The Road to Better Redistricting: Empirical Analysis and State-Based Reforms to Counter Partisan Gerrymandering

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Redistricting\(^1\) stands at the heart of our notions of representative democracy because it serves as a key mediating factor between voters’ preferences and electoral outcomes, determining, in large part, how well citizens are represented. Meaningful reforms are needed now more than ever to correct problems that stem from partisan gerrymandering. This Note endeavors to provide legislators, policymakers, and election reform advocates with a greater empirical understanding of redistricting reform proposals and their effect on the electoral process. By analyzing 4,422 district-level elections, conducted under three different redistricting processes, held over the course of twenty years, this Note also provides a clear roadmap for reform. As displeased voters increasingly turn their attention toward legislative, rather than judicial remedies, they should pursue nonpartisan redistricting commissions that utilize a combination of citizen participation and legislative endorsement of proposed district maps. These reforms will best increase electoral responsiveness and reduce partisan bias in elections.

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\(^1\) This Note refers to “redistricting” or “congressional redistricting” throughout, but the research, findings, and proposals apply interchangeably to state legislative redistricting.
The year 2011 marked a new low in American politics on two distinct fronts. In Washington, D.C., hyper-partisanship and congressional gridlock led to one of the least productive and most intransigent legislative sessions in recent history—a year riddled with high-stakes showdowns on everything from appropriations and debt-ceiling authorizations to short-term tax cuts and routine agency-level appointments. Meanwhile, in state capitals across the country, legislators and redistricting commissions grappled with the decennial task of

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redrawing congressional district boundaries. The results were equally vitriolic and dysfunctional.

In Ohio, a Republican congressional gerrymander sparked threats of a referendum and the specter of two separate primary elections which would have cost the state an additional fifteen million dollars. Crisis was averted after four months of legislative wrangling and a last minute, face-saving compromise for both sides. In Arizona, the Governor called the state senate into special session and took the unprecedented step of impeaching the chairwoman of the state’s Independent Redistricting Commission after the Commission—created by citizen initiative just eleven years earlier to remove politics from the process—submitted its proposed congressional map. The Arizona Supreme Court averted a constitutional crisis and restored the chairwoman to her post a mere three hours after entertaining arguments. Other states, including Texas and New York, fared no better, dumping case after case into the laps of federal and state courts to adjudicate on compressed, election-driven time frames.

This Note proceeds with the assumption that reforming the latter problem of congressional redistricting and the ever-present partisan gerrymander will simultaneously help address the former problems of hyper-partisanship and gridlock within the federal government. Districts drawn with the express purpose of favoring one political party (or incumbent legislator) naturally lead to uncompetitive and uncontested general elections, putting a greater emphasis on the primary election, which will determine the favored party’s nominee.

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11 DOUGLAS J. AMY, REAL CHOICES/NEW VOICES: HOW PROPORTIONAL REPRESENTATION ELECTIONS COULD REVITALIZE AMERICAN DEMOCRACY 57–63 (2d ed.
This reduces the universe of voters who ultimately determine who goes to Congress and who stays home—a significant problem if the government is to truly be "by the people."\textsuperscript{12} Worse yet, this process forces candidates toward the ideological fringes in order to survive primary elections.\textsuperscript{13}

It seems axiomatic that drawing politically extreme congressional districts will result in politically extreme candidates and, ultimately, politically extreme members of Congress.\textsuperscript{14} Compound the process 435 times and add in highly sophisticated geographical information systems, and the stage is set for the partisan recalcitrance that pervades Washington, D.C. and prevents action on our nation’s pressing problems.\textsuperscript{15}

We need a better method of drawing congressional districts. For decades, disenfranchised voters, good-government activists, and political parties out of power have turned to the courts for redress from partisan gerrymandering.\textsuperscript{16} Despite a partial victory in the 1980s, when the Supreme Court first declared that partisan gerrymanders could amount to unconstitutional discrimination,\textsuperscript{17} reform advocates have made little headway with the Judiciary. The Supreme Court backtracked throughout the past decade when it declared there are no judicially discernible and manageable standards for evaluating partisan

\textsuperscript{12} Laughlin McDonald, The Looming 2010 Census: A Proposed Judicially Manageable Standard and Other Reform Options for Partisan Gerrymandering, 46 HARV. J. ON LEGIS. 243, 244 (2009) ("A group that is denied by partisan gerrymandering the effective exercise of its vote is necessarily deprived of the ability to protect its rights.").

\textsuperscript{13} See David M. Konisky & Michiko Ueda, The Effects of Uncontested Elections on Legislator Performance, 36 LEGIS. STUD. Q. 199, 204 (2011).


\textsuperscript{15} This Note does not pretend that partisan gerrymandering is the only, or even the leading, cause of congressional gridlock. Partisan gerrymandering is but one of many factors. See Jeffrey W. Ladewig, Ideological Polarization and the Vanishing of Marginals: Retrospective Roll-Call Voting in the U.S. Congress, 72 J. POL. 499, 499 (2010). Eliminating political polarization and gridlock, however, are not the only benefits, nor the only aims, of redistricting reform.

\textsuperscript{16} See Nathaniel Persily, When Judges Carve Democracies: A Primer on Court-Drawn Redistricting Plans, 73 GEO. WASH. L. REV. 1131, 1131 (2005) ("[P]laintiffs routinely turn to the courts, not only to strike down plans as illegal, but also to draw remedial plans to take their place."). See generally Samuel Issacharoff & Pamela S. Karlan, Where to Draw the Line?: Judicial Review of Partisan Gerrymanders, 153 U. PA. L. REV. 541 (2004) (analyzing partisan gerrymandering lawsuits throughout the past thirty years).

\textsuperscript{17} Davis v. Bandemer, 478 U.S. 109, 124–25 (1986).
gerrymander claims, and states have responded imperviously to the threat of judicial sanction in the years since.

Given the Supreme Court’s acquiescence to partisan gerrymandering, meaningful reform must come from the ground up, through changes to state constitutions and the processes they establish for redistricting. Several states, including Arizona, California, and Washington, have succeeded in reforming their redistricting procedures to limit partisan gerrymanders. Others, like Ohio, have tried and come up short, but are poised to try again. Before they do, policymakers and the voters who must ultimately approve any reforms deserve a better understanding of the various redistricting procedures available as well as the effects those procedures have on electoral outcomes. This Note serves that objective by providing an unbiased, empirical analysis of the three most prevalent redistricting processes currently in use.

As upset voters and election reform advocates increasingly turn their attention toward redistricting reforms, this Note argues that constitutional advances should be made in the processes states use when selecting mapmakers and district maps. Specifically, this Note urges states to adopt nonpartisan redistricting commissions consisting of legislative service agency staff members and recommends that those commissions use an open-submission process when creating new congressional maps. Part II of this Note argues that the Supreme Court’s muddled, unenforced jurisprudence on partisan gerrymandering necessarily leaves state constitutional reforms as the only viable resolution to blatant partisan gerrymandering. Part III provides an empirical analysis of the effects on electoral responsiveness and partisan bias under the three most prevalent redistricting processes—partisan redistricting, bipartisan redistricting, and nonpartisan redistricting—and shows that nonpartisan redistricting commissions are best suited to reduce partisan gerrymandering. Part IV then proposes a roadmap for reforms that states can utilize as they amend their procedures for drawing congressional districts. Adopting these proposals will help restore fairness and confidence in the redistricting process and ultimately lead to less rancor and partisan extremism in Congress.

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19 See infra Part II.C (discussing recent partisan gerrymanders in Illinois, Maryland, and Ohio).
23 Jim Siegel & Joe Hallett, Redistricting Plan Expected to Be on Ballot, Columbus Dispatch, July 3, 2012, at A1 (summarizing a voter initiative to take redistricting out of the hands of the state legislature and vest it with an independent citizens’ commission).
II. FAILED JUDICIAL RESPONSES TO PARTISAN GERRYMANDERING

In the wake of the "Reapportionment Revolution"\(^{24}\) of the 1960s, voters fed up with the harmful effects of partisan gerrymandering continued to look to federal courts as their primary avenue for redress. Encouraged by the successes of early redistricting cases, which established the "one-person, one-vote" principle, litigants soon "shifted from seeking quantitative equality, in the form of equal representation, to seeking qualitative equality, or fair representation."\(^{25}\) This goal has proven elusive. Although voters achieved a partial victory in *Davis v. Bandemer*, when the Supreme Court held that claims of purely partisan gerrymandering were justiciable,\(^{26}\) the Court's exceedingly high standard for prevailing on a claim of discriminatory vote dilution has proven unattainable for litigants.\(^{27}\) Subsequent rulings have further undercut the initial promise from *Bandemer* and have left the Judiciary wholly ineffective as a deterrent or remedy to partisan gerrymandering.\(^{28}\) As a result of these failed judicial responses, state-based constitutional reforms remain the only credible check against harmful partisan gerrymanders.

A. Establishing Justiciability: The *Bandemer* Standard

In *Davis v. Bandemer*, the seminal case on partisan gerrymandering, the Supreme Court for the first time declared that claims of purely partisan gerrymandering were justiciable and could amount to unconstitutional discrimination through vote dilution.\(^{29}\) Six Justices agreed that Indiana voters could bring an Equal Protection Clause challenge to a Republican gerrymander


\(^{25}\) Hebert & Jenkins, supra note 24, at 546.

\(^{26}\) Davis v. Bandemer, 478 U.S. 109, 113 (1986) (plurality opinion).

\(^{27}\) See infra Part II.B (examining post-*Bandemer* litigation and finding that courts have not struck down a single redistricting plan on solely partisan gerrymander claims).

\(^{28}\) See infra Part II.C (discussing increasingly egregious partisan gerrymanders in response to judicial acquiescence).

\(^{29}\) Davis v. Bandemer, 478 U.S. 109, 113 (1986) (plurality opinion). Prior justiciable redistricting cases centered only on allegations of unequal district populations or racial gerrymandering. *Id.* at 119 (majority opinion). *Bandemer* resulted in a flurry of opinions. While six Justices agreed that the claim was justiciable, three Justices believed the claim was a non-justiciable political question. *Id.* at 111–12 (syllabus). The case involved a district court decision which held that Indiana's 1981 state legislative redistricting unconstitutionally diluted the votes of Indiana Democrats through a peculiar mix of single-member and multimember districts, irregularly shaped district lines, and district lines that failed to adhere consistently to political subdivision boundaries. *Id.* at 116 (plurality opinion).
of the state’s legislative districts. A four-Justice plurality, however, delivered the Court’s controlling opinion and determined the voters had not demonstrated unconstitutional discrimination sufficiently. The plurality opinion sent the first of many signals that the Judiciary is ill-suited to provide relief to voters disenfranchised by partisan gerrymanders.

The Bandemer plurality established an exceedingly high yet murky standard for proving unconstitutional political discrimination. Under this two-part test, plaintiffs must prove “both intentional discrimination against an identifiable political group and an actual discriminatory effect on that group.” The plurality stated that due to the political nature of redistricting, discriminatory intent would be an easily identifiable precursor so long as the plaintiffs could prove discriminatory effects. Proving discriminatory effects, however, would be another matter. Writing for the plurality, Justice White stated that lack of proportional political representation is not sufficient to prove unconstitutional discrimination; rather, “unconstitutional discrimination occurs only when the electoral system is arranged in a manner that will consistently degrade a voter’s or a group of voters’ influence on the political process as a whole.”

The plurality reasoned that because voters who cast their ballots for a losing candidate still have as much an opportunity to influence the winning candidate as other voters in the district, no constitutional discrimination has occurred, even in redistricting schemes where there was an intent to discriminate and the losing group “loses election after election” in a safe district. In short, unless the disenfranchised voters can prove that the candidate elected will “entirely ignore” their interests, there is no discrimination under the Equal Protection Clause. Foreshadowing future legal battles, Justice Powell admonished the plurality and called for a clearer, and presumably more attainable, standard for proving unconstitutional political discrimination stemming from partisan gerrymanders.

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30 Id. at 125–27 (majority opinion).
31 Id. at 143 (plurality opinion).
32 Id. at 127.
33 Id. at 127–29.
34 Id. at 132 (emphasis added).
36 Id.
37 Justices Powell and Stevens advanced an alternative formulation, centered on whether the district boundaries have been “distorted deliberately and arbitrarily to achieve illegitimate ends.” Id. at 165 (Powell, J., joined by Stevens, J., concurring in part and dissenting in part). This inquiry would have focused on independent measures of a redistricting plan’s fairness—factors like the configuration of the districts, whether districts conformed to the lines of political subdivisions, and the nature of the legislative process by which the redistricting plan was adopted. Id. at 173. Examining those factors, Justices Powell and Stevens felt the Indiana plan was a “paradigm example” of unconstitutional discrimination, and they would have affirmed the judgment of the District Court. Id. at 185.
B. An Unworkable Standard: Backtracking from Bandemer

If Bandemer offered limited hope for voters seeking redress from the discriminatory effects of partisan gerrymanders, subsequent rulings demonstrated how elusive the promise of judicial relief truly is. Lower courts have struggled to give consistent meaning to the Bandemer plurality’s vague articulation of the discriminatory-effects test since its inception. As noted constitutional scholar Professor Laurence Tribe remarked, “Neither Justice White’s nor Justice Powell’s approach to the question of partisan apportionment gives any real guidance to lower courts forced to adjudicate this issue....” Due to these inconsistent interpretations, as well as the high bar the Bandemer standard established, the Judiciary has not struck down a single redistricting plan on account of unconstitutional discrimination stemming solely from partisan gerrymanders.

In 2001, the Supreme Court largely ignored Bandemer when it reversed a successful equal protection challenge to a race-based gerrymander of the Twelfth Congressional District of North Carolina, stating that judicial caution is especially warranted where “political explanation[s],” rather than race, are the predominant factor in a redistricting plan. The North Carolina gerrymander

38 McDonald, supra note 12, at 248; see also Pamela S. Karlan, The Fire Next Time: Reapportionment After the 2000 Census, 50 STAN. L. REV. 731, 737 (1998) (“[I]n Davis v. Bandemer, the Court announced a liability standard for partisan gerrymanders that was essentially impossible to satisfy.”).

39 E.g., Republican Party of N.C. v. Martin, 980 F.2d 943, 957–58 (4th Cir. 1992) (viewing the test narrowly and holding that because North Carolina Republicans were historically inhibited from running for one office—superior court judge—there was sufficient evidence of unconstitutional discrimination to withstand a motion for dismissal); Martinez v. Bush, 234 F. Supp. 2d 1275, 1337 (S.D. Fla. 2002) (analyzing Bandemer’s effect test under the rubric of racial vote dilution and requiring the political group to set forth evidence of: (1) geographical compactness, (2) political cohesiveness of that group, (3) bloc voting on the part of the majority group, and (4) that the totality of the circumstances indicate vote dilution); Terrazas v. Slagle, 821 F. Supp. 1162, 1174–75 (W.D. Tex. 1993) (viewing the test broadly and holding that because Texas had elected a Republican Governor twice in the past fifteen years, Republican voters were not “unable to effectively influence legislative outcomes” such that the state’s legislative redistricting should be overturned); Badham v. Eu, 694 F. Supp. 664, 672 (N.D. Cal. 1988) (viewing the test broadly and holding that Republican plaintiffs could not be “entirely ignored” in the political process because California had a Republican Governor, one Republican U.S. Senator, and 40% of California’s congressional delegation was Republican), aff’d, 488 U.S. 1024 (1989).

LAURENCE TRIBE, AMERICAN CONSTITUTIONAL LAW 1083 (2d ed. 1988).


"created an unusually shaped district, split counties and cities, and in particular placed almost all heavily Democratic-registered, predominantly African-American voting precincts, inside the district." Although Easley v. Cromartie challenged North Carolina's gerrymander on account of racial discrimination as opposed to political discrimination, the Supreme Court's reversal sent a strong signal that "political behavior" was an acceptable explanation for the gerrymandered district. Indeed, the Court did not even mention Bandemer or so much as hint at constitutional limits to partisan gerrymandering.

Two follow-on Supreme Court cases which did discuss Bandemer at length further undercut any promise for judicial relief by holding there are no judicially discernible and manageable standards to evaluate partisan gerrymandering claims. Consequently, the Court upheld egregious partisan gerrymanders in both Pennsylvania and Texas and, in the process, signaled a green light for future partisan redistricting mischief.

Following the 2000 census, Pennsylvania Republicans enacted a partisan congressional redistricting plan, allegedly at the behest of "[p]rominent national figures in the Republican Party" to serve as a "punitive measure" for pro-Democratic plans enacted elsewhere. Despite Democrats outnumbering and actual voters within the commonwealth, the plan was designed to result in thirteen safe Republican seats out of nineteen total districts. Democratic voters challenged the gerrymander, and the district court agreed that Republicans had enacted the plan in order to establish a Republican supermajority among their congressional delegation. Nevertheless, because the congressional plan did not "essentially shut[] . . . Democratic voters out of the political process," the court dismissed the political gerrymander claim. The Supreme Court affirmed the district court's decision, noting Bandemer's "inability to enunciate [a] judicially

43 Id. at 238.
44 See id. at 257. The Court explained its original decision to remand the case for further proceedings, noting "there was a genuine issue of material fact as to whether the evidence also was consistent with a constitutional political objective, namely, the creation of a safe Democratic seat." Id. at 239.
45 McDonald, supra note 12, at 253.
47 Vieth, 541 U.S. at 272 (plurality opinion).
49 Id. at 544.
50 Id. at 547 (holding that because Democrats could still engage in fundamental democratic actions like registering to vote, raising money on behalf of candidates, voting, and speaking out on matters of public concern, they had failed to meet Bandemer's robust test for "discriminatory effect").
discernible and manageable standard” for partisan gerrymandering and sending yet another signal to partisan actors with an eye on the next redistricting cycle.

While the Pennsylvania case was winding its way through the courts, Texas Republicans, emboldened by winning control of the State House and Senate in 2002, bucked political norms and attempted to pass a largely unprecedented mid-decade re-redistricting plan. Despite a protracted struggle, in which dozens of Democratic legislators fled the state to deny a necessary quorum to pass the plan, Republican legislators enacted a new congressional map in 2003, “with the single-minded purpose . . . to gain partisan advantage.” Democratic voters challenged the map, arguing that a “mid-decennial redistricting, when solely motivated by partisan objectives” is an unconstitutional partisan gerrymander under the Equal Protection Clause. Despite acknowledging that the sole purpose and effect of the mid-decade redistricting was to gain partisan advantage in the Texas congressional delegation, the Supreme Court again denied relief to the voters and upheld the gerrymander. The Texas debacle and accompanying court decisions sent the strongest message yet: partisan actors need not fear judicial sanction of blatant political gerrymanders.

Thus, Bandemer’s unworkable standard—announced by a plurality, applied inconsistently by lower courts ever since, and largely ignored and undercut by subsequent Supreme Court rulings—cannot be viewed as a credible deterrent or remedy to partisan gerrymanders.

C. State Responses to Judicial Acquiescence: The Compelling Need for Redistricting Reform

State responses in the wake of this judicial acquiescence further underscore the compelling need for redistricting reform from the ground up, through modifications to state constitutional provisions. A cursory look at the 2011—

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51 Vieth, 541 U.S. at 306 (plurality opinion).
55 Id. at 412–13 (“The 2004 congressional elections did not disappoint the plan’s drafters. Republicans won 21 seats to the Democrats’ 11 . . . .”).
56 See id. at 410 (judgment of the Court). Justice Kennedy, the swing Justice, rejected the plaintiffs’ equal protection claims based upon a “sole-intent” theory of political discrimination, finding that despite the legislature’s overarching political objectives, “partisan aims did not guide every line it drew.” Id. at 417–20 (Kennedy, J., concurring in part and dissenting in part). Justice Kennedy also rejected the plaintiffs’ proposed standard for showing “discriminatory effects” because it failed in its requirement to “show a burden, as measured by a reliable standard, on the complainants’ representational rights.” Id. at 418. Without a breach of a recognized, manageable standard, the Court dismissed the plaintiffs’ partisan gerrymander claim. Id. at 423 (plurality opinion).
2012 redistricting process in Illinois, Maryland, and Ohio reveals once more that the threat of judicial sanction is an ineffective deterrent to partisan gerrymandering. Each of these states enacted overtly partisan gerrymanders in the most recent redistricting cycle, seemingly impervious to the specter of judicial rebuke.

Democrats in Illinois and Maryland raised eyebrows for their aggressive gerrymanders. In Illinois, private memorandums between the Democratic Congressional Campaign Committee and state legislative leadership offices instructed that a “critical part of the remapping process is altering the districts of incumbent Republicans to complicate their paths back to Washington.” The new map in Illinois is expected to utterly transform an eleven-to-eight Republican majority congressional delegation into a twelve-to-six Democratic majority delegation.

In Maryland, Democratic legislators targeted incumbent Republican Congressman Roscoe Bartlett by stretching his district nearly 200 miles from the West Virginia border to the Washington, D.C. beltway, taking in hundreds of thousands of new Democratic voters in the process. Though a federal district court dismissed a challenge to the redistricting plan, the court noted that “Maryland’s Republican Party regularly receives 40% of the statewide vote but might well retain only 12.5% of the congressional seats.” One judge stated the plan was, “by any reasonable standard, a blatant partisan gerrymander.”

Ohio’s recent gerrymander is also illustrative because it represents one of the more brazen attempts in modern history to convert a toss-up state’s congressional boundaries into a supermajority delegation for one political party. Pressured by home-state Speaker of the U.S. House of Representatives John Boehner, majority-party Republicans in the Ohio General Assembly crafted a congressional redistricting map that would transform a state “split 50-50 politically” into a congressional delegation with “a Republican lock on 12 of the state’s proposed 16 congressional districts.” To accomplish this feat, the map relied upon fifty-four county splits, with seven counties split three ways or

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57 See infra notes 59–67 and accompanying text.
58 See id.
60 See id. The Illinois gerrymander represents one of the best pick-up opportunities for Democrats nationwide. See id.
63 Id. at 905–07 (Titus, J., concurring) (criticizing the current state of the law with regards to claims of political gerrymandering and arguing for a burden-shifting regime to evaluate these claims).
more. The Ohio gerrymander scored worse than all fifty-three public submissions in a 2011 citizen redistricting competition when scored on objective criteria like compactness of districts, political competitiveness, and preserving communities of interest. Moreover, using an “electoral disproportionality” scale that compares established democracies around the world, one political scientist calculated that “[t]he 450 members of Russia’s Duma are elected from districts that are fairer” and more competitive than Ohio’s new congressional districts.

As these examples show, the risk of judicial sanction has not dissuaded legislators from enacting increasingly egregious partisan gerrymanders. If anything, recent judicial acquiescence has encouraged states to adopt more aggressive maps than they might have contemplated just twenty years ago. Past redistricting litigation indicates disenfranchised voters will find little subsequent redress in court. These failed judicial responses leave state-based constitutional reforms as the only viable solution to the harmful effects of partisan gerrymandering.

III. EMPIRICAL ANALYSIS OF PARTISAN, BIPARTISAN, AND NONPARTISAN REDISTRICTING

Despite partisan efforts to gerrymander districts for naked political advantage, the normative value of any redistricting plan that is free from gerrymandering lies in how responsive the system is to voter preferences and how unbiased it is toward the political parties. The Supreme Court, legal scholars, and political scientists have all identified obtaining responsive and unbiased electoral systems as key aims in redistricting. This section explores the effects that different redistricting processes have on levels of electoral responsiveness and partisan bias, and empirically demonstrates that the processes states utilize can have immediate, significant, and lasting impacts on the substantive outcomes of their elections. This analysis shows that nonpartisan redistricting is best suited to control partisan gerrymandering by simultaneously increasing electoral responsiveness and reducing partisan bias.

66 Id. For a side-by-side comparison of the congressional map Republicans enacted versus the winner of Ohio’s citizen redistricting competition, see infra Appendix, fig.6.
67 Hallett, supra note 65.
68 See, e.g., Cox, supra note 52, at 754; Andrew Gelman & Gary King, Enhancing Democracy Through Legislative Redistricting, 88 AM. POL. SCI. REV. 541, 554 (1994) [hereinafter Gelman & King, Enhancing Democracy]; Bernard Grofman & Gary King, The Future of Partisan Symmetry as a Judicial Test for Partisan Gerrymandering After LULAC v. Perry, 6 ELECTION L.J. 2, 6–9 (2007). Although not every scholar agrees with the assumptions that higher responsiveness and lower bias are normative goals of redistricting, this Note proceeds as though they are, focusing on how to achieve those goals rather than rearguing their importance.
A. Electoral Responsiveness and Partisan Bias

Before describing the analysis and results, a better understanding of the variables studied is required. Electoral responsiveness is the degree to which changes in voter preferences are reflected in the partisan composition of the winning candidates.69 While scholars have come to an agreement on this definition, they have not agreed upon how to best measure responsiveness.70

Regardless of the measurement method selected, once a parameter for electoral responsiveness is calculated, interpretations can be made about a state’s elections. There are three possible types of representation: proportional representation, unresponsive representation, and majoritarian representation.71 The simplest form is proportional representation, in which the parameter for responsiveness equals “1.”72 In proportional representation, a 1% increase in the statewide vote share for a particular party will correspond with a 1% increase in that party’s share of legislative seats.73 Exact proportional representation is rare in U.S. elections,74 but some states do achieve near-proportional representation.75

To one side of proportional representation lies unresponsive representation.76 In an unresponsive electoral system, an increase of 1% in the statewide vote share will lead to a smaller corresponding increase in seat share: somewhere between 0% and 1%.77 Electoral systems in which changes in the legislative seat share do not keep pace with changes in voter preferences seem counter to American notions of representative democracy.78

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69 E.g., Gelman & King, Enhancing Democracy, supra note 68, at 542.
70 See infra note 131 and accompanying text.
71 A word of caution: the level or category of responsiveness is a distinct concept and parameter from partisan bias. See Gary King, Representation Through Legislative Redistricting: A Stochastic Model, 33 AM. J. POL. SCI. 787, 793 (1989). Proportional, unresponsive, and majoritarian systems can all be equally fair to both parties in the translation of votes to seats, provided there is no partisan bias. Id. at 789–93. Similarly, proportional representation does not necessarily connote a lack of partisan bias. Id. Bias is discussed later in Part III.A.
73 Id.
74 Id. at 1254–55. Proportional representation is common in many European parliamentary elections, where the number of seats won by a particular party is directly proportional to that party’s vote share. AMY, supra note 11, at 2–3.
75 See infra Part III.D.3. From 1990–2010, Ohio, on average, achieved near-proportional representation.
76 King & Browning, supra note 72, at 1254.
77 See id.
78 See Gelman & King, Enhancing Democracy, supra note 68, at 544 (“Scholars of American politics almost uniformly take the normative position that higher values of responsiveness indicate a healthier democracy.”); see also Grofman & King, supra note 68, at 9.
To the other side of proportional representation lies majoritarian representation, in which the parameter for responsiveness is greater than "1."\(^{79}\) Thus, for every 1% increase in the statewide vote share for a particular party, the corresponding increase in legislative seat share will increase by some figure greater than 1%.\(^ {80}\) Majoritarian representation is common in modern U.S. elections,\(^ {81}\) and American political theorists consistently have held that a higher level of responsiveness is a desirable political outcome.\(^ {82}\)

As states contemplate reforming their redistricting processes, they should consider the impact that a given procedure will have on electoral responsiveness. Enacting a redistricting process that leads to higher responsiveness will send a strong message to a state's electorate: your votes will not merely be counted—they will matter in apportioning legislative control.

The second normative aspect of any redistricting plan is how fairly it treats the political parties. Although partisan fairness can mean many things, the most widely held understanding of political fairness is the lack of partisan bias within a redistricting system.\(^ {83}\) Partisan bias, in turn, describes how fairly a given redistricting plan treats the two political parties in the translation of statewide vote share to seats awarded.\(^ {84}\) In a biased system, it is harder for one party to translate its statewide vote share into seats.\(^ {85}\) Contrast this with an unbiased system, where both parties are required to attain the same percentage of the statewide vote share to win a given percentage of seats.\(^ {86}\) For example, in an unbiased system, if Democrats received 52% of the statewide vote and obtained 58% of the seats, then Republicans would also need only 52% of the vote to win 58% of the seats. The implication is that both parties would need only 50% of the statewide vote share to obtain a majority of the seats in an unbiased system.

\(^{79}\) King & Browning, supra note 72, at 1255.
\(^{80}\) Id.
\(^{81}\) See Gelman & King, Enhancing Democracy, supra note 68, at 545.
\(^{82}\) Id. at 544; Grofman & King, supra note 68, at 9 ("Most scholars therefore regard electoral systems with higher levels of electoral responsiveness as better[;] . . . many favor the American system of district-based elections, since it tends to produce a higher level of responsiveness than other systems."). See generally John A. Ferejohn, On the Decline of Competition in Congressional Elections, 71 AM. POL. SCI. REV. 166 (1977) (analyzing possible sources for the lack of responsiveness and competition in modern congressional elections). Using a different model than this Note, King and Browning highlight three benefits of majoritarian representation: First, it facilitates governing because it encourages majorities to form; second, it fosters partisan competition since a small increase in vote share near the 50% vote mark will result in a much larger increase in seat share; third, majoritarian representation actually protects minority political interests because after a party obtains 50% of the vote, there are diminishing returns for each additional percentage of the overall vote share. King & Browning, supra note 72, at 1255. Less clear is if there is an optimal or excessive level of responsiveness.
\(^{83}\) Cox, supra note 52, at 764–65; Grofman & King, supra note 68, at 6–8.
\(^{84}\) King, supra note 71, at 789.
\(^{85}\) Cox, supra note 52, at 765.
Any deviation from this outcome becomes the parameter for partisan bias.\(^7\) For example, if Democrats only needed 46% of the statewide vote share to win a majority of seats, then the parameter for bias would equal 4% in favor of Democrats.

Political gerrymandering, at its core, is the process of enshrining an electoral system with partisan bias in favor of those who draw the districts, thereby obtaining a decade-long electoral advantage, irrespective of voter preferences.\(^8\) Courts and scholars have consistently condemned these gerrymanders and their harmful effects.\(^9\) As states pursue redistricting reforms, they should enact processes that lead to the reduction, if not the elimination, of partisan bias.

**B. Procedural Approaches to Redistricting: Ohio, Pennsylvania, and Iowa as Examples**

There are dozens of possible variations in the redistricting procedures states utilize, including legislatively drawn districts; commission-drawn districts; hybrid procedures; or court-drawn districts.\(^9\) All of these systems, however, can be loosely classified by who controls the levers of power: one political party (partisan redistricting); both parties (bipartisan redistricting); or neither party (nonpartisan redistricting). This study analyzes those three redistricting procedures at work in the states of Ohio, Pennsylvania, and Iowa, respectively.\(^9\)

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\(^7\) *Id.* at 542.

\(^8\) See Gelman & King, *Enhancing Democracy, supra* note 68, at 543 (discussing the effects of redistricting on partisan bias and finding that "on average, redistricting favors the party that draws the lines more than if the party were to draw the lines. In fact, the effect is substantial and fades only very gradually over the following 10 years").


\(^9\) Justin Levitt, Brennen Ctr. for Justice, *A Citizen's Guide to Redistricting* 34–36 (2010), available at [http://brennan.3cdn.net/dbda15133af1b14e05b_i4m6b40of.pdf](http://brennan.3cdn.net/dbda15133af1b14e05b_i4m6b40of.pdf) [hereinafter Citizen's Guide to Redistricting]. At least thirty states still assign primary congressional redistricting power to their state legislatures. *Id.* The remaining states use a mix of advisory commissions, backup commissions, independent commissions, or other political commissions. *Id.*

\(^9\) The findings of this study are necessarily limited to the three states in question. While an analysis of more states would have provided more generalizable results, such a study was beyond the scope of this analysis. Moreover, only one state (Iowa) utilized a nonpartisan redistricting procedure for a long enough time frame to provide meaningful results, so it seemed intuitive to focus on one state from each category of redistricting procedures. Ohio and Pennsylvania were selected because they are both heavily populated swing states with a broad mixture of rural, urban, suburban, and exurban areas. Although Iowa is not as heavily populated and is predominately rural, its politics are closely divided, and it was the only state with a nonpartisan redistricting institution in operation throughout the time period of this study.
While the focus of this Note is congressional gerrymanders, the empirical analysis of different redistricting procedures necessarily centers on state legislative redistricting for two reasons: (1) state legislative elections produce more data points than congressional races; and (2) these states' redistricting processes can be classified clearly as partisan, bipartisan, and nonpartisan. Nevertheless, the approach taken and results gleaned can be transferred easily to any two-party races, including congressional elections.

1. Partisan Redistricting—Ohio

Ohio uses a partisan system to draw its state legislative districts: the five-member Apportionment Board consists of the Governor, the auditor of state, the secretary of state, and one legislator from each political party. Since the first three members are statewide elected officials, the Apportionment Board will always have a partisan majority. A simple majority vote of the Apportionment Board is required to enact a redistricting proposal. This Note, which analyzes elections from 1990-2010, involves one election conducted under a Democratic map (the 1990 election, which was the last held under the map Democrats crafted in 1981). The remaining ten elections were conducted under maps drawn by Republican-controlled apportionment boards in 1991 and 2001.

Ohio has 99 state house districts compared to 16 congressional seats; Pennsylvania has 203 state house districts compared to 18 congressional seats; Iowa has 100 state house districts compared to just 4 congressional seats. Justin Levitt, Who Draws the Lines? Party Control—Congressional Lines, ALL ABOUT REDISTRICTING, http://redistricting.lls.edu/who partyfed.php (last visited Oct. 28, 2012) (offering a comparison of the number of legislative districts and congressional seats). For the proposition that more data leads to more reliable findings, see Gelman & King, Enhancing Democracy, supra note 68, at 542–43.

See infra notes 95–111 and accompanying text. Had the study focused on congressional races, the analysis would be muddled because in Ohio and Pennsylvania, the legislatures are in charge of congressional redistricting rather than their partisan and bipartisan commissions for state legislative races. Levitt, supra note 92 (offering a state-by-state comparison of congressional redistricting institutions).

See generally Gelman & King, Enhancing Democracy, supra note 68 (analyzing state legislative races to draw general inferences about the effects of redistricting on responsiveness and bias); Richard G. Niemi & Simon Jackman, Bias and Responsiveness in State Legislative Districting, 16 LEGIS. STUD. Q. 183 (1991) (analyzing state legislative races and reaching results consistent with recent findings in congressional races for the effects of redistricting on responsiveness and bias).

Ohio Const. art. XI, § 1.


Ohio Const. art. XI, § 1.
2. Bipartisan Redistricting—Pennsylvania

Pennsylvania uses a bipartisan redistricting process. The five-member Legislative Reapportionment Commission consists of two Democrats and two Republicans: the majority and minority leaders from the State House and Senate or their delegates.98 Those four members must then agree upon a fifth member, the chairperson, who may not be a paid local, state, or federal employee.99 If the four legislators cannot agree upon a chairperson, then the Pennsylvania Supreme Court must appoint one.100 A simple majority vote of the Reapportionment Commission is required to enact a redistricting plan.101

In the five redistricting cycles that Pennsylvania has used this process, commission members have deadlocked four times on choosing a chairperson—throwing the decision to the Pennsylvania Supreme Court.102 Because Justices of the Pennsylvania Supreme Court are elected on a partisan basis,103 partisan motives might play a factor when members deadlock on choosing a chair. Nevertheless, the court has painstakingly avoided playing a partisan role when appointing the chairperson.104 Due to the compromise commission members face in selecting their chairperson, as well as the even-handed approach the Pennsylvania Supreme Court has taken when commission members have

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98 PA. CONST. art. II, § 17(b).
99 Id.
100 Id.
101 Id. § 17(a).
103 PA. CONST. art. V, § 13(a).
deadlocked on choosing a chair, Pennsylvania redistricting is best characterized as a bipartisan procedure.

3. Nonpartisan Redistricting—Iowa

Iowa utilizes a unique nonpartisan redistricting procedure. The process originates with the nonpartisan Legislative Services Agency, which crafts a redistricting plan based solely upon objective districting criteria.\(^{105}\) The legislature and Governor must then pass the proposed plan, without amendment,\(^{106}\) or else the agency will introduce its first alternative plan, also not subject to legislative amendment.\(^{107}\) If the alternate plan also fails, then the agency will propose a third and final plan.\(^{108}\) The agency's third plan is subject to amendment,\(^{109}\) but if the legislature and Governor fail to enact a redistricting plan by the fifteenth of September of the year following the federal census, then the Iowa Supreme Court assumes responsibility for the state's redistricting.\(^{110}\) In the three redistricting cycles since this system's enactment, the legislature and Governor have always approved a Legislative Service Agency plan, in part because legislators are wary of going against the nonpartisan process, which has obtained broad-based, popular support among Iowa voters.\(^{111}\)

C. The Analysis: Harnessing Data to Improve Our Politics

Policymakers and voters pursuing redistricting reforms should proceed on an informed basis. Swapping one redistricting procedure for another without first understanding the substantive outcomes that accompany the new procedure can undercut well-intentioned reform efforts. For example, by switching from partisan redistricting to a bipartisan system, reformers might unwittingly trade one host of evils (partisan gerrymanders) for another (incumbent-protection gerrymanders). The following analysis seeks to prevent this unfortunate outcome by providing thorough, accurate, and unbiased information regarding the three most prevalent redistricting procedures and their substantive impact on elections.

\(^{105}\) IOWA CODE §§ 42.2, 42.4 (2011). The Legislative Services Agency crafts a map based upon population, contiguity, compactness, and preservation of political subdivisions. \textit{Id.} § 42.4(1)–(4). No other information—including voter registration, past election results, addresses of incumbents, or demographic information other than population counts—may be considered. \textit{Id.} § 42.4(5).

\(^{106}\) \textit{Id.} § 42.3. Technical amendments are permitted; substantive amendments are not. \textit{Id.}

\(^{107}\) \textit{Id.}

\(^{108}\) \textit{Id.}

\(^{109}\) \textit{Id.}

\(^{110}\) IOWA CONST. art. III, § 35.

1. The Data: State House Elections in Ohio, Pennsylvania, and Iowa from 1990–2010

This analysis covers every race for the lower houses of the legislatures of Ohio, Pennsylvania, and Iowa for the eleven general elections held from 1990–2010. These states held a total of 4,422 district-level elections between 1990 and 2010. This time-series study includes analysis of two complete redistricting cycles. Data were collected from the Ohio Secretary of State’s office; the Pennsylvania Department of State; and the Iowa Secretary of State’s office.

All elections were held in single-member districts. Because the primary focus of this study is the translation of statewide vote share to legislative seat share between the two major parties, the analysis excludes third-party and independent candidates and their vote totals. Democrats or Republicans won every election with the exception of Ohio House District Eight in 1994.

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112 The analysis also covers a special election for Iowa House District Fifty-Two, held on December 12, 2006, to fill a vacancy caused by the death of an unopposed, incumbent representative prior to the general election. See Charlotte Eby, State Rep. Freeman Dies at 64, GLOBE GAZETTE (Mason City, Iowa), Sept. 7, 2006, at A7; Jeff Jones, Demos Field 21-Year-Old BV Student in Bid for Freeman’s House Seat, PILOT TRIB. (Storm Lake, Iowa), Nov. 14, 2006, at 1A.


116 Richard Niemi and Patrick Fett discussed some of the challenges associated with coding and analyzing election data—particularly with regard to uncontested elections, cross-party endorsements, and minor party candidates—and concluded it is not clear how to treat these events. Richard G. Niemi & Patrick Fett, The Swing Ratio: An Explanation and an Assessment, 11 LEGIS. STUD. Q. 75, 87 (1986). More recent redistricting research, however, has excluded third-party and independent candidate vote totals from measurements of electoral responsiveness and partisan bias. See Gelman & King, Enhancing Democracy, supra note 68, at 544; Andrew Gelman & Gary King, Estimating the Electoral Consequences of Legislative Redistricting, 85 J. AM. STAT. ASS’N 274, 274–75 (1990) [hereinafter Gelman & King, Estimating the Electoral Consequences].

117 Political Composition of the Ohio General Assembly—1990 to 2006, GONGWER NEWS SERVICE INC., http://www.gongwer-oh.com/public/gahis.html (last visited Feb. 15, 2012). In that contest, C.J. Prentiss, an incumbent Democrat, won reelection as an independent due to questions about her nominating petitions. Id. at n.7. Because she continued to caucus with the Democratic Party, id., her 1994 independent vote total served as the proxy vote for the Democratic Party in that election, and the official Democratic candidate’s vote totals were excluded.
One area of concern with the data was how to account for uncontested elections since they might not adequately reflect support for the two political parties. While past redistricting research has not produced a consistent treatment for uncontested elections, this analysis included vote totals from all uncontested elections primarily because the methodology utilized, the hypothetical one-year swing ratio, is much less dependent on how uncontested elections are treated than are other quantitative methods. Under this methodology, including uncontested elections has no impact on the measure of electoral responsiveness, though it will affect the parameter for partisan bias if either party were to win a disproportionate number of seats due to their vote share in uncontested elections.

2. Methodology: The Hypothetical One-Year Swing Ratio

This analysis uses a modified version of a linear fit model to depict electoral responsiveness and partisan bias. This modified version, the "hypothetical one-year swing ratio," was first described by David Butler in 1951 in an analysis of British parliamentary elections. Subsequent researchers have used this method (or variations of it) in examining the relationship between vote share and seats won in legislative races throughout the United States. The hypothetical one-year swing ratio is an ordinary, least squares linear regression of a series of possible data points, centered on the actual result in a given election year. The first point constructed is the actual result for a given election year. The percentage of statewide votes that Democratic candidates received is plotted on the x-axis, and the percentage of the legislative seats Democrats won is plotted on the y-axis. The other ten

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118 Several authors omitted how they reported uncontested elections. See generally King, supra note 71; Tufte, supra note 86. Others were more explicit. In their 1990 study of state legislative redistricting, Gelman and King used a proxy or "effective" vote measure for uncontested races. See Gelman & King, Estimating the Electoral Consequences, supra note 116, at 275. Other scholars, however, chose to include uncontested elections in the calculation of both vote share and seat share when those figures were available. See, e.g., King & Browning, supra note 72, at 1260; Niemi & Jackman, supra note 94, at 200 n.4.

119 Niemi & Fett, supra note 116, at 83.

120 See id. Future research utilizing the hypothetical one-year swing ratio could analyze election results using a proxy "effective vote" discussed in supra note 118.


123 Niemi & Fett, supra note 116, at 80.

124 Id. at 81 fig.2.
data points are created assuming the Democratic Party gained or lost votes uniformly across all districts. An example will illustrate:

In the 1990 Ohio elections, Democratic house candidates received 53.44% of the statewide vote share and won 61.60% of the seats in that chamber. This marks the first point for the regression analysis: 53.44% on the x-axis for vote share, and 61.60% on the y-axis for seat share. Had Democrats fared better by 1% in every district (a uniform, statewide shift in voter preference), they would not have won any additional seats. Therefore, the second point for the regression analysis would be 54.44% on the x-axis, but an identical 61.60% on the y-axis. But had Democrats won 2% more votes in every district, Democrats would have won an additional two seats (a 2% increase). Consequently, the third data point for the regression analysis would be 55.44% on the x-axis, and 63.60% on the y-axis. This process is repeated for ± 5% of the actual election outcome. Regressing the dependent variable (seat share) against the independent variable (vote share) for these eleven data points produces a hypothetical one-year swing ratio. The results are plotted below in Figure 1.

Figure 1: Plot of Percentage Seats Won by Percentage Votes Won, Ohio House of Representatives, 1990 General Election

![Graph showing the regression analysis](image)

The regression calculation includes estimated parameters for electoral responsiveness and partisan bias. In the 1990 Ohio example, the slope of the

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125 Id. at 80.
regression line represents the level of responsiveness for that election—in this case, 0.71. This indicates that for every 1% increase in statewide vote share for the Democratic Party, an increase of 0.71% in Democratic seat share was expected, marking a relatively unresponsive electoral system. The hypothetical one-year swing ratio also enables calculations for partisan bias. In an unbiased system, both parties require the same percentage of statewide vote share to achieve a majority in the legislature. By setting the percentage of seats won at 50% and solving the equation for the percentage of the statewide vote share, the result is the share of the vote that a political party is required to win in order to obtain a majority. The difference between this number and 50% is the resultant partisan bias or built-in unfairness advantage that one party has over another in a given electoral system. In the example from Ohio in 1990, the regression formula was:

\[ \text{Democratic Seat Share} = 0.24 + (0.71 \times \text{Democratic Vote Share}) \]

By setting “Democratic Seat Share” equal to 0.50 and solving the equation, “Democratic Vote Share” equals 0.37. This indicates that the Democratic Party needed just 37% of the statewide vote share to attain a majority of the legislative seats in Ohio in 1990. Conversely, the Republican Party would have needed 63% of the statewide vote share to achieve majority status. The difference between the 37% required for Democrats to attain majority status and the 50% that marks a truly unbiased system represents the parameter for partisan bias. In this example, Democrats enjoyed a bias of 13% in the 1990 election. Regardless of voter preferences, Democrats were able to translate their statewide vote share into their share of legislative seats 13% more effectively than Republicans.

The purpose of this Note is not to add to the growing literature on which methodology is best for studying electoral responsiveness and partisan bias. That no singular quantitative method has emerged with a consensus among political scientists—let alone the courts—suggests that different approaches provide different advantages and drawbacks. This Note utilizes the

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126 Tufte, supra note 86, at 543.
127 See id. at 548.
128 Id. at 542.
129 Id.
130 This result is not surprising given that Democrats controlled the Apportionment Board in the previous two redistricting cycles and instituted partisan gerrymanders to favor their candidates. Andrew Gelman & Gary King, A Unified Method of Evaluating Electoral Systems and Redistricting Plans, 38 AM. J. POL. SCI. 514, 545 (1994) [hereinafter Gelman & King, Unified Method].
131 For a rigorous discussion on various methodologies, compare Gelman & King, Unified Method, supra note 130, at 517–26 (expanding on an earlier stochastic model to include prospective, theoretical predictions of responsiveness and bias), and King, supra note 71, at 796–811 (introducing a probabilistic, stochastic model), with Niemi & Fett, supra note 116, at 76–83 (discussing various versions of the linear fit model, including the
hypothetical one-year swing ratio because it provides estimates for electoral responsiveness and partisan bias in such a straightforward manner. This model is more accessible to legislators, public interest groups, and concerned citizens—the Note’s intended audience—than are the complex algorithmic formulas associated with other models. Moreover, under the hypothetical one-year swing ratio, the estimates for responsiveness and bias can be calculated for single election years. Other methodologies require data from multiple elections and provide parameters for responsiveness and bias across a range of years but do not provide estimates for particular elections. While knowing the values of responsiveness and bias over longer periods of time has its own benefits, the advantage of the hypothetical one-year swing ratio is that it allows for discrete comparisons before and after particular redistricting plans take effect. These before-and-after values offer keener insight into the impact of redistricting itself.

D. The Results: Nonpartisan Redistricting Processes Lead to Optimal Outcomes

The results of this analysis show that the levels of electoral responsiveness and partisan bias varied systematically across the three redistricting processes utilized. Iowa, which utilizes a nonpartisan redistricting process, experienced the highest levels of responsiveness and the near elimination of partisan bias—the best outcome of the three redistricting processes studied. Pennsylvania, which utilizes a bipartisan redistricting process, experienced the lowest levels of responsiveness but also achieved near elimination of partisan bias. Ohio, which utilizes a partisan redistricting process, experienced near proportional representation but had the highest overall levels of partisan bias. The results are plotted below in Figures 2–5.

132 See Robert X. Browning & Gary King, Seats, Votes, and Gerrymandering: Estimating Representation and Bias in State Legislative Redistricting, 9 LAW & POL’Y 305, 313 (1987); see also Tufte, supra note 86, at 547.

133 See Niemi & Fett, supra note 116, at 82–83.

134 See Browning & King, supra note 132, at 305, 317; Niemi & Fett, supra note 116, at 78.

135 See Browning & King, supra note 132, at 309–10.

136 See Niemi & Fett, supra note 116, at 82.

137 For a table listing the complete results of this analysis, see infra Appendix, tbl.1. Spreadsheets containing the raw data (election results from 1990–2010) were compiled in accordance with supra Part III.C.1 and are on file with the author.

138 Electoral responsiveness is plotted along the x-axis between values of “0” and “3.” A value of “1” indicates proportional representation. States with majoritarian representation will have elections clustered around the right-hand side of the graph, with responsiveness levels greater than “1.” States with unresponsive representation will have elections clustered around the left-hand side of the graph, with levels lower than “1.” Partisan bias is plotted
1. Nonpartisan Redistricting

Figure 2: Iowa House, 1990–2010

Iowa, with its nonpartisan redistricting, had the highest levels of responsiveness, with an average of “1.60.” This means that for every 1% change in statewide vote share, the seat share in the Iowa House changed, on average, by 1.60%. Iowa experienced majoritarian representation in every election except 2006, an apparent outlier. A majority of Iowa elections had responsiveness greater than “1.5,” indicating a relatively responsive electoral system. More importantly, levels of responsiveness increased in the elections immediately following both redistricting cycles; the two highest levels of responsiveness in Iowa occurred in those elections (1992 and 2002).

These results, while based only on one state’s experience, strongly suggest that district maps created by nonpartisan officials will lead to greater responsiveness to voter preferences. Because nonpartisan mapmakers will presumably forego political considerations in favor of other districting principles like population equality, compactness of districts, or preservation of political subdivisions and communities of interest, individual districts are

along the y-axis, with values ranging from “-0.25” through “0.25.” Positive percentages indicate Democratic bias and negative percentages indicate Republican bias. For example, a bias level of “-0.10” indicates that in that election, the Republican Party had an inherent 10% advantage and would need to attain only 40% of the statewide vote share to achieve majority status. States with high levels of bias will have elections clustered around the top or bottom of the graph. States with low levels of bias will have elections clustered around the center, horizontal axis (the \( y=0 \) line). Redistricting elections are plotted with filled squares. All other elections are plotted with open squares.
crafted to neither benefit a particular legislator’s reelection prospects nor a political party’s overall election success. This, in turn, leads to districts and elections with greater levels of political uncertainty, and hence, increased responsiveness to changes in voter preferences. Nonpartisan redistricting, which in this study increased the responsiveness of a given electoral system, is an effective way of ensuring that voter preferences determine the partisan makeup of a state’s congressional delegation—not the once-a-decade redistricting process.

Nonpartisan Iowa also experienced the near elimination of partisan bias. For the eleven elections studied, the average bias was just 0.2% in favor of Democrats. Moreover, Iowa’s low levels of bias were neatly clustered around the y=0 line (as opposed to large levels of bias in either direction that merely cancel each other out when averaged), with bias never exceeding 5% in favor of either party. Both the 1991 and 2001 redistricting plans effectively eliminated partisan bias from Iowa’s electoral system. In addition, the three elections in which bias exceeded 3% all occurred during the last or second-to-last election held under a particular map, when the effects of redistricting are the most remote.

These results suggest that removing the redistricting process from those who stand to benefit politically from the outcome will lead to near-political parity for both parties in the overall electoral system. Under nonpartisan redistricting, Democrats and Republicans will be treated equally in the translation of vote share to seat share and will require nearly identical percentages of the statewide vote share to achieve a majority of legislative seats. Iowa’s results are plotted above in Figure 2.

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139 See King, supra note 71, at 817.
140 See Cox, supra note 52, at 772.
141 See King, supra note 71, at 817–18.
2. Bipartisan Redistricting

Figure 3: Pennsylvania House, 1990–2010

Pennsylvania, with bipartisan redistricting, experienced the lowest levels of electoral responsiveness, with an average of just “0.68”—indicating unresponsive representation. Only two elections had levels of responsiveness greater than “1.” Redistricting itself led to mixed results. Following the 1991 redistricting, responsiveness decreased from “1.34” to “1.” Following the 2001 redistricting, however, responsiveness increased slightly from “0.54” to “0.55.”

These results, while again based only upon one state’s experience, suggest that bipartisan redistricting will lead to the lowest levels of electoral responsiveness. Because enactment of any map requires consent from both political parties, a common result is an incumbent-protection redistricting plan in which both parties agree to leave the current districts largely unchanged.142 This political stability in district lines in turn leads to low levels of

142 See, e.g., Ken Gormley, Reapportioning Election Districts: An Exercise in Political Self-Preservation, USA TODAY MAG., Jan. 1997, at 22–23. Professor Ken Gormley, who served as the Executive Director of the Pennsylvania Legislative Reapportionment Commission during the 1991 redistricting cycle, flatly stated:

Preservation of jobs is the most powerful driving force behind reapportionment, even more so than political rivalries or personal hatreds. The fact is, Democrats and Republicans rally ’round the common goal of preserving each others’ political necks first. . . .

Incumbency is more important than what voters want. It is more important than what the Constitution says. It even trumps the natural urge to beat up the other political party.

Id. at 22.
responsiveness, so that large shifts in statewide vote share are required to achieve any meaningful, corresponding shift in the apportionment of legislative seats.

Bipartisan Pennsylvania—like nonpartisan Iowa—also experienced the near elimination of partisan bias. The average level of bias in the eleven elections surveyed was a scant 0.1% advantage for the Republican Party. Pennsylvania had just three elections in which bias was greater than 3% for either party. Although bias spiked to 8% in favor of the Republican Party in 2004, that election appears to be an outlier. Redistricting itself led to mixed outcomes on partisan bias in bipartisan Pennsylvania. Following the 1991 redistricting, bias was eliminated altogether from an already low 0.1% tilt toward the Democratic Party. Following the 2001 redistricting, however, bias shifted from a 2% Democratic edge to a 4.5% Republican edge.

Low levels of partisan bias are not surprising results of bipartisan redistricting. Because any successful plan requires the input and approval from both parties (or at the least, from one party and a neutral chairman), the potential for political mischief and aggressive partisan gerrymanders is greatly reduced. This result is also consistent with the notion that bipartisan redistricting typically leads to incumbent-protection plans. As one participant in Pennsylvania’s redistricting process noted, partisan raids on the opposition are rare and typically occur only after significant horse trading to preserve most of the incumbent legislators’ districts. The results for Pennsylvania are shown above in Figure 3.

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143 See King, supra note 71, at 815–16.
144 See Gelman & King, Enhancing Democracy, supra note 68, at 552. This twenty-year study of state legislative redistricting found that bipartisan redistricting led to the lowest levels of partisan bias. Id. at 543, 552; see also King, supra note 71, at 815–16.
145 See e.g., King, supra note 71, at 815.
146 Gormley, supra note 142, at 23. Pennsylvania does not have term limits for its state legislature. The Term Limited States, NAT'L CONF. OF ST. LEGISLATURES, http://www.ncsl.org/legislatures-elections/legisdata/chart-of-term-limits-states.aspx (last updated June 2009). This might make incumbency protection even more attractive for legislators and the Reapportionment Commission. Whether the results of this analysis would hold true in a state that uses bipartisan redistricting in conjunction with term limits remains an area for future research. One hypothesis is that incumbency protection would be less important in states with term limits, thereby pushing other redistricting objectives to the fore.
3. Partisan Redistricting

Figure 4: Ohio House, 1990–2010

Ohio, with partisan redistricting, experienced near-proportional representation, with an average electoral responsiveness of “1.05.” Redistricting itself led to mixed results. Following the 1991 redistricting, in which control of the process switched parties, responsiveness more than doubled in Ohio. In fact, the resulting election in 1992 offered the highest level of responsiveness for any Ohio election studied, peaking at “1.47.” Yet during the 2001 redistricting, Republicans drew the lines for a second consecutive cycle, and the opposite result occurred: electoral responsiveness plummeted by two-thirds. The resulting 2002 election offered the lowest level of responsiveness for any Ohio election, bottoming out at “0.45.”

These twin findings, while limited only to Ohio’s experience, suggest the impact on responsiveness in partisan systems depends on whether one party maintains control of the process or if control switches hands. In cycles in which control switches from one party to another, electoral responsiveness will likely

\[\text{Bias } "D"\]

\[\text{Bias } "R"\]

0.25
0.20
0.15
0.10
0.05
0.00
-0.05
-0.10
-0.15
-0.20
-0.25

0.0 0.5 1.0 1.5 2.0 2.5 3.0

Responsiveness

Ohio term limits, which first went into effect during the 2000 General Election, might partially explain this substantial decrease in responsiveness. The Term Limited States, supra note 146. Partisan mapmakers often carve up term-limited members’ districts first, allowing them to redistribute the voters of those districts to achieve maximum political gain. See Brian F. Schaffner et al., Incumbents Out, Party In? Term Limits and Partisan Redistricting in State Legislatures, 4 St. Pol. & Pol’y Q. 396, 407 (2004). This, in turn, results in inefficient voter distribution in minority-party districts, see id., which could help explain the lower responsiveness in the 2002 election. Unlike Ohio, Iowa and Pennsylvania do not have term limits. The Term Limited States, supra note 146 (listing all states with term limits, which do not include Iowa or Pennsylvania).
increase as mapmakers significantly alter the previous district lines to achieve electoral gains.\textsuperscript{148} In consecutive cycles in which the same party draws the lines, responsiveness will decrease dramatically as mapmakers make marginal incumbents safer by cramming minority-party voters into fewer and fewer districts.

Partisan redistricting in Ohio led to extreme levels of bias regardless of which party controlled the process. In the 1990 election—the only one under a Democratic map—Democrats enjoyed a 13\% partisan bias. Following Republican takeover of the Apportionment Board, bias initially declined to near zero for the 1992 and 1994 elections. Apparently it took a few cycles for the new districts to “take effect” on longstanding Democratic officeholders.\textsuperscript{149} The watershed moment for Republicans occurred in 1994; following their takeover of the Ohio House that year, the GOP experienced bias in their favor in the 6\% range for the remainder of the 1990s. Following a second consecutive Republican gerrymander, partisan bias increased sharply from 5\% in 2000 to 21\% in 2002. The 2002 election marked the highest level of partisan bias in any election in this study. Democrats would have needed to win 71\% of the statewide vote that year to win a majority in the Ohio House. For the ten elections conducted under a Republican-drawn map, the GOP experienced, on average, bias in their favor of 4.4\%.

These results lend support to earlier findings on state legislative redistricting. Scholars maintain that bias will be greatest in partisan redistricting because the party drawing the district lines can manipulate the electoral inefficiencies of each district to maintain or expand its legislative majority.\textsuperscript{150} Packing, cracking, and the targeting of incumbent minority party legislators are all strategies that majority parties have used to instill partisan advantages in electoral systems.\textsuperscript{151} Absent the checks and balances from bipartisan redistricting or nonpartisan redistricting, partisan bias will remain a common

\begin{footnotes}
\item[148] See King, supra note 71, at 813–14.
\item[149] See Lee Leonard, The End of an Era in Ohio, ST. LEGISLATURES, July 1994, at 24, 27 (speculating that long-serving House Speaker Vern Riffe “worked a miracle” by clinging to a Democratic majority in 1992 in the face of a Republican-drawn map). Perhaps in Speaker Riffe’s absence, the full effects of the Republican gerrymander in 1991 would have been apparent sooner. Nevertheless, the 1992 election still represented a dramatic swing in bias from the 1990 election, albeit from a heavily Democratic bias to zero bias: a 13\% change.
\item[150] See Gelman & King, Enhancing Democracy, supra note 68, at 543, 552–53; Gelman & King, Estimating the Electoral Consequences, supra note 116, at 281–82; King, supra note 71, at 813–14.
\item[151] See Bruce E. Cain, Assessing the Partisan Effects of Redistricting, 79 AM. POL. SCI. REV. 320, 320–21 (1985) (describing various strategies of achieving partisan gains in redistricting through the manipulation of “electoral inefficiency”). Typical examples include packing large percentages of Democratic voters into a few inner-city districts to decrease the overall efficiency of Democratic votes statewide; cracking predominantly Republican suburbs into multiple districts to dilute the overall efficiency of Republican votes; or drawing incumbent legislators from the minority party out of their districts altogether in an effort to disadvantage those legislators. See id.
\end{footnotes}
feature of partisan redistricting. The results for Ohio are shown above in Figure 4. The composite results are plotted together in Figure 5, below.

Figure 5: Composite Results

As this analysis demonstrates, and as Figure 5 depicts, only nonpartisan redistricting is suited to achieve the twin aims of meaningful redistricting reform: increasing electoral responsiveness and reducing partisan bias. While bipartisan redistricting also proved capable of reducing partisan bias, it came at a price—namely, the creation of incumbent-protection gerrymanders which significantly reduced electoral responsiveness. States pursuing redistricting reform should not settle for trading one undesirable outcome in the form of partisan gerrymanders for another in the form of incumbent-protection gerrymanders. As this study shows, it is possible to establish a redistricting procedure that fosters elections where voters’ choices matter in apportioning legislative control and both political parties are treated fairly at the ballot box. The next section sketches the contours of an ideal nonpartisan redistricting institution and map-making procedure.
IV. A Roadmap for Reform: Nonpartisan Redistricting, Citizen Participation, and Limited Legislative Oversight

Because of the Federal Judiciary's reluctance or inability to provide a clear remedy for partisan gerrymanders, and because congressional redistricting remains a creature of state law, meaningful efforts to curtail egregious partisan gerrymandering must be grounded in state constitutional reforms. This section provides a roadmap for those reforms, and based upon the findings in the empirical analysis from Part III, recommends that states adopt a nonpartisan redistricting commission to best address the scourge of partisan gerrymandering. The commission will be most successful if: (1) it is comprised of experienced, nonpartisan civil servants, and (2) adopts a hybrid approach of publicly submitted redistricting plans and limited legislative approval of the final plan. These measures are necessary to instill legitimacy and expertise in the redistricting process, to encourage public participation, and to ensure democratic accountability and oversight of the commission's work.

A. Composition of the Nonpartisan Redistricting Commission

A nonpartisan, technocratic redistricting commission housed in a state's legislative service agency represents the best hope for removing the worst political avarice from one of democracy's most important tasks. This type of

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See supra Part II.

Although Article I, Section 4 of the U.S. Constitution grants Congress the ultimate power to regulate congressional elections, including congressional redistricting, the Constitution places that authority in the hands of state legislatures first, and Congress has only sparingly used its residual power, leaving congressional redistricting almost entirely to the states. James A. Gardner, Foreword: Representation Without Party: Lessons from State Constitutional Attempts to Control Gerrymandering, 37 RUTGERS L.J. 881, 886-87 (2006).

We can categorize reform proposals as either procedural- or substantive-criteria reforms. See Cox, supra note 52, at 756. Cox assigned different names to these two categories and added a third "outcome-based regulations" category, but the thrust remains the same. Reforms can affect either the procedural mechanism for selecting mapmakers and maps or the substantive criteria that mapmakers must account for when redistricting (i.e., contiguity, compactness, preservation of political subdivisions, and so on). See id. Because contemporary redistricting reforms aimed at curtailting partisan gerrymanders have centered on procedures, see Adam B. Cox, Designing Redistricting Institutions, 5 ELECTION L.J. 412, 412 (2006), and because a faithful study of substantive-criteria reforms and their effects on electoral outcomes remains outside the scope of this study, all recommendations are tailored toward procedural reforms. Future research might isolate substantive requirements like competitiveness, compactness, or overall fairness to assess their ability to increase electoral responsiveness and reduce partisan bias.

The American Bar Association has also recently endorsed some form of independent redistricting commission (one outside a state's legislature) as a way to reduce partisan gerrymandering. See A.B.A. HOUSE OF DELEGATES, REPORT NO. 102A, DAILY JOURNAL: 2008 MIDYEAR MEETING (2008).
redistricting institution would benefit from greater legitimacy, expertise, and administrative ease than other variations of nonpartisan redistricting commissions. Additionally, with two important modifications to the submission and approval process for proposed maps, this type of redistricting institution can remove political self-dealing from the process while preserving core attributes of democratic decision making like public participation, scrutiny, and accountability.

Despite a growing number of states experimenting with a nonpartisan or independent redistricting process, no consensus exists for who should sit on the redistricting commission or how those members should be selected. The majority of reform states have adopted some variation of the citizen redistricting commission, "assigning the redistricting pen to a set of potentially partisan citizens not directly beholden to incumbent elected officials." These citizen commissioners are selected either by sitting elected officials or, in California’s case, through something akin to a jury-selection process. In contrast, Iowa delegates primary redistricting authority to a nonpartisan staff of legislative service employees—experienced civil servants who already play a neutral, supporting role for the legislature in its day-to-day operations.

There are clear benefits of assigning redistricting authority to a nonpartisan body of civil servants with legislative experience as opposed to a group of everyday citizens who are selected once a decade to perform the task. The relative legitimacy, expertise, and administrative ease associated with a nonpartisan, technocratic commission all suggest the Iowa model is a better vehicle for redistricting reform. First, a technocratic commission offers a strong defense to any accusations of lingering partisanship or political interference with the redistricting process. Since legislative service agencies already perform their roles in a politically neutral manner, and since legislative service staff members are not dependent on appointment from elected officials like...
most citizen redistricting commissions, allegations of partisan motives seem wanting.\textsuperscript{163}

Secondly, a technocratic commission offers expertise and a reservoir of institutional knowledge that a citizen commission is unlikely to obtain. Redistricting is an inherently \textit{specialized} endeavor involving complex, often conflicting considerations like population counts, compactness of districts, racial and ethnic considerations, partisan composition, county and municipal boundaries, and preservation of communities of shared interests.\textsuperscript{164} In short, these are just the type of complicated decisions to which we might traditionally defer to a body of experts to sort through.\textsuperscript{165} In addition to having a base of expertise from which to operate, a technocratic commission housed in a legislative service agency would also \textit{maintain} redistricting knowledge better than a one-and-done citizen commission. Institutional memory and the accumulation of best practices from prior redistricting cycles would add to the legitimacy and effectiveness of the nonpartisan commission.

Finally, from an administrative standpoint, the transition to a technocratic redistricting commission comprised of legislative service agency staffers would be noticeably less cumbersome than a transition to a citizen commission. The infrastructure, funding, staffing, and logistical pieces are already in place for a commission of legislative service agency experts. No additional burden is placed upon the state to initiate the redistricting process. Contrast with a citizen redistricting commission like those in Arizona or California which entail convoluted, time-consuming selection processes;\textsuperscript{166} require independent

\textsuperscript{163} Indeed, since Iowa enacted its redistricting procedure in 1980, the Iowa Legislature has approved a legislative service agency plan without substantive modification each time, and no one has ever filed suit challenging an enacted plan. See Cook, \textit{supra} note 111, at 3. Contrast with Arizona’s Independent Redistricting Commission—a citizen commission with four of five members appointed by legislative leaders (with an independent chairperson)—which has experienced great tumult and failed to deflect accusations of overt partisanship or lawsuits. See Pitzl, \textit{supra} note 7, at Al.

\textsuperscript{164} See Gardner, \textit{supra} note 153, at 894–97.

\textsuperscript{165} Cf. Gerken, \textit{supra} note 162, at 194. Some scholars, however, argue that a citizen commission is better suited to address these competing concerns. See Levitt, \textit{supra} note 10, at 537–39. But this assumption is predicated on the false notion that the nonpartisan commission would also be charged with establishing which substantive redistricting criteria to use and in which hierarchy to value them. See id. at 540–41. Yet as the Iowa experience instructs, the elected legislature still makes those value choices. See IOWA CODE § 42.4 (2011) (articulating explicit redistricting standards to follow). The Legislative Service Agency staff merely works within that guidance to produce legislative maps that are free of self-dealing. See Cook, \textit{supra} note 111, at 3.

\textsuperscript{166} See ARIZ. CONST. art. IV, pt. 2, § 1(3)-(13) (explaining that the Arizona Commission on Appellate Court Appointments solicits applications for the Arizona Independent Redistricting Commission and forwards a pool of twenty-five nominees—ten Democrats, ten Republicans, and five unaffiliated voters—to the state’s four legislative leaders, who each have a seven-day window to make an appointment from the pool; those four core members of the redistricting commission must then select, by a majority vote, one of the five unaffiliated applicants from the eligible pool to serve as the commission’s chairperson);
funding sources for office space, staffing, equipment, and contracting; and must be constituted anew for each redistricting cycle.

Despite these obvious advantages to a technocratic form of nonpartisan redistricting commission, it is not a panacea for every state. States without a full-time, professional legislature aided by a nonpartisan legislative service agency would be better served by a citizen commission. Even for states with a nonpartisan legislative service agency, this proposal remains open to criticisms that redistricting might become too removed from public participation, scrutiny, and accountability. In other words, by removing the more perverse political elements from redistricting, the process will simultaneously forego some beneficial attributes of democratic decision making. Although these criticisms are valid, they are easily overcome by

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168 Ariz. Const. art. IV, pt. 2, § 1(23); Cal. Const. art. XXI, § 2(a).
169 Without a nonpartisan legislative service agency in place, many of the advantages of this proposal vanish. For those states, one option is to constitute a technocratic commission from scratch, perhaps by enlisting academics and geographers. The other alternative is to follow the lead of states like California and Washington in creating nonpartisan commissions of interested citizens.

170 See Michael S. Kang, De-Rigging Elections: Direct Democracy and the Future of Redistricting Reform, 84 Wash. U. L. Rev. 667, 668 (2006) (arguing that any nonpartisan redistricting commission would unnecessarily shield the process from public engagement and oversight); cf. Gerken, supra note 162, at 194–95 (discussing electoral reform commissions more generally and arguing that technocratic commissions are susceptible to charges of being "antidemocratic or out of touch" and that some infusion of common knowledge or "everyday politics" can successfully inoculate nonpartisan, expert commissions from those criticisms).
171 See Kang, supra note 170, at 690; see also Levitt, supra note 10, at 537–38 (arguing citizen commissions are preferable because it is expected that redistricting institutions must engage in "substantially political task[s]").
structuring the process of map submission and approval in a way that encourages public participation and provides for democratic oversight.\textsuperscript{172}

As the next section explains, by coupling a nonpartisan, technocratic redistricting commission with an open submission process—whereby any interested party could submit a proposed map for scoring based upon the substantive criteria the state has adopted—redistricting would benefit from the legitimacy and expertise of the technocratic commission while simultaneously fostering public participation and engagement. Moreover, by maintaining a limited form of legislative approval of the final map, the process would still have the advantages of democratic accountability and oversight.

B. Procedure for Enacting a Redistricting Plan

Infusing a nonpartisan, technocratic redistricting commission with strong citizen participation and limited oversight from an elected legislature is a compelling vehicle for reform. Indeed, states have already enacted or experimented with key components of this reform package piecemeal and have achieved noticeable success. Combining the disparate elements into one coherent redistricting institution would build on those successes and provide a powerful alternative to blatant partisan gerrymandering. The process would incorporate elements from Iowa's nonpartisan redistricting system,\textsuperscript{173} from Ohio's recent public redistricting contests,\textsuperscript{174} and from Washington's independent redistricting system, which allows the legislature a final "tweak" to modify the independent commission's proposed plan.\textsuperscript{175}

\textsuperscript{172} Iowa already provides for public engagement through the use of a citizens' advisory panel which conducts public hearings and solicits input on any proposed plan prior to its enactment. \textsc{Iowa Code} §§ 42.5–42.6 (2011). Iowa's redistricting process also provides for democratic oversight and accountability by requiring legislative endorsement of any proposed redistricting plan. \textsc{Id.} § 42.3.

\textsuperscript{173} See supra notes 105–10 and accompanying text.

\textsuperscript{174} The Ohio Campaign for Accountable Redistricting recently conducted a citizen redistricting competition in which interested parties submitted their own maps for assessment based on a pre-determined set of objective scoring criteria (primarily centered upon Ohio's actual substantive criteria for redistricting). See \textsc{Ohio Redistricting Competition Rules and Scoring, Ohio Campaign for Accountable Redistricting}, 3–16 (2011) http://www.moneyinpoliticsohio.org/competition/rules2.pdf. This competition generated statewide attention and produced legislative and congressional redistricting proposals that were far more politically competitive and geographically compact than the gerrymandered districts the Ohio Apportionment Board and legislature adopted. See Joe Hallett, \textit{Coalition Spokesman Advocates Fairer Redistricting}, \textsc{Columbus Dispatch}, Sept. 29, 2011, at B2. Interestingly, a Republican state legislator from Illinois won the competition for both the congressional map and the state legislative maps. Jim Siegel, \textit{Map Wins for Fair-Redistricting Plan}, \textsc{Columbus Dispatch}, Aug. 25, 2011, at B3; Jim Siegel, \textit{Dems Offer Redistricting Drawn by Illinois Republican}, \textsc{Columbus Dispatch}, Sept. 20, 2011, at B5.

\textsuperscript{175} The Washington State Legislature is permitted to modify its independent redistricting commission's proposed plans, but only if the adjustments affect no more than two percent of a district's population, and only if two-thirds of each chamber votes in favor of the
1. The Nonpartisan Redistricting Commission’s “Best Effort” Map

This model redistricting process would begin, much like in Iowa, with a state’s legislative service agency (the “technocratic commission”) crafting a proposed congressional map in accordance with the substantive redistricting criteria outlined in the state’s constitution.176 Delegating the first crack at redistricting to a nonpartisan, technocratic commission removes the potential for partisan gerrymandering and self-interest among legislators. It also places a premium on the legitimacy and expertise of the process.177 The technocratic commission’s proposal would represent the state’s “best effort” map and would serve as a starting point for the follow-on public redistricting competition.

2. Citizen Participation: The Public Redistricting Competition

To ensure citizen participation and transparency, the commission would also conduct a public redistricting competition, much like the recent effort in Ohio,178 by making mapping software available to the public and soliciting citizen-submitted maps. The commission would then evaluate every map submitted, including its own “best effort” map, and select for further consideration the three proposals that score the highest on objective measurements of the state’s substantive redistricting criteria.179 By opening the redistricting process to the public in such a straightforward and meaningful way, states will send a strong signal to their electorates that the bad old days of back-room deals and secretive redistricting negotiations are finished.180

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176 WASH. CONST. art. II, § 43(7); WASH. REV. CODE ANN. § 44.05.100 (West 2012). Since legislators do tend to know their districts best, “[a]llowing the legislature a final opportunity to tweak commission lines may both facilitate the passage of redistricting reform in the first place, and permit an escape valve to correct unintended negative consequences of particular redistricting decisions.” CITIZEN’S GUIDE TO REDISTRICTING, supra note 90, at 77.

177 Again, any “value choices” for which substantive redistricting criteria to adopt and in which order to prioritize them will be left to the states’ citizens and elected officials. The redistricting institution will merely operate within those express confines. See CITIZEN’S GUIDE TO REDISTRICTING, supra note 90, at 78.

178 See supra Part IV.A.

179 See supra note 174 and accompanying text. In the Ohio competition, interested participants registered online and were given access to census tract data, mapping software, and redistricting requirements and scoring criteria; participants then e-mailed their proposals back to the competition’s hosts for scoring. See id.

180 Although three proposals seems at first blush like an arbitrary number, this provision provides the legislature with some flexibility in approving a final map while not overwhelming legislators with a laundry list of potential redistricting proposals. States could, of course, increase or decrease this number as they deem fit.

180 Speaker of the United States House of Representatives, Ohio Republican John Boehner, dictated much of the Buckeye State’s 2011 redistricting process away from public view through emails from his Washington consultants to a pair of Ohio-based redistricting staffers who were holed up in a taxpayer-funded hotel room. See Aaron Marshall, Boehner Aide Was Calling the Shots on Ohio Redistricting, Emails Show: Coalition’s Report Details
Moreover, "[by] establish[ing] a pool of 'winners,' rather than a single winning plan," from the competition, this system ensures some flexibility in the decision-making process to account for factors that do not easily lend themselves to objective measurements.\textsuperscript{181}

3. Limited Legislative Oversight and Approval

Next, to maintain democratic accountability and oversight, the commission would forward the three highest-scoring proposals to the legislature for consideration. At this point, the legislature may enact one of the three plans and forward it to the Governor for signature or, if necessary, may tweak one of the existing plans prior to enacting it, much like Washington's independent redistricting process.\textsuperscript{182} As in Washington, the legislature would be limited to how drastically it can modify any of the existing plans (somewhere less than two percent of any district's population), and any modification would require a two-thirds vote of both chambers.\textsuperscript{183}

This combination of legislative constraint and discretion serves three important goals. First and foremost, it removes the potential for blatant partisan gerrymanders. With a limited menu of baseline redistricting maps from which to choose, the legislature could not act with unbridled self-interest or partisan extremism. Secondly, by vesting the legislature with some control and participation in the process, this set-up removes the pitfalls of redistricting by automation,\textsuperscript{184} and shields the process from charges that it lacks democratic accountability and oversight. Additionally, in order for legislators to agree to concede primary control of redistricting, they will likely want some form of final endorsement, and this proposal assures their continued involvement in the redistricting process.

4. A Self-Executing Provision

Should the legislature and Governor fail to approve any of the three plans within a specified time period, then the commission would have the power to enact its own choice from among the three proposals, as originally submitted. This self-executing provision discourages delay tactics designed to throw the

\textit{Behind-the-Scenes Influence}, \textit{Plain Dealer} (Cleveland), Dec. 13, 2011, at A1. Democrats in Washington, D.C. also tried to influence the redistricting process by providing guidance, feedback, and encouragement to Illinois's legislative leaders as they proceeded to enact a partisan gerrymander. See supra notes 59–60 and accompanying text.

\textsuperscript{181} Levitt, \textit{supra} note 10, at 528–29. One example might be including notable landmarks or symbolic attractions within a particular district.

\textsuperscript{182} See supra note 175 and accompanying text.

\textsuperscript{183} See \textit{Wash. Rev. Code Ann.} § 44.05.100 (West 2012).

\textsuperscript{184} See Levitt, \textit{supra} note 10, at 522–26.
redistricting process into the judicial system.\footnote{Iowa also has a backup plan in case the legislature fails to approve one of the Legislative Service Agency’s maps, but under that system, the Iowa Supreme Court assumes all responsibility for redistricting. IOWA CONST. art. III, § 35. Determined partisans in the legislature could abuse such an arrangement if they felt the Judiciary would lend a friendly ear. Keeping the self-executing provision within the nonpartisan commission removes further temptation for partisan gain. Washington’s independent redistricting commission does not require legislative endorsement; legislative tweaks are permissive, but in their absence, the commission’s plan is self-executing. WASH. CONST. art. II, § 43(7).} It also gives legislators a strong incentive to approve one of the plans, lest they lose any say in the process by sending the final determination back to the redistricting commission or subject themselves to “public outcry” for bucking the recommendations of the nonpartisan commission.\footnote{Christopher S. Elmendorf, *Representation Reinforcement Through Advisory Commissions: The Case of Election Law*, 80 N.Y.U. L. REV. 1366, 1388–89 (2005) (discussing how “singularly effective” advisory redistricting commissions have been in foreign countries and in Iowa and describing how legislators are reluctant to go against commission proposals).}

This model redistricting proposal marks a necessary compromise. On the one hand, we must shield redistricting from the baser elements of politics to achieve overarching goals like increasing electoral responsiveness and reducing partisan bias. On the other hand, redistricting should not occur in a vacuum, removed from public participation, scrutiny, and accountability. To achieve that balance, the process necessarily involves several stages of redistricting actors and actions. One concern is that a complicated reform proposal might be difficult to explain to low-information voters\footnote{See Heather K. Gerken, *Getting from Here to There in Redistricting Reform*, 5 DUKE J. CONST. L. & PUB. POL’Y 1, 2 (2010) (“[V]oters tend to care about substantive outcomes, not process reforms.”).} who must approve of any changes to a state’s redistricting procedures. However, the actual content of redistricting reforms seems to have little impact on their fate at the polls.\footnote{See Nicholas Stephanopoulos, *Reforming Redistricting: Why Popular Initiatives to Establish Redistricting Commissions Succeed or Fail*, AM. CONST. SOC’Y L. & POL’Y 21–22 (Mar. 2007), http://www.acsclaw.org/sites/default/files/Stephanopoulos_-_Redistricting_Initiatives_March_2007.pdf (examining redistricting reform initiatives that succeeded during the past century and finding “the actual content of a redistricting initiative also has little impact” on the measure’s success or failure at the polls).}

reform proposals also involve complex balancing between redistricting actors and the requirements for adoption of a particular plan. Complexity, therefore, is not the natural enemy of reform.

States remain laboratories of democracy, free to experiment with new and better solutions to meet the exigencies of the times. The proposal detailed above might not be a seamless fix for the many faces of redistricting politics and redistricting reform. Indeed, no solution can fit perfectly with the idiosyncrasies of each state's politics or its polity. What this proposal offers is a clear roadmap, grounded in empirical research, for addressing the invidious consequences of redistricting's original sin: the partisan gerrymander.

Placing primary redistricting authority in the hands of a commission of nonpartisan, technocratic mapmakers signals a state’s emphasis on legitimacy and expertise in drawing its representational boundaries. Opening the process and redistricting resources to any interested citizen ensures public participation and transparency. Finally, maintaining limited legislative oversight guarantees some flexibility, and most importantly, democratic accountability for one of democracy's fundamental tasks. Enacting some, or all, of these suggestions will go a long way to reforming redistricting and, in the process, our government itself.

V. CONCLUSION

Partisan gerrymandering of congressional districts, while not new to American politics, has become so pervasive and so egregious that it now threatens the ability of the federal government to carry out its essential functions. Districts drawn for the sole purpose of advantaging one political party or one incumbent legislator not only deny voters a meaningful choice in who will represent them in Congress, they also force congressional candidates to tack to the ideological extremes just to survive the primary election. This in turn leads to ideologically entrenched members of Congress and crippling political polarization within our nation's capitol.

We can, and we must, do better. Although the Judiciary has proven ineffective at preventing or remedying the harmful effects of partisan gerrymanders, state constitutional reforms provide hope. As this Note empirically demonstrates, states that transition to a nonpartisan redistricting

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190 Arizona requires its Independent Redistricting Commission to propose a plan, undertake traditional public notice and comment procedures, and respond to legislative recommendations. Ariz. Const. art. IV, pt. 2, § 1(14)-(17). California's process contemplates at least three different decision-making stages: redistricting commission approval, citizen referendum, and California Supreme Court appointment of special masters in the event of the commission's failure to adopt a plan. Cal. Const. art. XXI, § 2(g)-(j).

191 See Citizen's Guide to Redistricting, supra note 90, at 74–83. See generally Elmendorf, supra note 186 (advocating advisory redistricting commissions to work in conjunction with state legislatures); Kang, supra note 170 (arguing redistricting maps should be subject to public referendum).
procedure are more likely to engender elections that are responsive to voters' choices and that treat both political parties fairly in the translation of statewide vote totals to their share of congressional seats. Indeed, responsive and fair elections remain an attainable dream—not a lost cause.

The key components of a successful, nonpartisan redistricting reform proposal already exist, albeit piecemeal. States pursuing reform would do well to combine those disparate components into one coherent redistricting institution. Combining a nonpartisan redistricting commission, a citizen redistricting competition, and limited legislative oversight and approval of the final congressional map would achieve what no other redistricting reform purports to accomplish: removing political avarice from an inherently and irreconcilably political process. By shielding the mapmaking process from partisan actors who are focused on self-interest and political gain while simultaneously fostering transparency, public participation, and democratic oversight, this redistricting institution and mapmaking procedure offer a credible, attainable counter to the invidious consequences of partisan gerrymandering.
Figure 6: A Tale of Two Congressional Maps

The map on the left is Ohio’s enacted congressional map, approved by the Ohio General Assembly, for the 2012–2020 elections. The map on the right was the winning proposal from among over fifty citizen entries in the “Ohio Redistricting Competition,” a public redistricting competition conducted in 2011 by the Ohio Campaign for Accountable Redistricting.\textsuperscript{192}

\textsuperscript{192} Both maps and detailed information about the Ohio Redistricting Competition are available online. \textit{Draw the Line Ohio}, \textit{Draw the Line Midwest}, http://drawthelinemidwest.org/ohio/ (last visited Feb. 13, 2012).
Table 1: Electoral Responsiveness and Partisan Bias Data

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