, the slope is higher by 0.34 (SE 0.03) in California and by 0.34 (SE 0.05) in Washington. The added roll-off at the threshold therefore comes from the excluded party's voters, about a third of whom skip the race.

These patterns also rule out a simpler explanation, that voters know or care less about a same-party race. A general loss of information or interest would raise roll-off equally among all voters in a lockout. Instead, the increase in roll-off grows with the excluded party's share, and the same precinct slope is about zero in Democrat-versus-Republican contests on the same ballots.

Washington replicates the design from California. In its 198 design contests of 2008–2024, roll-off rises by 6.8 percentage points at the threshold (seat-clustered SE 2.2, 95 percent interval 2.4 to 11.2), from 3.9 to 10.7 percent, estimated from 49 contests within 6.1 points (Figure 2). Only 14 of the 49 lie above the threshold. In Washington a same-party general usually arises because the other party fields no one, which puts the contest outside the design, so close races for second place that end in a lockout are rare, and the density of r is thinner above the threshold than below (log difference −1.1, SE 0.5). The thinner density does not indicate manipulation, because no candidate can control a primary's vote count closely enough to land on a chosen side of the threshold. With few treated contests the clustered standard error is optimistic, so I add a wild bootstrap that imposes no change at the threshold (Cameron, Gelbach, and Miller, 2008), which gives $p = 0.039$. Estimates across bandwidths

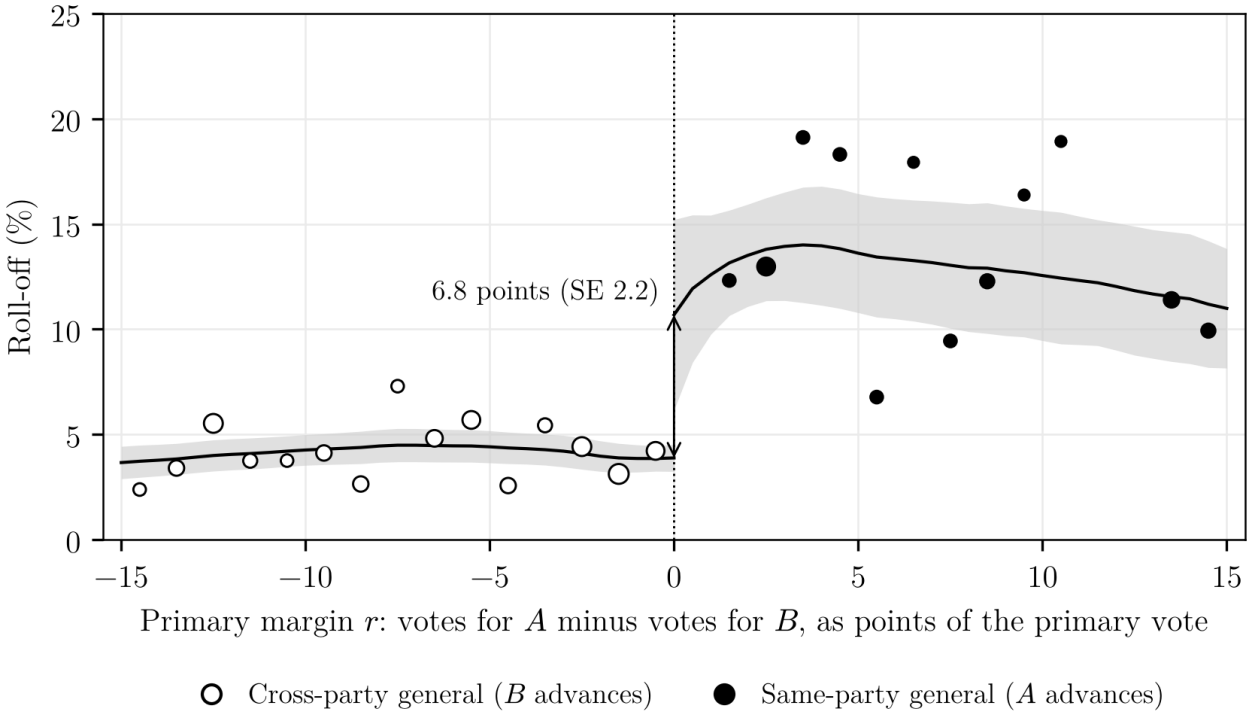


Figure 2: Roll-off at the threshold in Washington, 2008–2024. Means in 1-point bins of the primary margin, sized by the number of contests, with local-linear fits and 95 percent intervals (bandwidth 6.1) on each side of the threshold. The 198 design contests, of which 96 lie within 15 points of the threshold.

and specifications run from 5.2 to 9.8 points. Midterm contests are overrepresented just above the threshold, and controlling for them gives 9.3 (SE 2.3). Top-of-ticket votes relative to primary votes show no significant change at the threshold, and the sample is too small to measure the interaction with the excluded party's share.

5. ADDING UP THE COST OF LOCKOUTS

Table 2 follows the cost of a lockout from close contests to the reform. Panel A repeats the threshold estimates, and Panel B measures the cost in all contests. Each Washington legislative district elects two representatives on the same ballot, and about half also elect a senator. Contests of different types in the same district and year therefore face the same voters. Among 447 such contests, a same-party general has roll-off 9.5 percentage points higher than a Democrat-versus-Republican one, and a county panel of California's Assembly races gives

9.1. An uncontested race, in which no voter has a choice, has roll-off 21.0 percentage points higher.

Panel C turns to the reform, and its estimates are descriptive. Each state changed its rules once and statewide, so the comparison has in effect two units, and county-clustered standard errors overstate its precision (Conley and Taber, 2011). The benchmark is how far the states drift apart when neither changes its rules, between −4.0 and +2.9 points over four-year pairs of elections. The changes at adoption fall within that range: −3.5 points in Washington's State House roll-off relative to California's in 2008, and −0.9 in California's Assembly roll-off relative to Washington's in 2012. Neither shows a rise, though a comparison of two states cannot detect effects of a few points. Other changes coincide with the switches: Washington's counties moved to voting by mail between 2005 and 2011, and its earlier primaries were blanket and then pick-a-party rather than closed. California's first districts drawn by its redistricting commission took effect in 2012. Two states cannot separate these from the reform.

The mix of contests explains why the overall turnout effect is small. Lockouts were 8 percent of Washington's contests and 16 percent of California's. In Washington, nobody else was on the primary ballot in 62 percent of lockouts, and under the old rules most of these would have been uncontested races. This counterfactual fits the state's history: it makes 23 percent of State House races uncontested, against 24 percent in 2002–2006. The change in the mix of contests predicts a change of −0.4 percentage points (SE 0.9) in Washington's State House roll-off, close to zero. In California, the other major party had a primary candidate in 56 percent of lockouts, so many lockouts replaced a two-party race rather than an uncontested one. There the change in the mix of contests predicts that California's Assembly roll-off should rise by about 1 percentage point relative to Washington's. The observed change was smaller (−0.9 points, Panel C). Through lockouts, the reform raised average roll-off by about 1 percentage point at most.

Lockouts also change how many voters decide a seat, which is a separate question from

Table 2: The roll-off cost of exclusion, from the contest to the reform

Comparison	State	Sample	Percentage points
A. Close races for second place			
Same-party vs cross-party general	CA	2012–24, 132 contests ($h = 7.2$)	10.2 (1.2)
Per 10 points of excluded share	CA	2012–24, same 132 contests	2.1 (0.7)
Same-party vs cross-party general	WA	2008–24, 49 contests ($h = 6.1$)	6.8 (2.2)
Per 10 points of excluded share	WA	2008–24, 43 of the same contests	0.3 (1.6)
B. All contests within a state, relative to D vs R			
Same-party general, same ballot	WA	Legislature 2008–24, 447 contests	9.5 (0.7)
Same-party general, county panel	CA	Assembly 2002–24, 58 counties	9.1 (1.3)
Uncontested race, same ballot	WA	Legislature 2008–24, 447 contests	21.0 (0.8)
C. Adoption of the top-two			
Switch in 2008, relative to CA	WA	97 counties, 2004–10	−3.5 (1.2)
Predicted from contest mix	WA	Same	−0.4 (0.9)
Switch in 2012, relative to WA	CA	97 counties, 2008–18	−0.9 (0.9)
Predicted from contest mix	CA	Same	+1.1 (0.8)
Four-year pairs, no rule change	CA	2012–16, 2014–18, 2020–24	−4.0 to +2.9
D. Who leaves: precinct roll-off per 10 points of the excluded party's share			
Same-party general	CA	2016/20; 50 contests, 16,016 precincts	2.8 (0.3)
Same-party general	WA	2010–24; 89 contests, 18,064 precincts	3.1 (0.3)
D vs R general	CA	2016/20; 217 contests, 73,429 precincts	−0.0 (0.1)
D vs R general	WA	2010–24; 681 contests, 126,311 precincts	0.1 (0.0)
Same- minus cross-party, within h	CA	2016/20; 44 contests	3.4 (0.3)
Same- minus cross-party, within h	WA	2010–24; 43 contests	3.4 (0.5)

Note: Differences in roll-off, with standard errors in parentheses. D vs R is a general election with a Democrat and a Republican, and h is the bandwidth. A: local-linear regression discontinuity, errors clustered by seat. B: district-by-year or county and year fixed effects. C: county difference-in-differences, errors clustered by county, which overstates precision (see text). The 2014–18 pair is measured against ballots cast. D: precinct regressions with contest fixed effects. The last two rows are slope differences within h.

which voters decide it. Sinclair, O'Grady, Miller, and Murphy (2026) point out that a same-party general election is decided by far more voters than the primary it replaces, and the statewide returns bear this out. From 2012 to 2024, California's general elections drew between 1.5 and 2.5 times as many ballots as the primaries of the same year, 7.5 million against 4.5 million in 2014 and 17.8 million against 9.7 million in 2020.[5] Even if 15 percent of top-of-ticket voters skip a same-party race, the voters who remain are 1.3 to 2.1 times as many as took part in the whole primary. Under the old rules, the decisive election in such a district was the dominant party's primary, and a same-party general draws several times as many voters as that primary did. The reform enlarges the electorate that decides a one-party seat and at the same time removes a tenth of the ballot's voters, mostly of the excluded party, from that race. An average over the whole electorate registers only the first fact.

6. LESSONS FOR STATES WEIGHING REFORM

States that consider a nonpartisan primary choose more than whether to adopt one. They also choose how many candidates advance. Alaska's top-four primary, and the top-four and top-five primaries proposed in Colorado, Idaho, Montana and Nevada in 2024, advance more candidates than California's and Washington's. The returns allow a simple count of how this choice changes the number of lockouts. Holding the primary results fixed, I ask in how many lockouts the excluded party had a candidate among the top three, four or five primary finishers.

In California, the excluded party had a primary candidate in 96 of the 171 lockouts, and in 80 of them its best candidate finished third. A top-four rule would have put a candidate of the excluded party on the November ballot in 92 of the 171 contests, and a top-five rule in 93. In Washington, where the excluded party usually fielded no one, it had a primary candidate in 29 of the 98 lockouts, and a top-four rule would have put that candidate on the ballot in 28. A top-four rule would thus have avoided more than half of California's lockouts and

[5]Historical participation tables in the Statements of Vote for the March 2024 primary and the November 2024 general election.

more than a quarter of Washington's. Almost every lockout that remains is a race in which the excluded party fielded no candidate at all, the same exclusion that partisan primaries produce when a party fields no nominee.

This count is mechanical. A different rule would change who runs and how voters cast primary ballots, and a general election with four candidates is not a two-party race. Alaska also uses ranked-choice voting in its general election, which this paper does not study. The count shows, however, where the cost documented here comes from. It arises when a party's voters cast enough primary votes to field a candidate but too few to place that candidate second. A rule that advances more candidates removes most of these cases, and a rule that advances two keeps them, concentrated in the one-party districts where the excluded party is weakest.

Two implications follow for states. First, evaluations that compare average roll-off or turnout before and after adoption will not detect this cost, because lockouts are a minority of contests (Section 5). Measuring it requires data on the contests themselves and on the precincts within them. Second, the cost falls on a predictable group, minority partisans in districts their party cannot win. The choice of how many candidates advance is therefore partly a choice about whether those voters keep a candidate of their own in November.

7. DISCUSSION

I have shown that the top-two primary changed partisan political behavior for voters locked out of a general election. A lockout costs about 8 to 10 percentage points of roll-off where it occurs, and the excluded party's voters bear it: the new system left a party without a candidate, and about a third of its voters left the race while the advancing party's voters stayed. Adoption did not measurably raise legislative roll-off on average, because lockouts were a minority of contests and because the rules they replaced had their own means of excluding voters. An average over a state's elections thus hides a cost that falls on a specific group, minority partisans in districts where their party is weak.

In a district dominated by one party, the decisive election under partisan primaries was that party's primary. The top-two primary moves the decision to a general election open to every voter. Primary rules can shape whom representatives answer to (Gerber and Morton, 1998), and the reform's supporters expected winners to answer to a broader electorate (Alvarez and Sinclair, 2015). The results measure the effect of broadening the electorate. About 85 percent of the voters at the top of the ticket still vote in a same-party race, and those who leave come disproportionately from the excluded party. Whether the remaining electorate changes whom it elects or how winners govern is a separate question, examined with other designs (Ahler, Citrin, and Lenz, 2016; McGhee and Shor, 2017; Kousser, Phillips, and Shor, 2018).

The threshold estimates are local to close races for second place, mostly in one-party districts, with California's lockouts mostly Democratic (138 of 171). Washington, where lockouts fall on both parties and a same-party general rarely follows a close race for second place, shows a similar but less precise increase in roll-off. The composition arithmetic assumes that the same candidates would have run under the old rules.

The way an election counts votes matters most for the groups it leaves out, and evaluations of reform that look only at averages will miss them. The November 2026 general election, held on November 3 with 21 same-party contests in California, offers the next test once its returns are final.

DATA AVAILABILITY STATEMENT

The data and code that reproduce every table, figure and number in this article and its supplementary material will be deposited in the SPPQ Dataverse.

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