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No. 2022-SC-0522

In the Kentucky Supreme Court

DERRICK GRAHAM, JILL ROBINSON, MARY LYNN COLLINS,
KATIMA SMITH-WILLIS, JOSEPH SMITH, and THE KENTUCKY
DEMOCRATIC PARTY,

Plaintiffs-Appellants,

v.

MICHAEL ADAMS, in his official capacity of Secretary of State, and
KENTUCKY STATE BOARD OF ELECTIONS,

Defendants-Appellees.

APPEAL FROM FRANKLIN CIRCUIT COURT
CASE NO. 22-CI-00047

BRIEF OF APPELLANTS

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CERTIFICATE OF SERVICE

In accordance with RAP 30(B), on June 26, 2023, the undersigned filed this brief with the Court’s electronic filing system which caused a copy to be served on all counsel of record. The undersigned also served copies of the brief via U.S. Mail on (1) Hon. Thomas Wingate, Franklin Circuit Court, 222 St. Clair St., Frankfort, KY 40601; (2) Victor Maddox, Heather Becker, Alex Magera, Aaron Silletto, Office of Attorney General, 700 Capital Avenue, Suite 118, Frankfort, KY 40601; (3) Taylor Brown, Kentucky State Board of Elections, 140 Walnut Street, Frankfort, KY 40601; (4) Jennifer Scutchfield, Office of the Secretary of State, 700 Capital Avenue, Suite 152, Frankfort, KY 40601. Undersigned counsel further certifies that it did not retrieve the appellate record from the Franklin Circuit Clerk.

s/ Michael P. Abate

APPELLANT'S BRIEF

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INTRODUCTION

In a representative democracy, voters should choose their leaders—not the other way around. The question presented by this case is whether anything in Kentucky’s Constitution prohibits partisan gerrymandering, which has been rightly described by the U.S. Supreme Court as “incompatible with democratic principles.” *Rucho v. Common Cause*, 139 S. Ct. 2484, 2506 (2019).

Here, the trial court found that Kentucky’s State House and Congressional maps were partisan gerrymanders, based on a multi-day trial featuring testimony from some of the world’s leading gerrymandering and political science experts. It also found the State House map split and/or combined counties far more than necessary to achieve population equality. Nevertheless, the court held that Kentucky’s Constitution left courts powerless to rein in the excesses of the legislative supermajority.

The trial court got the facts right but the law wrong. Section 33 of the Kentucky Constitution, which prohibits the splitting and combining of counties unless necessary to achieve population equality, is binding unless a specific prohibition *must* give way to satisfy one-person, one-vote standards. Likewise, the Constitution’s “free and equal” elections clause prohibits partisan gerrymandering—as Pennsylvania’s Supreme Court held when interpreting the provision the framers of the 1891 Constitution copied. And gerrymandering violates both equal protection and free speech principles. Any other conclusion would render hollow the fundamental rights guaranteed to Kentucky’s citizens by its Constitution to prohibit this very kind of gerrymandering.

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STATEMENT OF THE CASE

I. Factual Background

Every ten years, the Kentucky General Assembly redraws electoral maps for the state Senate and House and the U.S. Congressional Districts. This lawsuit was filed to challenge the constitutionality of two maps enacted during the 2022 legislative session: the new maps for the State House of Representatives (HB 2) and U.S. Congressional (SB 3) districts. The trial court correctly concluded that both maps constitute partisan gerrymanders. R. 1870-75.

The maps created by HB 2 were first made public on December 30, 2021, just days before the legislative session began. (VR 4/5/22, 4:12:00 – 4:12:50). SB 3 was revealed on the Senate floor on the first day of session. By the fifth day of session, HB 2 and SB 3 passed the general assembly almost entirely along party lines. (VR 4/5/22, 4:12:15 – 4:13:30).

Governor Beshear vetoed both HB 2 and SB 3 on January 19, 2022, because he believed they are “unconstitutional political gerrymander[s].” The Governor vetoed HB 2 because it “appears designed to deprive certain communities of representation” in part by “excessively split[ting] counties including Fayette, Boone, Hardin, and Campbell, and carv[ing] up other

counties such as Jefferson and Warren for partisan reasons, contrary to the Kentucky Constitution.” HB 2 Veto Message¹; HB 2 Map (DEX 1², Tab 1).

Governor Beshear vetoed SB 3, in part because it “re-draws the First Congressional District to wind across hundreds of miles, from Franklin to Fulton County” and is plainly “not designed to provide fair representation to the people of Kentucky and was not necessary because of population changes.” SB 3 Veto Message³; SB 3 Map (DEX 1, Tab 11).

The next day the General Assembly overrode Governor Beshear’s vetoes—again, almost entirely along party lines. At that time, HB 2 and SB 3 became effective by virtue of their “emergency clause[s].” (*See* R. 133; R. 287).

Plaintiffs-Appellants filed their lawsuit challenging HB 2 and SB 3 that same day. (R. 1-287). Later in the legislative session, the Democratic minority introduced its own State House redistricting proposal—HB 191—which was not adopted by the General Assembly but is used by Appellants as a comparator to HB 2 to demonstrate that it is possible to draw a more Constitutionally sound redistricting map. (*See* R. 134-235).

Although the trial court agreed that HB 2 and SB 3 constitute partisan gerrymanders, the court ultimately denied relief based on the erroneous holding that Kentucky’s constitution provides no remedy. (R. 1832-1903). The

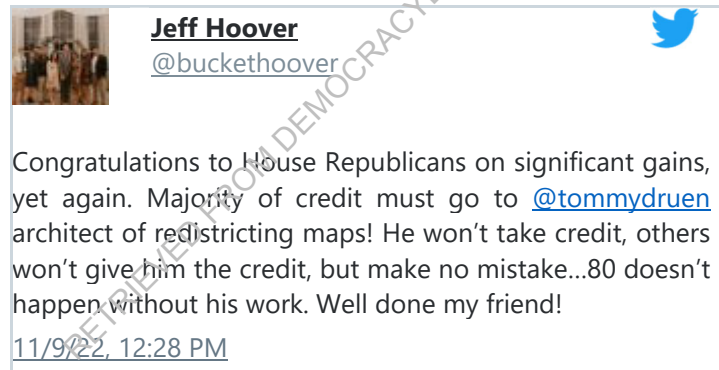
¹ Available at: <https://apps.legislature.ky.gov/record/22rs/hb2/veto.pdf>.

² Exhibits admitted at trial are cited as “PEX __” for Plaintiffs’ Exhibits and “DEX __” For Defendants’ Exhibits.

³ Available at: <https://apps.legislature.ky.gov/record/22rs/sb3/veto.pdf>.

2022 elections were conducted under the gerrymandered maps, which had their intended effect. Democrats won only 20 seats in the Kentucky House, and several incumbent Democratic legislators were defeated after their districts were targeted through gerrymanders, including Reps. Jeff Donohue (37-Jefferson), Angie Hatton (94-Pike), Charles Miller (28-Jefferson), Patti Minter (20-Warren), and Buddy Wheatley (65-Kenton). Indeed, Democrats only won eight contested races statewide.⁴

Shortly after the election, former House Speaker Jeff Hoover tweeted his congratulations to the person he called the “architect of redistricting maps.” Hoover was clear that 80 seats “doesn’t happen without” his maps:



⁴ The trial court took judicial notice of the unofficial 2022 election results (R. 1844), which were subsequently certified as official and made available on the Kentucky State Board of Elections’ website, the contents of which the parties have stipulated is admissible (R. 1835). See <https://elect.ky.gov/results/2020-2029/Pages/2022.aspx>.

Druen demurred, noting it was really a team effort:



A. HB 2 Violates Section 33 of the Kentucky Constitution.

Section 33 of the Kentucky Constitution spells out specific requirements that Kentucky's legislative map drawers must follow when reapportioning our Commonwealth:

The first General Assembly after the adoption of this Constitution shall divide the State into thirty-eight Senatorial Districts, and one hundred Representative Districts, as nearly equal in population as may be *without dividing any county*, except where a county may include more than one district, which districts shall constitute the Senatorial and Representative Districts for ten years. *Not more than two counties shall be joined together to form a Representative District*: Provided, in doing so the principle requiring every district to be as nearly equal in population as may be shall not be violated. At the expiration of that time, the General Assembly shall then, and every ten years thereafter, redistrict the State according to this rule, and for the purposes expressed in this section. If, in making said districts, inequality of population should be unavoidable, any advantage resulting therefrom shall be given to districts having the largest territory. *No part of a county shall be added to another county to make a district, and the counties forming a district shall be contiguous.*

Ky. Const. § 33 (emphases added). As relevant to this case, Section 33 mandates that mapmakers must not: (1) split counties, unless they are large enough to contain more than one district; (2) create districts that contain more

than two counties; and (3) add a part of one county to another to make a district.

From the first redistricting challenge under the 1891 Constitution, Kentucky courts have recognized that these commands cannot be literally observed in every instance while creating 100 districts of roughly equal population from among Kentucky's 120 counties. *See Ragland v. Anderson*, 100 S.W. 865, 866-67 (Ky. 1907). To reconcile these competing constitutional prerogatives, *Ragland* held that Section 33's mandates must be followed unless absolutely "necessary in order to effectuate that equality of representation which the spirit of the whole section so imperatively demands." *Ragland*, 100 S.W. at 870 (emphasis added). Kentucky courts have never retreated from that well-reasoned rule emphasizing the framers' insistence on maintaining county integrity during redistricting. *See, e.g., Legislative Research Commission v. Fischer*, 366 S.W.3d 905, 912 (Ky. 2012) ("*Fischer IV*").

Kentucky courts have adopted a black-letter rule that each of its state house districts must be within +/- 5% of the "ideal" district population. The parties agree the "ideal" district contains 45,058 Kentuckians,⁵ and that each district created by HB 2 is within 5% of the ideal.

Kentucky courts also have held that, to satisfy Section 33, a map must split the fewest number of counties possible. The parties agree that the

⁵ This number is obtained by dividing Kentucky's population (4,505,800) by the number of legislative districts (100).

minimum number of counties that must be split to draw a House map with 100 districts within 5% of the ideal population is 23 counties. (R. 1835). These splits are required either because the counties' populations are too large to fit within a single house district or because the geography and population of the counties requires an additional split to join it with an adjacent county.

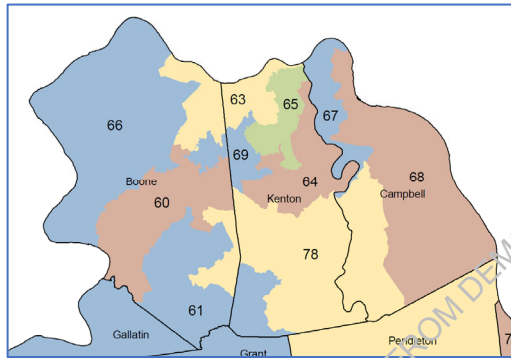
The parties disagree, however, on whether Section 33 imposes any additional requirements on mapmakers. It is undisputed that HB 2 splits counties far more times than necessary to comply with Kentucky's population equality rules. (VR 4/5/22, 11:08:42 – 11:13:49; VR 4/7/22, 4:19:49 – 4:21:14). Specifically, HB 2 splits those 23 counties a total of 80 times. (VR 4/5/22, 3:38:28 – 3:38:41; *see also* DEX 1, Tab 1). HB 191, by contrast splits those 23 counties only a total of 60 times. *Id.*⁶

Section 33 also states that “[n]o part of a county shall be added to another county to make a district.” Ky. Const. § 33. HB 2 creates 45 districts that violate this rule: District Nos. 1, 2, 3, 5, 6, 8, 10, 14, 16, 18, 19, 22, 26, 27, 33, 37, 39, 45, 48, 52, 55, 56, 61, 63, 69, 71, 73, 78, 80, 82, 83, 85, 86, 87, 88, 89, 90, 91, 92, 94, 95, 96, 97, 98, and 100. (VR 4/5/22, 3:39:29 – 3:40:48). HB 191,

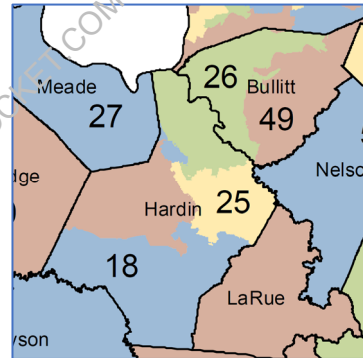
⁶ The counties HB 2 splits more times than is necessary to achieve population equality are: Fayette (8 instead of 7), Boone (5 instead of 3), Hardin (4 instead of 2-3), Campbell (2 instead of 1), Madison (3 instead of 2), Bullitt (2 instead of 1), Christian (2 instead of 1), McCracken (3 instead of 1-2), Oldham (2 instead of 1), Pulaski (4 instead of 1), Laurel (5 instead of 1-3), Pike (3 instead of 1), and Jessamine (3 instead of 1) Counties. *See* DEX 1, Tab 1 (A range of required splits is provided for some counties because changes to the district splits in one county have a spillover effect into other counties.).

by contrast, creates only 31 multi-county districts. (VR 4/5/22, 3:40:48 – 3:41:10; PEX 4).

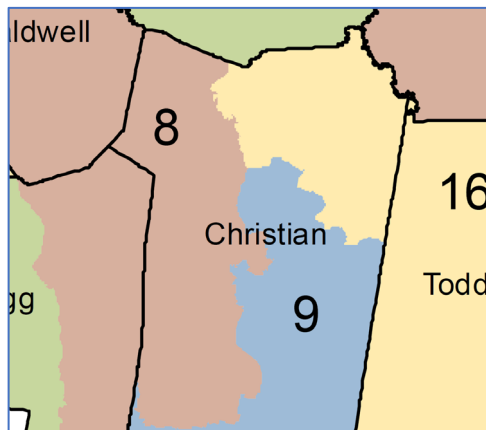
The following maps of Northern Kentucky (Boone, Kenton, and Campbell), Bullitt/Hardin, Christian, Fayette, McCracken, and Pike Counties illustrate how the HB 2’s authors unconstitutionally divided counties and joined multiple portions of one county with neighboring ones in violation of Section 33:



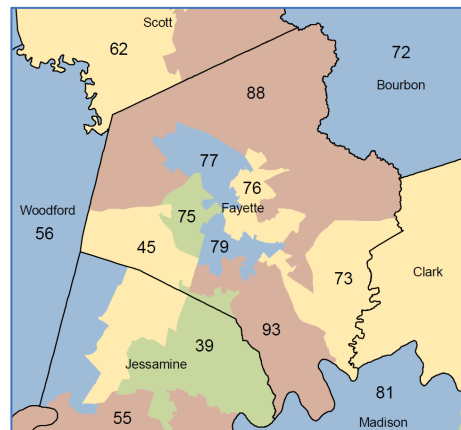
Northern Kentucky



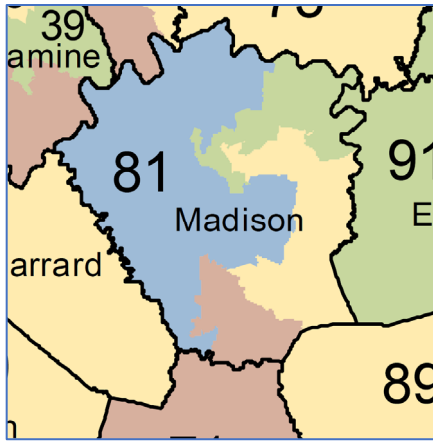
Bullitt/Hardin



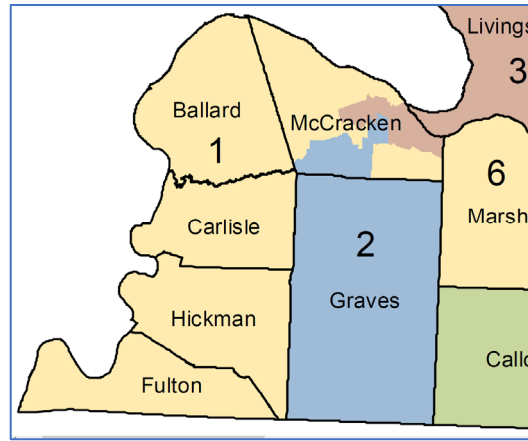
Christian



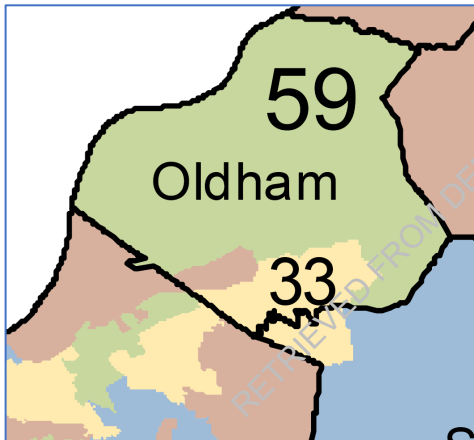
Fayette



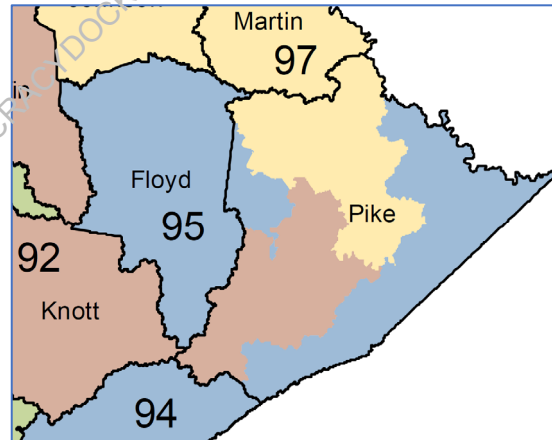
Madison



McCracken



Oldham



Pike

Source: DEX 1, Tab 1 (HB 2 Map).

Pike County is a useful exemplar. Pike County is divided into four districts, all of which take a small portion of the county and pair it with neighboring counties to form a district. (That had the desired effect: Rep. Angie Hatton, the House Minority Whip, was defeated under this plan). That pattern repeats itself in Madison County, which HB 2 divides among 4 districts

dominated by surrounding counties. The result is the elimination of arguably the most competitive House district in the Commonwealth and replacing it with three safe Republican seats (VR 4/6/22, 3:54:45)—all of which were won by Republican candidates.

Section 33 further mandates that “[n]ot more than two counties shall be joined together to form a Representative District.” Ky. Const. § 33. Thirty-one times HB 2 combines more than two counties in a single district: District Nos. 1 (5), 6 (3), 8 (3), 12 (4), 14 (3), 16 (3), 21 (4), 22 (3), 24 (3), 33 (3), 47 (4), 52 (3), 55 (3), 56 (3), 61 (3), 70 (4), 71 (4), 74 (3), 78 (4), 80 (3), 83 (3), 84 (3), 89 (5), 90 (3), 91 (3), 92, (3), 93 (3), 94 (3), 96 (3), 97 (3), 99 (3). (VR 4/5/22 3:41:22 – 3:41:30). By contrast, HB 191 contained only 23 districts with more than two counties. (VR 4/5/22 3:41:30 – 3:41:28; PEX 4). (Once again, this is sometimes necessary due to the populations of certain counties and the separate constitutional requirement that all counties in a district be contiguous).

These facts are not in dispute. Defendants do not contest that HB 2 contains dozens of violations of the text of Section 33, as just summarized. They simply argue that this Court would countenance those extra constitutional violations because HB 2 achieves the required population variance while splitting the fewest number of counties possible.

B. HB 2 and SB 3 are Partisan Gerrymanders.

Appellants presented expert evidence regarding several objective statistical metrics that measure HB 2’s and SB 3’s partisan fairness and bias. As correctly held by the trial court, this evidence compels the conclusion that

HB 2 and SB 3 are partisan gerrymanders designed to maximize the electoral gains of the Republican Party. (R. 1870-75).

1. Dr. Imai's Simulation Analysis

Plaintiffs introduced evidence from Dr. Kosuke Imai of Harvard University. Dr. Imai is a highly regarded researcher in the field of political science. His work has been published in the field's preeminent peer-reviewed journals and is in the top 1% of most frequently cited research since 2018. (VR 4/5/22, 10:24:20 – 10:25:58, 10:29:26 – 10:29:55; PEX 1 (listing Dr. Imai's publications on pp. 3-12)). Dr. Imai was elected by his peers to serve as President of the Society for Political Methodology, the premier academic society for scholars from around the globe who use statistics and machine learning to study political science. (VR 4/5/22, 10:30:01 – 10:30:59).

Both of Defendants' expert witnesses praised Dr. Imai and his methodology as the foremost authority in the field of partisan gerrymandering analysis. (VR 4/5/22, 10:49:24 – 10:49:51; VR 4/7/22, 11:51:42 – 11:54:30; VR 4/7/22, 5:01:09; VR 4/7/22, 4:16:25, 4:16:40; PEX 7). The trial court correctly found that the opinions offered by Dr. Imai in this case are "extremely reliable" and worthy of "significant weight." (R. 1872).

Dr. Imai uses Monte Carlo simulation algorithms—which he developed and are now widely used (including by one of Defendants' experts)—to generate a representative set of 10,000 possible redistricting maps under a specified set of criteria. (PEX 2, pp. 6-7; VR 4/5/22, 10:31:32 – 10:37:46). This allows one to evaluate the properties of an enacted map by comparing them against those of

the simulated maps. (*Id.*). If the proposed plan unusually favors one party over another when compared to the “ensemble” of simulated maps, this serves as empirical evidence that the proposed plan is a partisan gerrymander. (*Id.*). Statistical analysis then allows one to quantify the degree to which the proposed plan is extreme relative to the ensemble of simulated plans in terms of partisan outcomes. (*Id.*).

A primary advantage of the simulation-based approach is its ability to account for the political and geographic features that are specific to each state, including spatial distribution of voters and configuration of administrative boundaries—sometimes referred to as a state’s “political geography.” (PEX 2, p. 7; VR 4/5/22, 10:38:30 – 10:40:43). Simulation methods can also incorporate each state’s redistricting rules. (*Id.*).

Dr. Imai’s simulation-based approach therefore allows one to compare a proposed plan to a representative set of alternate districting plans subject to Kentucky’s administrative boundaries, political geography, and constitutional requirements. (*Id.*). Over the last 10 years, simulation methods have become the dominant way to evaluate redistricting plans. (VR 4/5/22, 10:37:47 – 10:40:43).

These simulation algorithms are not designed to generate thousands of maps that would actually be enacted by policy makers. (VR 4/5/22, 10:35:47 – 10:36:49). Rather, the primary goal of the simulation-based approach is to

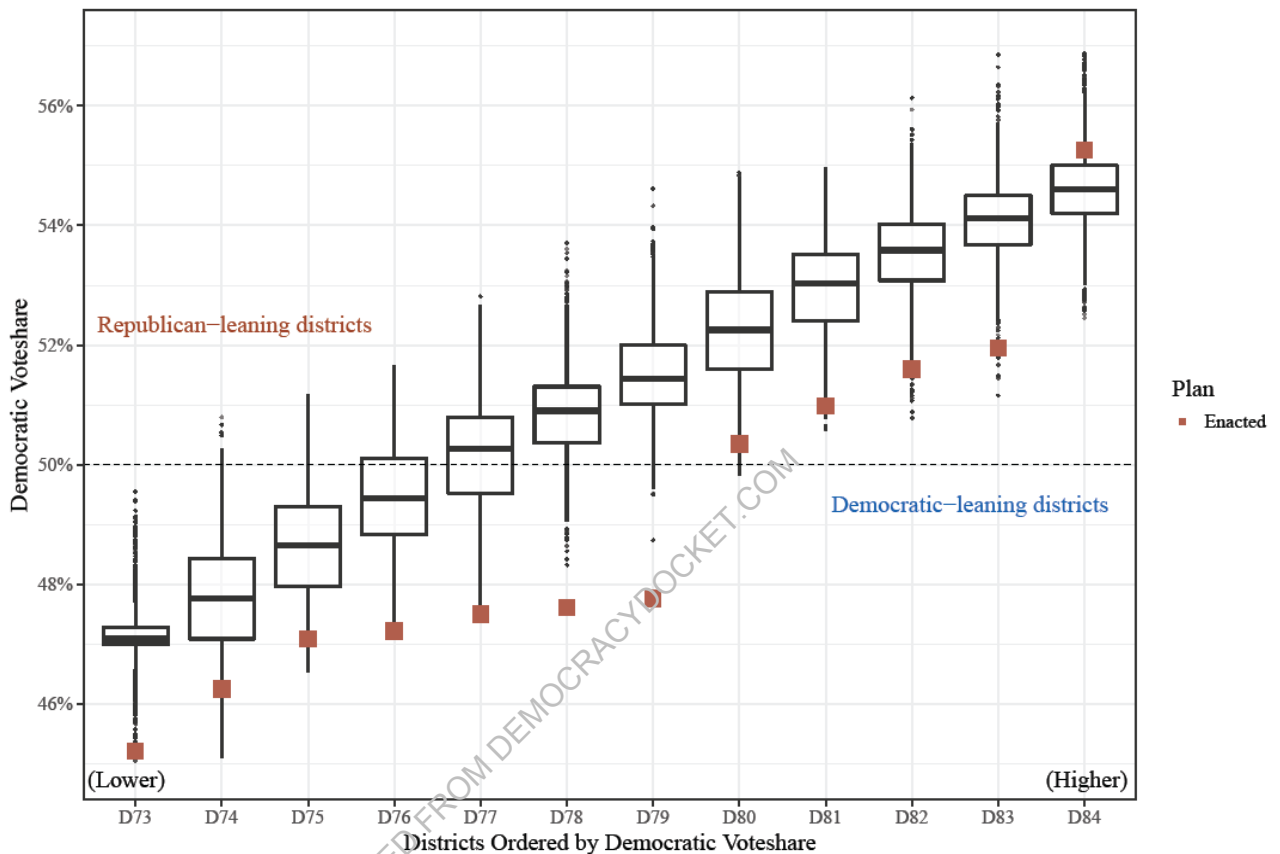
evaluate a specific proposed or enacted plan for partisan bias or other concerns. (*Id.*; see also VR 4/7/22, 12:33:35 – 12:33:58).

2. Dr. Imai's Analysis of HB 2

Dr. Imai used his simulation algorithm to generate 10,000 state House plans which all satisfy the criteria set forth in Section 33—*i.e.*, 100 geographically contiguous districts with population deviation not to exceed +/- 5% and minimizing the number of county splits. (PEX 2, pp. 21-22). Dr. Imai evaluated the partisan lean of districts created by HB 2 compared to the simulated House plans using data from the 8 most recent state-wide elections for which precinct-level voting data is available: the 2016 Presidential and U.S. Senate elections, and 2019 elections for Governor, Attorney General, Secretary of State, Auditor, Treasurer, and Agricultural Commissioner. (PEX 2, p. 24; VR 4/5/22, 10:55:19 – 10:59:01). That averaging is important because it provides a general measure of partisanship, not specific to any candidate or race. Accordingly, it is standard practice in simulation analysis. (VR 4/5/22, 2:07:57 – 2:08:40, 2:09:40).

Dr. Imai ordered each district under the enacted House plan by its Democratic vote share (based on the average of the 8 elections identified above), from the district with the lowest Democratic vote share to the one with the highest. (PEX 2, pp. 11-13; VR 4/5/22, 11:21:20 – 11:29:01). Dr. Imai then conducted the same operation on each of the 10,000 simulated House plans by sorting its districts according to their Democratic vote shares. (*Id.*). He then compared the distribution of district level Democratic vote share between the

simulated and enacted House plans. That comparison can be seen in Figure 3 of his report:



Here, a red square represents the expected Democratic vote share of each ordered district under the enacted plan, focusing on a total of 12 districts, ranging from the district with the 73rd lowest Democratic vote share (denoted by “D73”) to the one with the 84th lowest (denoted by “D84”). (*Id.*) These ordered districts were selected because their vote shares are the closest to the 50% threshold represented by the graph’s dotted horizontal line. (*Id.*)

In this “boxplot,” the box represents the range that contains 50% of the simulated data, and the horizontal line represents the median value. (*Id.*) The vertical lines that come out of the box (called “whiskers”) represent the typical

range of data. (*Id.*). Any data points falling outside of these lines, including those indicated by black dots, are considered outliers. (*Id.*).

The above boxplot shows a clear pattern with respect to the partisan bias of HB 2. Under the enacted plan, there exists a large jump of about 2.6 percentage points between the Republican-leaning district with the highest Democratic vote share (D79) and the Democratic-leaning district with the lowest Democratic vote share (D80). (*Id.*). That gap is known as a “signature of gerrymandering” in the academic literature (Herschlag et al. 2020), and it serves as empirical evidence for efforts to make Republican-leaning districts safer while reducing the Democratic advantage of Democratic-leaning districts. (*Id.*). In contrast, the simulated House plans do not exhibit such a discontinuous gap. In fact, the boxplots change smoothly from the lowest district-level Democratic vote share (D73) to the highest (D84) within this figure. (*Id.*).

Furthermore, when compared to the simulated House plans, the enacted House plan has more Republican-leaning districts (*i.e.*, those below the 50% threshold) while reducing the number of the Democratic-leaning districts (*i.e.*, those above the 50% threshold). (*Id.*). Under most of the simulated House plans, ordered districts D77, D78, and D79 have a Democratic majority. Yet, the enacted plan makes these ordered districts Republican-leaning by a more than 2 percentage point margin. (*Id.*). Indeed, *none* of the 10,000 simulated House plans have a lower Democratic vote share for these three ordered

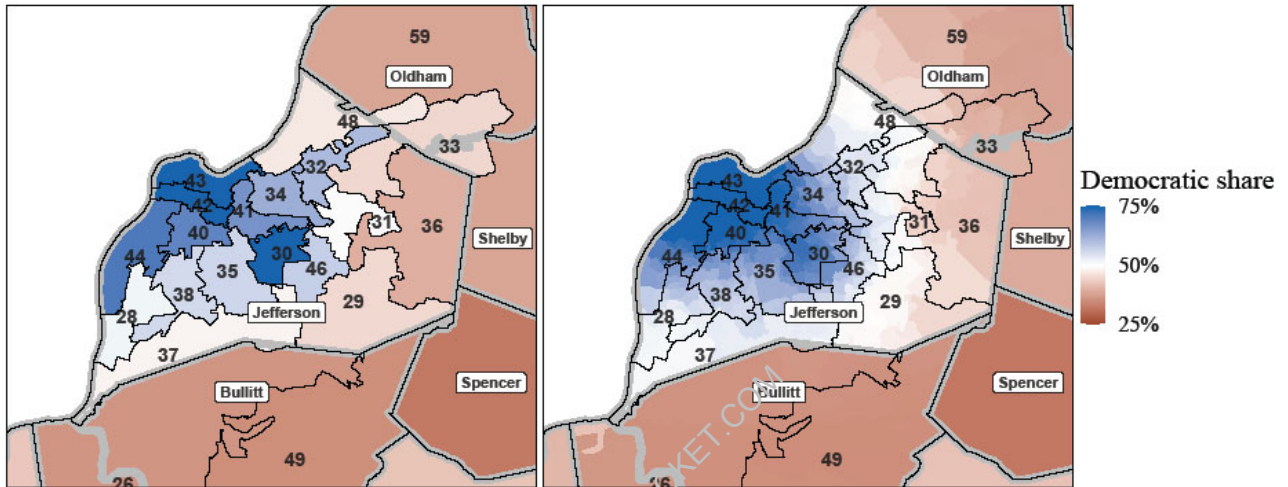
districts than the enacted House plan, proving that the enacted plan is a clear statistical outlier. (*Id.*)

Finally, Dr. Imai's Figure 3 also shows that the enacted House plan makes the Republican-leaning districts safer while reducing the vote share margin of the Democratic-leaning districts. (*Id.*) Under the enacted House plan, Republican-leaning ordered districts D73, D74, D75, and D76 have much lower Democratic vote share than most simulated House plans, making these districts safer for the Republican party. (*Id.*) In contrast, Democratic-leaning ordered districts D80, D81, D82, and D83 have much lower Democratic vote share, leading to less safe districts for the Democratic party. (*Id.*) This asymmetric treatment of Republican-leaning and Democratic-leaning districts represents clear empirical evidence that HB 2 was drafted to maximize the political representation of the Republican party—particularly in the crucial districts that might otherwise be competitive. (*Id.*)

Dr. Imai also conducted a local analysis of Kentucky's two largest cities (Louisville and Lexington), where he observed that HB 2's pattern of combining Democratic voters in urban areas with Republican voters in suburban and rural areas to create more Republican-leaning districts. (VR 4/5/22, 11:31:48 – 11:32:20).

As this Court is aware, Jefferson County is the home to Louisville, where voters generally lean towards the Democratic Party, while the precincts closer to the county border with neighboring Oldham, Shelby, Spencer, and Bullitt

Counties lean more Republican. Dr. Imai compared how these areas are treated under HB 2 with his set of simulated House maps, as shown in Figure 4 of his report:



The left map of Figure 4 presents the district-level vote share under the enacted House plan. (PEX 2, pp. 13-15; VR 4/5/22, 11:33:06 – 11:38:45). The right map of Figure 4 shows the expected two-party vote share of districts to which each precinct belongs under Dr. Imai’s simulated House plans. (*Id.*)

Under HB 2, Districts 33 and 48 spill over into the neighboring Oldham County to make them safe Republican districts. (*Id.*). Specifically, the enacted House plan turns District 33 into a safe Republican district (the average Democratic vote share of about 45%) by combining the Republican-leaning areas in east Louisville (*i.e.*, Lyndon and Anchorage) with Republican strongholds in Oldham County (*i.e.*, Pewee Valley and South Crestwood). (*Id.*). Similarly, the enacted House plan makes District 48 Republican-leaning (the average Democratic vote share of about 47%) by, again, combining the

Republican areas in east Louisville (*i.e.*, Indian Hills and Glenview) with a part of Oldham County where many Republican voters live (*i.e.*, the north of Crestwood). (*Id.*).

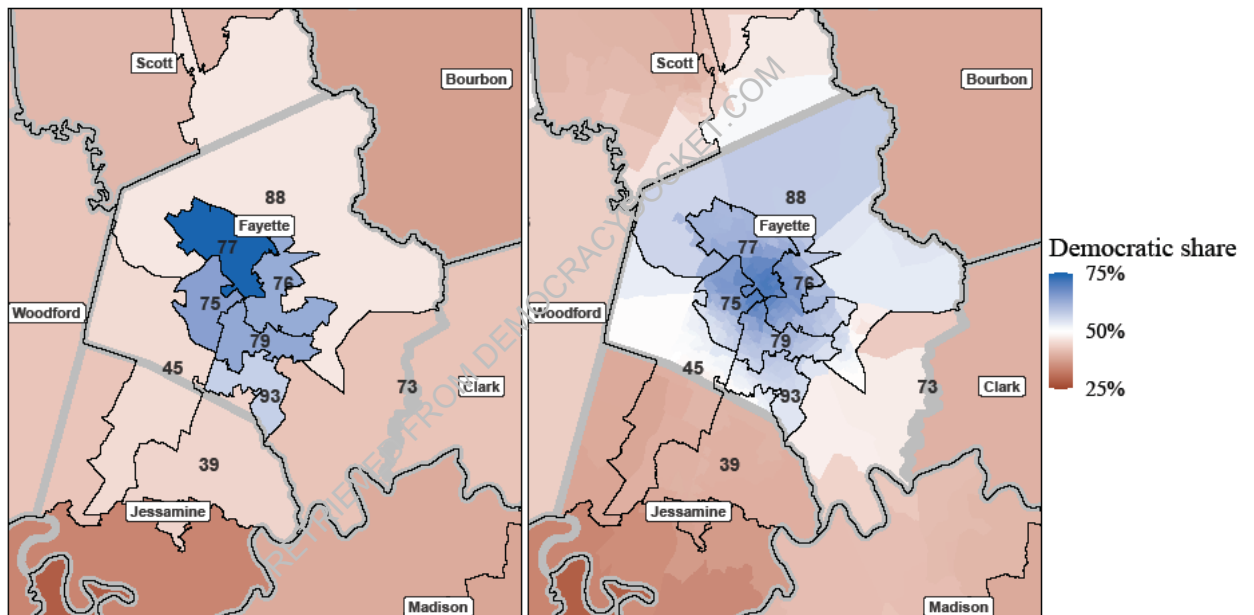
The map on the right, by contrast, shows that the parts of District 33 that belong to Jefferson County are likely to be part of a much more competitive district under the simulated House plans (indicated by white color) than under the enacted House plan. (*Id.*). Likewise, the parts of District 48 which belong to Jefferson County are likely to be part of either a slightly Democratic-leaning district, in the case of east Louisville (indicated by light blue color), or a more competitive district in the case of precincts near the county border (indicated by white color). (*Id.*).

Thus, Dr. Imai's analysis of Jefferson County shows that the enacted House plan creates additional safe Republican districts by combining some voters who live in Jefferson County with many Republican voters from neighboring counties. (*Id.*).

Finally, District 37 of the enacted House plan connects strongly Republican-leaning precincts located along the border between Jefferson and Bullitt Counties to create a Republican-leaning district with the Democratic vote share of about 48%. (*Id.*). Indeed, it even dips into Bullitt County to pick up a precinct, gratuitously violating Section 33 in the process. Under the simulated House plans, however, these areas are expected to belong to a

Democratic-leaning district. (*Id.*). This had the intended effect: a Republican challenger unseated the Democratic incumbent in District 37.⁷

The pattern was repeated in Fayette County. Voters in the city center generally lean towards the Democratic party, whereas the precincts located on the border with Woodford, Scott, Bourbon, Clark, and Madison Counties have many Republican voters. Dr. Imai compared how these areas are treated under HB 2 with his set of simulated House maps, as shown in Figure 5 of his report:



The left map of Figure 5 presents the district-level Democratic vote share under the enacted House plan. (PEX 2, pp. 15-16; VR 4/5/22, 11:39:35 – 11:43:20). The enacted House plan divides many Democratic voters into four districts located near the city center. (*Id.*). District 77 has the largest Democratic vote share of about 76.2%, followed by Districts 75 (64.4%), 79

⁷ It is also worth noting that some of the precincts included in Districts 29 and 36 are expected to be part of a much more competitive district under the simulated House map when compared to HB 2’s map. (*Id.*).

(63.4%), and 76 (62.8%), all of which are packed with many Democratic voters. (*Id.*)

In contrast, the enacted House plan makes District 88 safely Republican by combining the Republican-leaning precincts on the county border with Republican strongholds from the neighboring Scott County (violating Section 33, again, in the process). (*Id.*) Similarly, the enacted House plan makes District 45 strongly lean toward the Republican party (Democratic vote share of about 45.3%) by taking some Democratic-leaning and Republican-leaning precincts of Fayette County and combining them with strongly Republican-leaning precincts from the neighboring Jessamine County. (*Id.*)

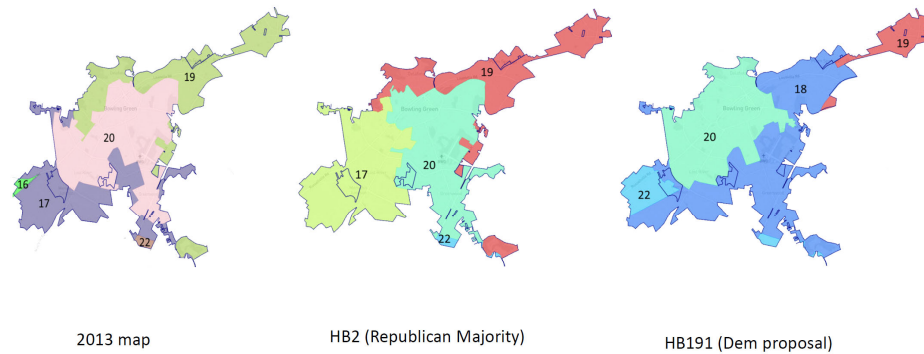
The right map of Figure 5 shows the expected two-party vote share of district to which each precinct belongs under the simulated House plans. (*Id.*) Under the simulated House plans, the precincts in the northern part of Fayette County are more likely to belong to Democratic districts while the enacted House plan assigns these precincts to District 88, which strongly leans towards the Republican party. (*Id.*) Similarly, the precincts in the southwest corner of Fayette County belong to a much more competitive district under the simulated House plans than under the enacted plan, which assign these precincts to District 45. (*Id.*) One of those districts is District 39, where Republicans once again unseated a Democratic incumbent after redistricting. Dr. Imai's analysis of Fayette County shows that HB 2 packs Democratic voters in a small number of districts and creates additional safe Republican districts

by combining some voters who live in Fayette County with many Republican voters from neighboring counties. (*Id.*).

HB 2's drafters repeated this pattern in cities across the Commonwealth to great effect. For example, the City of Bowling Green has historically been wholly within the 20th legislative district. But HB 2 disregards this historic consideration and cracks the city down the middle, dividing it between Districts 17 and District 20. (VR 4/5/22, 3:44:19 – 3:44:31). The effect is to convert District 20—historically “a Democratic performing district” (VR 4/5/22, 3:45:19 – 3:45:30)—into an uncompetitive district where Republicans hold a 10-point advantage. (VR 4/5/22, 3:45:30). Unsurprisingly, incumbent Democratic legislator Patti Minter lost her seat.

This swing is particularly troubling because District 20's population grew since the 2010 census; therefore, the district could have “condensed” to protect the Bowling Green's community of interest and allow its voters to translate their votes into representation. (VR 4/5/22, 3:34:30 – 3:45:42). Instead, HB 2's drafters broke the city in two to maximize their partisan advantage:

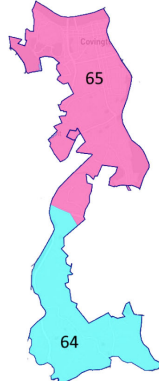
Bowling Green



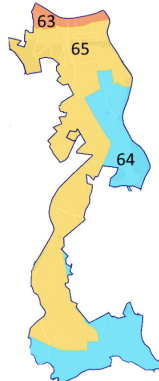
(PEX 3, p. 1).

In Northern Kentucky, District 65, previously represented by a Democrat, was redrawn to swing the district from a 10-point Democratic advantage to a 10-point Republican advantage. (VR 4/5/22, 3:47:31 – 3:47:44). This swing was achieved by cracking the City of Covington into several districts to dilute its Democratic voters by pairing them with neighboring suburban and rural districts. Most of downtown Covington is in District 65, which now extends “outside the City of Covington and deep into parts of Kenton County that are not a similar community to downtown Covington.” (VR 4/5/22, 3:47:06 – 3:47:31). The map also lops off Covington’s precincts closest to the Ohio River and joins them with the heavily Republican 63rd District. There is seemingly no explanation for such a bizarre division of Covington’s voters, except the maximization of the Republican partisan advantage in the State House. Once again, it worked: Rep. Buddy Wheatley lost his re-election bid in a seat he won by over 20 points just two years prior.

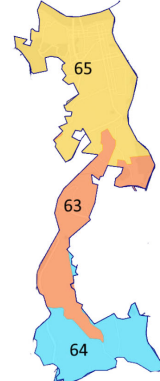
Covington



2013 map



HB2 (Republican Majority)

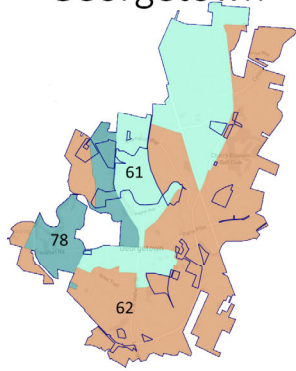


HB191 (Dem proposal)

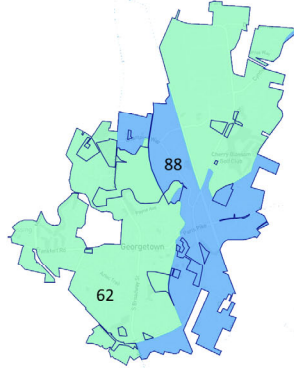
(PEX 3, p. 2).

HB 2 divides the City of Georgetown in half. District 88 now divides the city’s northern and southern halves, creating two heavily Republic districts. District 88, which was previously wholly within Fayette County, now “becomes significantly more Republican performing.” (VR 4/5/22, 3:51:50 – 3:52:03). Incumbent Rep. Cherlynn Stevenson, a Democrat, won that seat by only 37 votes.

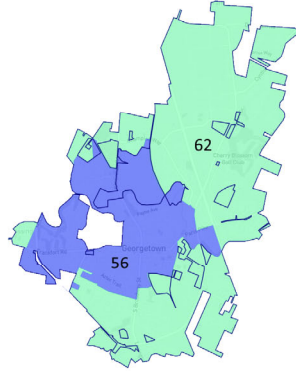
Georgetown



2013 map



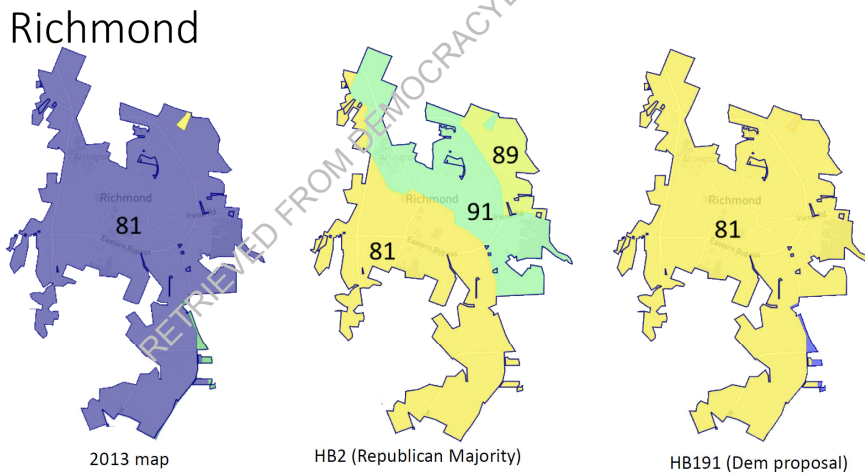
HB2 (Republican Majority)



HB191 (Dem proposal)

(PEX 3, p. 5).

Likewise, the City of Richmond, has historically been “wholly contained within the 81st House District for decades.” (VR 4/5/22, 3:54:18 – 3:54:30). HB 2 commits multiple violations of Section 33 by splitting Richmond into three “and taking pieces of the City...and then tacking them on to counties outside of Madison County.” (VR 4/5/22, 3:54:47 – 3:55:03). This change morphs the 81st—one of Kentucky’s most competitive districts, decided by less than one percent of the vote in 2018 and 2016 (VR 4/5/22, 3:54:31 – 3:53:44)—into “three solidly Republican districts.” (VR 4/5/22, 3:55:5 – 3:55:19). One of those races went uncontested, and the other two were decided by 36 and 54 percentage points, respectively.



(PEX 3, p. 7).

3. Dr. Caughey’s Partisan Bias Analysis

Appellants also offered testimony from Dr. Devin Caughey, a tenured professor of Political Science at the Massachusetts Institute of Technology (“MIT”). Dr. Caughey’s expertise is in the areas of political representation, measuring public opinion, and the role of elections in linking public preferences

to government outputs, particularly at the state level. (VR 4/6/22, 10:09:50 – 10:10:50).

Like Dr. Imai, Dr. Caughey is eminently qualified to provide the Court expertise in this matter. Before joining MIT's faculty in 2012, Dr. Caughey earned his undergraduate degree in History at Yale University; obtained an M.Phil in Historical Studies at Cambridge University in England; and went on to earn both a master's degree and PhD in Political Science from the University of California-Berkeley. (See PEX 5).

Dr. Caughey has published two books: one on representation in the one-party south, and another on statistical methods to be used in forecasting and public opinion surveys. (PEX 5; VR 4/6/22, 10:11:48 – 10:12:11). He published a third book in 2022 surveying state politics since the 1930s, looking at how state legislatures have responded to public opinion. *Id.* In addition, Dr. Caughey has published 16 peer-reviewed academic articles on a range of subjects. (PEX 5). One of Dr. Caughey's areas of expertise is the study of partisan gerrymandering in state legislative elections and its consequences on policies enacted as a result of those elections. (VR 4/6/22, 10:15:30 – 10:16:35).

He has served as an expert witness in three other partisan gerrymandering cases—once in Oregon, and twice in Pennsylvania. (VR 4/6/22, 10:57:40 – 10:59:16). Again, given these qualifications, it is unsurprising Dr. Caughey's testimony has never been excluded by a court.

4. Dr. Caughey's Analysis of HB 2

Dr. Caughey conducted his analysis in part using “Plan Score.” Plan Score is a publicly available website that uses past election data and a prediction algorithm to make predictions about state legislative races and use that projection to calculate the expected “Efficiency Gap,” “Declination,” and other metrics of partisan gerrymandering. (VR 4/6/22, 10:41:25 – 10:49:30). Plan Score is a publicly available and transparent platform that allows any user to upload legislative maps and assess their partisan bias. Though it is designed for use by the general public, Plan Score uses sophisticated statistical analysis, including multi-level Bayesian prediction models, to evaluate legislative maps and produce partisan bias metrics.

Dr. Caughey explained two basic strategies that state legislatures can use to engage in political gerrymandering, which he defined as a way for a political party “to maximize the number of seats that one’s own party wins subject to the number of votes they are likely to earn statewide”—otherwise known as the party’s “seat share.” (VR 4/6/22, 10:23:00 – 10:23:31). First, mapmakers can engage in what is known as “cracking,” where they take the supporters of the opposing party and spread them evenly across districts that are nevertheless a majority for the party drawing the maps. (VR 4/6/22, 10:24:11 – 10:24:30). Mapmakers also can engage in “packing,” where they take the “supporters of the opposing parties and pack them into a few hyperlopsided districts.” (VR 4/6/22, 10:24:31 – 10:24:51). Often, as here, both

methods are used in conjunction to maximize partisan gains statewide. (VR 4/6/22, 10:24:52 – 10:24:55).

There are many objective metrics that can measure partisan gerrymandering. One of those metrics, known as the “Efficiency Gap,” measures how efficient each party is at translating votes into seats. (See PEX 6 § 4.2; VR 4/6/22, 10:50:10 – 10:54:05). The Efficiency Gap compares the number of “wasted” votes for each party—that is, the number of votes cast for a losing candidate. (VR 4/6/22, 10:50:30 – 10:51:49). If one party’s votes are being wasted at a lower rate than its opponent’s, that is an advantage because it has a chance of winning more seats with comparatively fewer votes. *Id.* This metric is useful because it can quantify the extent voters have been packed and cracked into districts designed to waste their votes. (VR 4/6/22, 10:52:25 – 10:53:35).

The Efficiency Gap has become one of the “generally accepted metrics for evaluating the partisan fairness of a redistricting plan.” *Carter v. Chapman*, 270 A.3d 444, 458 (Pa. 2022). Moreover, while there is no definitive Efficiency Gap score that, if exceeded, constitutes *per se* partisan gerrymandering, political scientists generally agree that an Efficiency Gap over 7-8% (especially when corroborated by other objective measures of partisan gerrymandering) is a sign that voters have been systemically packed and cracked into districts to minimize their expected seat share. (VR 4/6/22, 11:44:25 – 11:46:00).

Analyzing HB 2 under this metric, Dr. Caughey calculated it “is likely to waste 13.4 percentage points more Democratic votes than Republican votes.” (PEX 6, § 5.1.1). That 13.4% Efficiency Gap means HB 2 gives the Republican party an extra 13 seats on top of what would normally be considered a “winner’s bonus.” (VR 4/6/22, 11:21:25 – 11:21:58). This result is “[a]n extremely large efficiency gap...relative to what you see in other states at other times.” (VR 4/6/22, 11:22:26 – 11:22:33). Although Kentucky’s unique political geography may explain some of HB 2’s Efficiency Gap, the trial court correctly found that there is no non-partisan explanation for the 13.4% Efficiency Gap created by HB 2. (R. 1871).

HB 2 is “more favorable toward Republicans than 99% of all plans that have ever been scored by Plan Score.” (VR 4/6/22, 11:22:45 – 11:23:05). That makes HB 2 an extreme statistical outlier that cannot be explained away by Kentucky’s political geography. In fact, the only evidence in the record on this point suggests that HB 2 is significantly more pro-Republican than other states with higher levels of partisan sorting between urban and rural areas. (VR 4/6/22, 11:24:55 – 11:29:30; PEX 10).

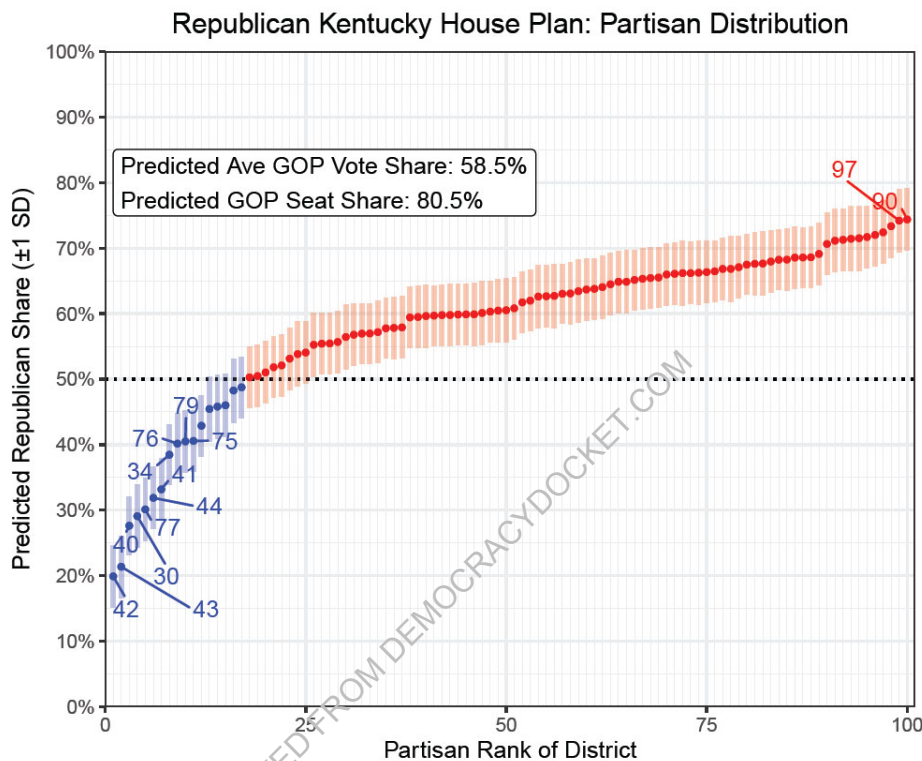
Dr. Caughey also evaluated HB 2’s “Declination.” (PEX 6, § 4.4; VR 4/6/22, 10:54:05 – 10:56:40). To measure this statistic, one creates a plot of all the legislative districts, arranged by the percentage of vote share expected for one party. (VR 4/6/22, 10:54:25 – 10:55:00). Then, starting from the point on the graph where each party is expected to win 50% of the two-party vote, a

political scientist would create two trend lines—one through the middle of each party’s expected vote share “cloud” (represented by the point estimates on the plot). (PEX 6, § 4.4). To find the declination, one measures the angle between the two trend lines. A non-gerrymandered map would not produce a sharp angle between the two lines; the expected vote share plot will increase smoothly from left to right. (VR 4/6/22, 10:54:45 – 10:55:20). As the angle between the lines increases, however, it signals gerrymandering because the majority party has packed many of the opposition’s voters into a few heavily concentrated districts but spread the rest (and its own) across a larger number of districts where the majority party’s votes will translate into more seats. (VR 4/6/22, 10:55:21 – 10:56:40).

Importantly, Efficiency Gap and Declination are highly correlated, but do not always point in the same direction. (VR 4/6/22, 10:56:41 – 10:57:36). When they do point in the same direction, like here, a court can have far more confidence in the conclusion that a map is a result of gerrymandering. Dr. Caughey found that HB 2’s Declination, like its Efficiency Gap, is “off the charts.” (VR 4/6/22, 11:46:44). The Declination shows that HB 2’s pro-Republican bias of this plan is larger than the bias in 98% of all historical plans scored by Plan Score (PEX 6, § 5.1.1).

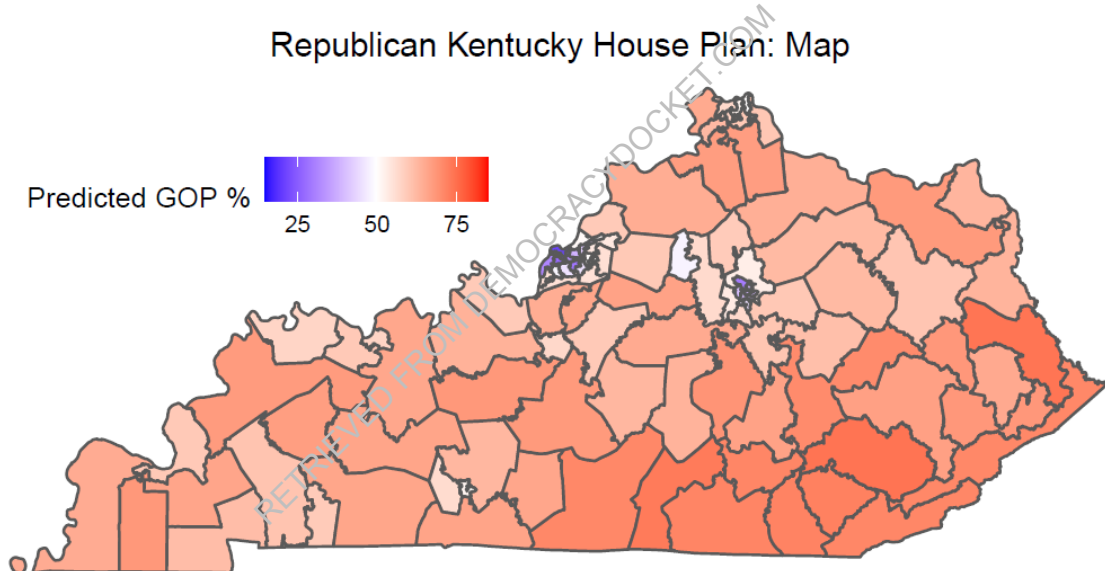
This extreme Declination can be seen visually in the plot below by the radically different “tails” at the respective ends of the graph. The red dots ascend gradually in a smooth line upward from 50% expected Republican vote

share. By contrast, the blue dots form a line that drops precipitously down to the bottom of the graph. The angle (or decline) between those two lines is very steep, hence a significant declination score.



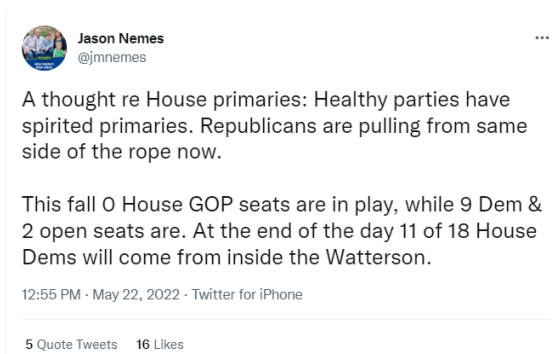
This plot also reflects HB 2’s extreme partisan asymmetry. (VR 4/6/22, 11:13:45 – 11:20:36). Indeed, under HB 2, an election with a perfect 50/50 partisan vote split would produce a large Republican majority of approximately 60 seats. (VR 4/6/22, 11:17:45 – 11:18:50). The plot also shows that HB 2 largely eliminates competitive races for the State House in Kentucky. Only 7 of the 100 seats give either party at least a 25% chance of winning. (PEX 6, § 5.1; VR 4/6/22, 11:34:15 – 11:35:29). Thus, more than 90% of Kentuckians will live in a District where their Representative will almost certainly be chosen in the dominant party’s primary.

Dr. Caughey also plotted each district's likely Republican vote share. On the following map a darker the shade of red or blue, means the more likely the district is to vote for Republican and Democratic candidates, respectively. This map made clear that Democrats were unlikely to fare well outside of Louisville, Lexington, and—perhaps—Frankfort, a portion of which “leans” Democratic under this plan. That is particularly true where the city-by-city analysis conducted above that shows HB 2 systematically cracking urban Democrats into districts with suburban and rural Republican voters.



(PEX 6, § 5.1).

Appellants were not the only ones predicting this outcome. One of the plan's sponsors, now majority-whip Rep. Jason Nemes, predicted after the primary elections that Democrats would win fewer than 20 seats, and that they would be heavily concentrated in Louisville:



That prediction was spot on; even in a year where Democrats largely outperformed expectations nationally and avoided the predicted “Red Wave,” they won only 20 seats in Kentucky’s House—with all but two of those legislators coming from Louisville, Lexington, or Frankfort.

Dr. Imai’s and Dr. Caughey’s analyses left little doubt that HB 2 creates a durable, structural advantage for Republican candidates that has never been matched in Kentucky or any other state. (VR 4/6/22, 16:20:55 – 16:21:03). Importantly, Defendants did not attempt to affirmatively rebut any of Dr. Imai’s or Dr. Caughey’s opinions with respect to HB 2’s partisan bias. Although they retained two experts, neither offered an opinion that HB 2 was not a partisan gerrymander. The trial court correctly found it “abundantly clear that HB 2 is a partisan gerrymander.” (R. 1871).

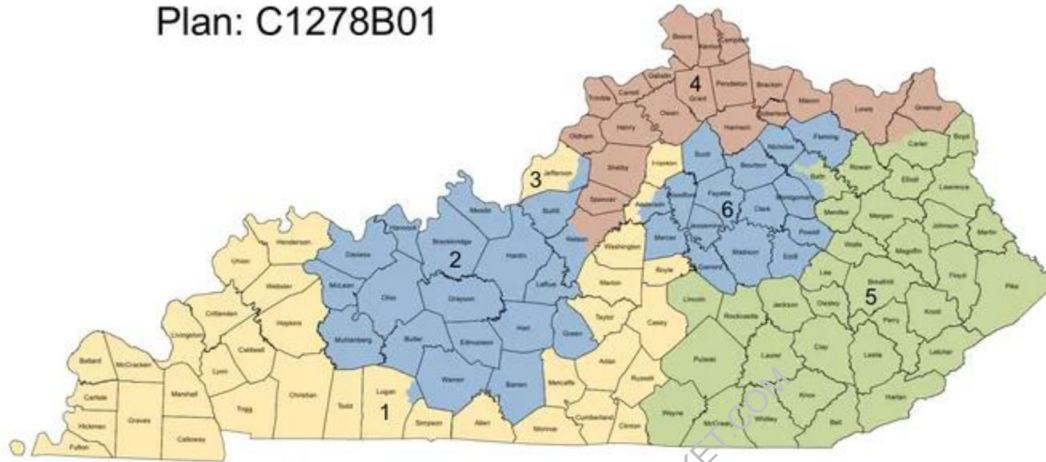
5. Dr. Imai’s Analysis of SB 3

Plaintiffs also challenge the Congressional map created by SB 3 as an unconstitutional partisan gerrymander and an exercise of arbitrary and absolute power prohibited by Section 2 of Kentucky’s Constitution. Dr. Imai evaluated SB 3’s Congressional map using the same simulation algorithm

approach that he applied to the state House map. (PEX 2, pp. 16-17; VR 4/5/22, 12:00:04 – 12:03:15). The results are striking.

The First Congressional District created by SB 3 is patently bizarre:

Plan: C1278B01



SB 3’s 1st District is less compact than 99% of simulated plans that contain Franklin County. (*Id.*). The amoeba-like district stretches from Fulton County along the Commonwealth’s southern border before jutting upwards at an almost 90-degree angle to encompass half of central Kentucky, stretching as far north as Franklin County.

Dr. Imai’s analysis revealed that District 1 was drawn to achieve partisan ends. His simulation analysis shows that the 35% Democratic vote share in the enacted 1st District is lower than more than 99% of simulated districts containing Franklin County, making the enacted 1st District an extreme outlier. (PEX 2, pp. 17-18; VR 4/5/22, 12:10:05 – 12:12:00). By contrast, Dr. Imai’s maps that kept the historical pairing of Franklin and Fayette counties intact produced an average Democratic vote share of 47.8%. Like HB

2, it appears SB 3's drafters' goal was to eliminate the Republican party's political competition across the Commonwealth.

Again, Appellants chose not to introduce any affirmative evidence to rebut Dr. Imai's testimony regarding partisan fairness; they opted instead only to levy critiques at his methods. But those critiques fell flat. Defendants' expert Sean Trende attempted to justify the 1st district's bizarre shape by harkening back to the 30-year-old map intended to protect former Congressman representing the 2nd District, William Natcher, who was a resident of Bowling Green. (VR 4/7/22, 12:22:16 – 12:24:10, 12:27:25 – 12:27:50). The trial court rightly gave “no weight to Mr. Trende's testimony,” finding it odd that Mr. Trende focused on preserving the political district of a politician who died in 1994, at the expense of the historical pairing of Frankfort and Lexington in a single Congressional district. (R. 1872). This argument proves that the 1st district's unusual shape was not necessary to preserve any longstanding communities of interest but was, instead, a relic of a former political era.

The trial court noted that Defendant's other expert, Dr. Stephen Voss, offered testimony that actually supported Dr. Imai's opinions with respect to SB 3. (R. 1874). Dr. Voss experimented with Dr. Imai's simulation algorithm to conduct several “regional analyses” that attempted to account for certain historical features of Kentucky maps. To do so, Dr. Voss placed “soft constraints” on Dr. Imai's simulation algorithm that instructed the algorithm to attempt to keep certain regions intact, if possible. (VR 4/7/22, 4:51:35 –

4:54:10). His results are illuminating. When Dr. Voss instructed the algorithm to keep Warren, Daviess, and Bullitt Counties together (the “core” of the 2nd District, rather than the entire thing), Franklin County almost never appears in the First District. If you “leave the simulation” alone, Franklin County “won’t end up in the First” District. (VR 4/7/22, 4:53:15 – 4:53:23).

In short, SB 3 sacrifices the residents of more than a dozen counties in service of the map drawers’ partisan aims. The map bisects Anderson County, splitting its population between the 1st and 6th Districts. It also moves the entirety of Washington County into the 1st District, whereas most of it was previously attached to the more compact, adjacent 2nd District. If this pattern holds, in 2030, the First District may very well stretch from Fulton County to the Ohio River.

II. Procedural History

Plaintiffs filed the Complaint on January 20, 2022, alleging that HB 2 and SB 3 violated Sections 1, 2, 3, and 6 of Kentucky’s constitution, and that HB 2 additionally violated Section 33 of Kentucky’s constitution. (R. 1-287). The Kentucky Attorney General filed a motion to intervene on behalf of the Commonwealth on January 27, 2022. (R. 306-45). On January 28, 2022, Plaintiffs filed a motion for temporary injunction, which sought immediate injunctive relief to prevent the May 2022 primary election from being conducted under the maps created by HB 2 and SB 3. (R. 346-92). Plaintiffs motion for temporary injunction was denied by Order dated February 17, 2022. (R. 687-700).

The Commonwealth filed a counterclaim, crossclaim, and motion for temporary and permanent injunction, which sought a declaration that conducting the 2022 election under the maps that existed prior to HB 2 and SB 3 would violate Section 33 of the Kentucky's constitution and the Fourteenth Amendment to the United States constitution. (R. 399-430, 532-45) (that claim is the subject of Appellees' cross-appeal). Defendants also filed a motion to dismiss (R. 501-31), which was denied by Order dated February 17, 2022 (R. 683-86).

The trial court conducted a bench trial on April 5-7, 2022, during which the court heard testimony from fact and expert witnesses. At that hearing, Appellants offered lay and expert testimony establishing that HB 2 and SB 3 are partisan gerrymanders. The Commonwealth, by contrast, made no attempt to prove that its maps were not gerrymandered; they simply took issue with Appellants' analysis of the maps.

The court credited the testimony of Appellants' experts, Drs. Imai and Caughey, who he found to be experts in their field. (R. 1870-71). The court found Dr. Imai's simulation analysis, in particular, to be "extremely reliable" and gave it "significant weight." (R. 1872). Conversely, the court was "unpersuaded by Mr. Trende's testimony" trying to poke holes in Appellants' analysis of the partisan bias of HB 2. (R. 1871). It likewise held that "[t]he Commonwealth's experts failed to rebut Dr. Imai's findings" regarding SB 3. (R. 1872). Dr. Voss' testimony "actually supported Dr. Imai's testimony" about

SB 3, whereas the court found “Mr. Trende’s testimony self-serving and unreliable.” (R. 1874).

Based on all the testimony and its comparative weighing of the evidence (including expert opinions), the court issued a final and appealable Opinion and Order November 10, 2022, finding that Plaintiffs had proven that HB 2 and SB 3 were partisan gerrymanders. (R. 1832-1903). Indeed, the Court found it was “compelled” by the evidence to conclude “that HB 2 is a partisan gerrymander.” (R. 1870). The court found that, compared to the 10,000 simulated maps produced by Dr. Imai, “HB 2 is an outlier” that was drawn to make “Republican leaning districts [] safer whereas Democratic leaning districts have been made more competitive”—“the signature of partisan gerrymandering.” (R. 1870). Democratic-leaning Counties Jefferson and Fayette were “cracked and packed to create additional Republican safe districts.” (R. 1870). The supermajority disenfranchised the voters of the Commonwealth’s two most populous counties by “pack[ing] Democratic electors into a few districts then combined other Democratic electors within Republican leaning neighboring counties.” (R. 1871).

The circuit court made clear these additional safe Republican districts were not caused by shifts in voter’s preferences, or “Kentucky’s political geography, but due to the cracking and packing of Democratic electors in districts to allow Republicans to maximize partisan gains statewide.” (R. 1871). Moreover, Dr. Caughey’s analysis of HB 2 confirmed Dr. Imai’s findings. HB

2's Declination score "is off the charts" and "shows a pro-Republican bias larger than he has ever seen." (R. 1870).

The court also found that SB 3 is a partisan gerrymander. The Congressional map is "purely irrational and creates an uncompact and noncontiguous district (the First District)" (R. 1872) that can only be explained by maximizing the supermajorities' partisan advantage. As noted, the circuit court's finding was based on Dr. Imai's "extremely reliable" analysis, which was afforded "significant weight." (R. 1872).

"Dr. Imai's simulations found that SB 3's First District is less compact than 99% of simulated plans that contain Franklin County." *Id.* That sprawl produces a First District with a Democratic vote share of 35%—"which is an extreme outlier." (R. 1872). Dr. Imai's simulation analysis further proved that "Franklin County is typically placed in districts with much higher Democratic vote shares with an average Democratic vote share of 43.6%." (R. 1872). When "Franklin County is placed in its historic district, the Sixth District, the Democratic vote share is 47.8%." (R. 1872). The court also noted that Dr. Voss "actually supported Dr. Imai's testimony" by explaining that the simulation algorithm, if left unaltered, does not produce any Congressional maps that join Franklin County to the First District. (R. 1874). Rather, in all 10,000 simulations the algorithm pairs Franklin County with its neighbors in the Bluegrass Region, including Fayette County. (R. 1874); *see also*, VR 4/7/22, 4:52:50-4:53:38. This evidence "is clear" and proves that "SB 3 is a partisan

gerrymander aimed at diluting the Democratic vote share by creating an uncompact First District based on rationale that was not applied across all districts.” (R. 1874-75).

Although the Court found both maps to be gerrymandered, it nevertheless concluded that this gerrymandering did not violate the Kentucky Constitution. The court concluded that “Kentucky Supreme Court precedent, in this Court’s eyes, does not prohibit” excessively splitting and/or combining counties for partisan gain (R. 1881). Likewise, while acknowledging that “[o]ther states’ constitutions have similar provisions to Kentucky’s Section 6 that have recently been used to hold partisan gerrymandering unconstitutional,” and reiterating that “Plaintiffs present a compelling argument, and the evidence and testimony presented at trial support that HB 2 and SB 3 are partisan gerrymanders,” (R. 1883), the court nevertheless rejected the partisan gerrymandering claim because it concluded that Section 6 is merely a “prohibition against interferences with the vote-placement and vote-counting process.” (R. 1886).

Further, the court rejected Appellants’ equal protection claim on the ground that the only things those provisions protect are one-person/one-vote claims and racial gerrymandering. (R. 1891). Likewise, it rejected Appellants’ free speech claims and Section 2 claim (alleging the exercise of absolute and arbitrary power) on the ground that the Kentucky Constitution delegates redistricting to the legislative branch. (R. 1891-94).

Finally, the Court held that the Commonwealth's counterclaim and crossclaim were moot and declined to issue an advisory opinion regarding the claims. (*Id.*)

Plaintiffs timely appealed on November 28, 2022. (R. 1904-77). The Commonwealth filed a notice of cross-appeal on December 6, 2022. This Court accepted transfer of the appeals on March 23, 2023.

STANDARD OF REVIEW

The circuit court correctly understood its duty to ensure that legislative apportionment plans comply with the requirements of the Kentucky constitution: "Well over a century ago, Kentucky's highest court rejected the general idea that redistricting is a political question not within the bounds of judicial review." R. 1856 (citing *Ragland*, 100 S.W. at 867). And "[a]s recently as the last round of redistricting in 2012, the Kentucky Supreme Court reaffirmed the judiciary's duty to 'ascertain whether a particular redistricting plan passes constitutional muster [.]'" *Id.* (citing *Fischer IV*, 366 S.W.3d at 911). "Similarly, Kentucky courts have flatly rejected the argument 'that congressional redistricting is a political question and one not justiciable by the courts.'" *Id.* (quoting *Watts v. O'Connell*, 247 S.W.2d 531, 532 (Ky. 1952)).

The circuit court's determination that HB 2 and SB 3 are partisan gerrymanders is a factual finding that may only be set aside for clear error. *Welch v. Commonwealth*, 563 S.W.3d 612 (Ky. 2018); *Graham v. Commonwealth*, 319 S.W.3d 331, 337 (Ky. 2010). Similarly, "any factual determinations made by the trial court in evaluating an expert's reliability are

reviewed for clear error.” *Holbrook v. Commonwealth*, 525 S.W.3d 73, 79 (Ky. 2017). “A factual finding is not clearly erroneous if it is supported by ‘evidence of substance and relevant consequence having the fitness to induce conviction in the minds of reasonable men.’” *Simms v. Estate of Blake*, 615 S.W.3d 14, 23 (Ky. 2021) (citation omitted).

In contrast, this Court reviews the circuit court’s legal holdings, including its interpretation of the Kentucky Constitution, *de novo*. *Commonwealth v. Doeblner*, 626 S.W.3d 611, 618 (Ky. 2021).

ARGUMENT

I. HB 2 Violates Section 33 of the Kentucky Constitution.

Whether HB 2 violates Section 33 boils down to a simple question: where the legislature *can* follow the Constitution’s command not to split and/or combine counties (or parts thereof), *must* it do so? Defendants do not dispute that HB 2 violates the text of the Constitution dozens of times more than is necessary for population equivalence; they simply contend that this Court’s caselaw lets them get away with it. But this Court has never gone that far.

Moreover, regardless of what this Court has previously held, it should clarify that the legislature must follow the text of the Constitution when it can—no matter how politically inconvenient it finds it. *See, e.g., Westerfield v. Ward*, 599 S.W.3d 738, 748 (Ky. 2019) (“When interpreting constitutional provisions, we look first and foremost to the express language of the provision, ‘and words must be given their plain and usual meaning.’” (citing *Fletcher v.*

Graham, 192 S.W.3d 350, 357-58 (Ky. 2006)); *Rose v. Council for Better Educ., Inc.*, 790 S.W.2d 186, 211 (Ky. 1989) (“We simply take the plain directive of the Constitution, and, armed with its purpose, we decide what our General Assembly must achieve in complying with its solemn constitutional duty.”). That is the very point of a constitution, after all—to protect the rights of the people *from* their government. *See, e.g., Columbia Broadcasting v. Democratic Comm*, 412 U.S. 94, 162 (1973) (“The struggle for liberty has been a struggle against Government. The essential scheme of our Constitution and Bill of Rights was to take Government off the backs of people.” (Douglas, J., concurring)).

The text of Section 33 lays down three separate rules meant to protect county integrity, a principle “of at least equal importance” to population equality under Section 33. *Fischer v. State Bd. of Elections*, 879 S.W.2d 475, 477 (Ky. 1994) (“*Fischer II*”). Mapmakers must not: (1) split counties, unless they are large enough to contain more than one district; (2) create districts that contain more than two counties; or (3) create districts by adding a part of one county to another. *See Ky. Const. § 33*.

When drafting Section 33, the framers of the 1891 Constitution saw it as a key check against the evils of partisan gerrymandering—with which they were very familiar. In the debates over the legislative apportionment provision that would become Section 33, delegates decried the practice of creating districts with widely varying populations to achieve partisan ends. John

Clardy, a delegate from Christian County, observed that “[t]here are two or three counties which have two representatives on this floor which have not as much population as the county I represent, *and it was done simply as a political gerrymandering scheme.*” Ky. Const. Debates, Vol. 3, p. 3976 (emphasis added). *Id.* Likewise, Bennett Young, representing Louisville, called out other states’ gerrymandering problems and (successfully) urged his fellow delegates to reject proposals that would have allowed the legislature to inflict similar harms on Kentucky in the future:

In the name of God, *do we want the miserable Republican gerrymandering State of New York to be brought into the Constitution of the State of Kentucky?* It has been a byword and a stench. The Constitutional provision under which the people of the city of New York and other parts of the State of New York are robbed of their representation, it has been a byword and a stench in the nostrils of every free man in this country. *We do not want that in Kentucky.*

Id. at 3984 (emphasis added).

And, crucially, the delegates were acutely aware that the Legislature had, in fact, badly gerrymandered Kentucky in recent times to achieve partisan ends. Delegate Iverson Twyman, from Larue County, even argued during the debate on Section 33 that the convention itself should apportion the initial districts because:

[W]henever it is left to the Legislature, ***they will gerrymander the State***, and not give just representation. I have only to refer—and I do not do it in a political sense, but because it is history—I have only to refer to the action of the last Legislature, which, in apportioning the Congressional Districts of the State, instead of dividing them up according to population or territory, we find that they formed ten solid districts, and put all the Republican

counties into one district, which gave the Republicans a majority of over ten thousand in that district. Was that fair or just? Was that giving a fair representation? Not at all.

Ky. Const. Debates, Vol. 4, p. 4620.

To prevent these ills from re-occurring, the delegates made several amendments to the apportionment provision designed to limit the ability of the legislature to engage in partisan gerrymandering. Chief among those amendments was the change offered by F.A. Hopkins of Floyd County to ensure that “not more than two counties shall be joined together to form a representative district.” *Id.* at 4609. In explaining the purpose of this amendment, Hopkins noted that, in the absence of such a restriction, “a gerrymander can be resorted to which would begin at one end of the State and sweep to the other. A fraction of representation which will be due to one end of the State can be carried to another part of the State, and applied where it is not due and does not belong, which I say would not be just.” *Id.* at 4610. “[A]s a safeguard against such a move, and to protect the entire people of the State,” Hopkins “offered this amendment, which will put to an end the very great injustice that would otherwise be done to various counties.” *Id.*

The delegates also adopted amendments from P.P. Johnston of Fayette County, providing that, when drawing districts, the “principle requiring every district to be as nearly equal in population as may be shall not be violated” (*id.* at 4613, 4620-21), as well as from William Mackoy of Covington, specifying that “[n]o part of a county shall be added to any other county to make another

district.” (*id.* at 4609, 4622). Taken together, these amendments were intended to tie the legislature’s hands and ensure that they could not carve up counties to gerrymander the state’s legislative districts for partisan purposes.

To be sure, Kentucky courts have recognized that Section 33’s prohibitions cannot be honored in every instance while creating 100 districts of roughly equal population from among Kentucky’s 120 counties. From the beginning, however, this Court (and its predecessor) has required any deviations from these principles to “be *necessary* . . . to effectuate that equality of representation which the spirit of the whole section imperatively demands.” *Ragland*, 100 S.W. at 870 (emphasis added). Since that time, this Court has not “retreat[ed] from the importance of county integrity.” *Fischer IV*, 366 S.W.3d at 912. On the contrary, it has continued to reaffirm that it is “not free to disregard the drafters’ intent to preserve county integrity by striking the provision from Section 33,” even if it can no longer be observed in *every* instance. *Id.* at 913. Simply put, “[p]reservation of county integrity” was the “paramount consideration” of Section 33’s drafters and must “be balanced with population equality to accommodate both.” *Fischer II*, 879 S.W.2d at 479.

The trial court had little trouble concluding that “Plaintiffs have sufficiently established that HB 2 unnecessarily divides the twenty-three (23) split counties more times than necessary.” R. 1880. Indeed, HB 2 splits 23 counties 80 times, (VR 4/5/22, 3:38:31)—*far more* total splits than necessary to accommodate constitutional “one-person, one-vote” principles. HB 191, by

contrast, splits 23 counties only 60 times while remaining safely within the 5% population deviation standard. (VR 4/5/22, 3:38:45; PEX 4). Even Dr. Voss, the Commonwealth's expert, "agreed that there could have been fewer multi-split counties in HB 2 and if the law requires HB 2 to divide counties the fewest number of times possible, then HB 2 would violate this." R. 1880 (citing VR 4/7/22, 4:19:49-4:21:14). And Dr. Imai, Plaintiffs' expert, demonstrated through his simulation analysis that the number of multi-split counties in HB 2 "is a statistical outlier." *Id.* (citing VR 4/5/22, 11:11:40-11:12:28).

But it is not just the total number of times that HB 2 splits counties that violates Section 33. Section 33 also states that "[n]ot more than two counties shall be joined together to form a Representative District." Ky. Const. § 33. Deviations from this rule are permitted only if "*necessary* in order to effectuate that equality of representation" *Ragland*, 100 S.W. at 870 (emphasis added). Yet, HB 2 violates this command on 31 separate occasions (VR 4/5/22, 3:41:26). These excessive multi-county districts were not "necessary" to achieve population equivalence. HB 191 proves the point; it created maps within the required population deviation range containing only 23 districts formed from parts of 3 or more counties (not coincidentally, the minimum number of county splits required). (VR 4/5/22, 3:41:33; PEX 4). HB 2's extra violations of this rule must be seen for what they are: the consequence of the mapmakers' decision to excessively divide counties purely for partisan gain, without regard for the Constitution's text.

Moreover, Section 33 also requires that “[n]o part of a county shall be added to another county to make a district” Ky. Const. § 33. Once again, HB 2 flagrantly violates this rule to pursue its partisan ends. Indeed, nearly half the districts in HB 2—45 in all—were built by violating this rule. And once again, HB 191 proves this was not necessary to achieve population equality: HB 191 would have created districts that cross county lines only 31 times. (VR 4/5/22, 3:41:00; PEX 4).

The fact section above is littered with examples, complete with full-color maps, showing how the mapmakers carved up counties, joining multiple portions of one county with neighboring ones to achieve their partisan ends. *See supra* at 4-9. In many of these counties, the mapmakers committed multiple, intentional violations of Section 33 in the same county. Pike County is a perfect example: it is divided into four separate districts, all of which take a portion of Pike County and pair it with a neighboring county to form a district. Three of these four (District Nos. 92, 94, and 97) also contain at least three counties in them, violating Section 33 in two distinct ways. Unsurprisingly, this plan worked to unseat Rep. Angie Hatton, the House Minority Whip.

Similar “double” violations of Section 33 may be found in 23 districts: 1, 6, 8, 14, 16, 22, 33, 52, 55, 56, 61, 71, 78, 80, 83, 89, 90, 91, 92, 94, 96, 97, 100. (*See* DEX 1, Tab 1). By contrast, HB 191 had only 13 “double” violations of Section 33 (PEX 4).

Despite dozens of unnecessary constitutional transgressions, the trial court found HB 2 constitutional because “Kentucky Supreme Court precedent, in this Court’s eyes, does not prohibit such.” R. 1881. In essence, the Court adopted the Appellees’ theory that so long as the legislature (1) keeps the population variance within five percent of the ideal district size and (2) splits the fewest number of counties, it is free to ignore the actual text of Section 33 text as many times as it sees fit in pursuit of its political ends.

The trial court erred in adopting that interpretation of this Court’s Section 33 precedents. Although satisfying those two conditions is *necessary* for an apportionment plan to be constitutional, this Court has not held that compliance with those requirements, alone, is *sufficient* to defeat any Section 33 challenge.

To see why the legislature must follow Section 33’s specific commands when it can, the Court need look no further than its opinion in *Fischer II*, which relied on the “highly persuasive” Tennessee Supreme Court decision in *State ex rel. Lockert v. Crowell*, 656 S.W.2d 836 (Tenn. 1983). *Lockert* interpreted a “virtually indistinguishable” provision of the Tennessee Constitution. *Fischer II*, 879 S.W.2d at 479. This Court approvingly cited *Lockert* as “direct[ing] adoption of a plan which *crossed as few county lines as possible* within federal constitutional guidelines for equal representation.” *Id.* (emphasis added). *Lockert* had held that the constitutional language does not “sanction a single county line violation not shown to be necessary” to avoid a breach of equal

representation requirements. *Lockert*, 656 S.W.2d at 839. As a result, *Lockert* struck down a map that “crosse[d] the county lines of fifty-seven counties *and [made] at least nine additional unnecessary and constitutional divisions of those counties.*” *Id.* at 841-2 (emphasis added).⁸

In recent redistricting cycles, numerous other states have reached the same conclusions about their own Section 33 analogues, including Pennsylvania, North Carolina, and Missouri. *See, e.g., Holt v. 2011 Legislative Reapportionment Comm’n*, 38 A.3d 711, 755 (Pa. 2012) (striking down apportionment plan under state constitution in light of alternative proposals showing “that the LRC’s Final Plan contained subdivision splits that were not absolutely necessary”); *State ex rel. Teichman v. Carnahan*, 357 S.W.3d 601, 607 (Mo. 2012) (“The nonpartisan reapportionment commission’s plan violated this constitutional provision by improperly dividing the district boundaries in the multi-district areas . . .”); *Stephenson v. Bartlett*, 562 S.E.2d 377, 390 (N.C. 2002) (“The General Assembly may consider partisan advantage and incumbency protection in the application of its discretionary redistricting decisions, but it must do so in conformity with the State Constitution. To hold otherwise would abrogate the constitutional limitations or ‘objective constraints’ that the people of North Carolina have imposed on legislative

⁸ Specifically, the Court held that because “[t]he [l]egislature can devise a Senate plan which complies with the one person, one vote requirement and divides only three counties, and does so only three times...the Legislature must enact a Senate plan which divides only three counties and does so only three times.” *Lockert* at 844.

redistricting and reapportionment in the State Constitution. Accordingly, the [Whole-County Provision] remains valid and binding upon the General Assembly during the redistricting and reapportionment process . . . except to the extent superseded by federal law.” (internal citation omitted)).

In the three decades since *Fischer II*, this Court has reaffirmed that county integrity may only be compromised in service of equal population principles. In *Jensen v. Kentucky State Board of Elections*, 959 S.W.2d 771, 776 (Ky. 1997), this Court declined to “reconsider *Fischer II* and interpret Section 33 to require the division of the minimum number of counties *only after* each county large enough to contain a whole district is awarded the maximum number of districts its population would permit.” *Id.* at 774 (emphasis added). This Court declined to create this new constitutional rule because it would have required the Court to accept a map that divided more than the minimum possible number of counties and distributed population “slightly greater than . . . plus-or-minus 5%.” *Id.* at 774. In *Jensen*, this Court was rightfully unwilling to run roughshod over both of Section 33’s competing concerns—population equality and county integrity—without clear constitutional authority to do so.

Here, HB 191 proves it is possible to draw a legislative map that satisfies the Kentucky Constitution’s equal representation requirements while dividing Kentucky’s counties 20 times fewer than HB 2; crossing county lines to form districts 14 times fewer; and forming districts containing parts of three or more

counties 8 fewer times. That is dispositive of the issue because from the first legislative reapportionment, Section 33 has been understood to allow deviations from county integrity principles only when “*necessary* . . . to effectuate that equality of representation which the spirit of the whole section imperatively demands.” *Ragland*, 100 S.W. at 870 (emphasis added).

Appellees will no doubt argue, as they did in the trial court, that this Court has watered down the concept of “county integrity” to mean just the total number of counties split, without consideration of how many times the counties are then subdivided, whether portions of those counties are added to neighboring counties to form new districts, or if portions of more than two counties are combined to form districts. They likely will point to language from *Fischer IV* and *Jensen* that, they contend, means that Section 33 simply requires “dividing the fewest possible number of counties.” *Fischer IV*, 366 S.W.3d at 912. And they will insist that so long as they clear that low bar, they can ignore the actual text of Section 33. They must continue to make this argument; HB 2 makes sense no other way.

That argument is wrong, however. This “Court did not retreat from the importance of county integrity in *Jensen*.” *Fischer IV*, 366 S.W.3d at 912. That is undeniable. The Appellant in *Jensen* “premise[d] his constitutional challenge on the fact that the 1996 Act does not create a whole House district within the boundaries of either Pulaski County or Laurel County, even though both counties have populations large enough to accommodate a whole district.”

Jensen, 959 S.W.2d at 773. The challenger then asked the Supreme Court to “reconsider *Fischer II* and interpret Section 33 to require the division of a minimum number of counties *only after each county large enough to contain a whole district is awarded the maximum number of whole districts which can be accommodated by its population.*” *Id.* (emphasis added). This Court rejected the argument that each county large enough to have a district must get one because “that requirement was not included in the language of Section 33.” *Id.* at 775. That holding explains why, in *Fischer IV*, this Court went out of its way to hold it was “not free to disregard the drafters’ intent to preserve county integrity by striking the provision from Section 33”; it must, instead, give effect to both the words and spirit of Section 33 to the maximum extent possible. *Id.* at 913. That is precisely what Appellants ask here.⁹

Fischer IV, likewise, cannot withstand the weight Appellees place upon it. On the contrary, its reasoning supports Appellants’ claims. There, the Legislative Research Committee asked this Court to reverse two previous holdings: (1) that Section 33 requires the General Assembly to divide the fewest number of counties possible and (2) that Section 33 forbids the General Assembly to exceed the +/- 5% population tolerance even if the total variance

⁹ Appellees also are likely to point out that the party (and attorneys) challenging the plan adopted in *Jensen* advanced arguments similar to Appellants’ here. But that is a red herring; what matters is what this Court held in *Jensen*. It simply rejected the argument that the legislature must create a district in every county large enough to have one; it did not exempt the General Assembly from its obligations to follow the express mandates of the Constitution when possible.

between the largest and smallest district was less than 10%. *See Fischer IV*, 366 S.W.3d at 908. This Court declined to do so, finding that its duty was to follow the text of the Constitution “to the greatest extent possible.” *Id.* at 913. As applied to the facts here, that means minimizing county splits and/or combinations as much as possible while maintaining population equality. Those requirements appear in the text of Section 33. Yet Appellees ask this Court to ignore them.

Finally, the circuit court suggested that the “infamous ‘footnote 5,’ which became the center of *Fischer II*’s notable successor [*Jensen*],” supports Appellees’ Section 33 arguments. (R. 1877-1880). But this, too, misreads *Jensen*. In footnote 5 of *Fischer II*, this Court noted that it could “scarcely conceive of a circumstance in which a county or part thereof which lacks sufficient population to constitute a district would be subjected to multiple divisions.” *Fischer II*, 879 S.W.2d at 479 n.5 (Ky. 1994). By the time of *Jensen*, however, this Court noted that “what we thought was scarcely conceivable has been proven to be *unavoidable*.” *Jensen*, 959 S.W.2d at 776 (emphasis added). “No one now suggests that any redistricting plan could be drafted without some such multiple divisions.” *Id.* Here, by contrast, the excessive dividing and splitting of counties is not “unavoidable” and HB 191 proves that a plan can be drawn to minimize “such multiple divisions.” *Id.* *Jensen*’s treatment of footnote 5 thus supports Appellants’ argument, not Appellees’.

II. HB 2 and SB 3 violate section 6 of the Kentucky Constitution

“After consideration of the testimony and evidence presented at trial,” the Circuit Court was “compelled” to conclude that “HB 2 is a partisan gerrymander.” R. 1870. Likewise, the court found “that the evidence presented at trial sufficiently demonstrates that SB 3 is a partisan gerrymander.” R. 1872. These holdings are not surprising; they were supported by detailed testimony and analysis from Appellants’ experts. Appellees, on the other hand, did not even attempt to prove that the maps were not drawn for partisan purposes. They simply tried—unsuccessfully—to poke holes in Appellants’ analysis, and to fall back on the argument that Section 6 does not limit their political gamesmanship in any way. That is not correct.

Section 6 of Kentucky’s Constitution mandates that “[a]ll elections shall be free and equal.” Ky. Const. § 6. This provision is essential to fulfill “the very purpose of elections”—that is, “to obtain a full, fair, and free expression of the popular will upon the matter, whatever it may be, submitted to the people for their approval or rejection.” *Wallbrecht v. Ingram*, 175 S.W. 1022, 1026 (Ky. 1915).

Kentucky’s Free and Equal Elections Clause has no analog in the United States Constitution. Thus, while the United States Supreme Court has criticized “highly partisan” legislative maps as “unjust” and “incompatible with democratic principles,” it has found no “plausible grant of authority in the United States Constitution” to federal courts to address the issue. *Rucho v. Common Cause*, 139 S. Ct. 2484, 2506 (2019). The Court, however, did not

“condemn complaints about redistricting to echo into a void.” *Id.* Rather, it expressly left the issue to the states to address with their unique “provisions in state statutes and *state constitutions* that can provide standards and guidance for state courts to apply.” *Id.* (emphasis added).

Since *Rucho*, many states have cited their own constitutions as a basis to prohibit partisan gerrymandering. *See, e.g., Matter of 2021 Redistricting Cases*, 528 P.3d 40, 92 (Alaska 2023); *Harkenrider v. Hochul*, 197 N.E.3d 437 (N.Y. 2022); *League of Women Voters of Ohio v. Ohio Redistricting Comm’n*, 199 N.E.3d 485 (Ohio 2022). The most relevant decisions for this case are those from the Pennsylvania Supreme Court interpreting that state’s “free and equal” elections clause, on which Kentucky modeled Section 6. *See, e.g., Carter v. Chapman*, 270 A.3d 444, 458 (Pa. 2022); *League of Women Voters v. Commonwealth*, 178 A.3d 737 (Pa. 2018) (“*LWV*”).

In *LWV*, the Pennsylvania Supreme Court used its commonwealth’s free and equal election clause to overturn a partisan gerrymander. It did so, in part, because Pennsylvania’s Constitution, when adopted in 1776, was widely viewed as “the most radically democratic of all the early state constitutions.” *LWV*, 178 A.3d at 802. Its free and equal elections clause “mandates clearly and unambiguously, and in the broadest possible terms, that all elections conducted in this Commonwealth must be ‘free and equal.’” *Id.* at 804. The text’s “broad and wide sweep” is meant to “strike not only at privacy and partiality in popular elections, but also corruption, compulsions, and other

undue influences...[it] exclude[s] not only all invidious discriminations between individual electors, but also between different sections or places in the State.” *Id.* at 809 (quoting Charles R. Buckalew delegate to Pennsylvania 1873 Constitutional Convention). The free and equal clause “guarantees our citizens an equal right... to elect their representatives...[and] translate their votes into representation.” *Id.* at 804. This guarantee is essential “to end, once and for all, the primary cause of popular dissatisfaction which undermined the governance of Pennsylvania”—that is, “the dilution of the right of the people of this Commonwealth to select representatives to govern their affairs based on considerations of the region of the state in which they lived, and the religious and *political beliefs to which they adhered.*” *Id.* at 808-09 (emphasis added).

Kentucky’s free and equal election clause is identical to Pennsylvania’s because the drafter of Kentucky’s Bill of Rights “borrowed almost verbatim from the Pennsylvania Constitution of 1790.” *Commonwealth v. Wasson*, 842 S.W.2d 487 (Ky. 1992), *overruled on different grounds by Calloway County Sheriff’s Dep’t v. Woodall*, 607 S.W.3d 557 (Ky. 2020). Accordingly, “decisions of the Supreme Court of Pennsylvania, when interpretating provisions of the Pennsylvania Constitution similar to that of the Kentucky Constitution, are very persuasive to the Courts of the Commonwealth and should be given as much deference as any non-binding authority receives.” *Yeoman v. Com., Health Policy Bd.*, 983 S.W.2d 459 (Ky. 1998).

Although the Circuit Court found that HB 2 and SB 3 were in fact partisan gerrymanders, it held there was no violation of Section 6 because, in the court's view, that provision is solely a "prohibition against interferences with the vote-placement and vote-counting process." R. 1886. That holding rests on a misreading of prior Section 6 precedents, the constitutional debates the trial court cited, and the importance of cases like *LWV* that interpret similar "free and equal" elections clauses.

First, this Court's predecessor held in *Burns v. Lackey*, 186 S.W. 909 (Ky. 1916), that Section 6 was not merely limited to election-day interferences. There, the Court reversed the outcome of an election under Section 6 because of the alleged undue influence of a political organization comprised of many of the communities' Black residents, who pledged to vote together as a block. The Court found a Section 6 violation even though "[t]here [was] no claim that physical violence was practiced at the election, or that any voter who was not in the ordinary sense a legal voter cast a ballot." *Burns*, 186 S.W. at 914. Nor was there any dispute the ballots were accurately counted. *See also Queenan v. Russell*, 339 S.W.2d 475 (Ky. 1960) (striking down an absentee ballot law under Section 6 because Jefferson and other populous counties were disadvantaged by provisions in the statute requiring certain procedures for counting and recording absentee ballots).

Second, the 1891 Constitutional debates the court cited, when placed in proper context, support Appellants, not Appellees. Indeed, those debates reveal

that the delegates' continuing use of Pennsylvania's "free and equal" formulation was intended to embrace the "broad and wide sweep" of the Pennsylvania provision. *LWV*, 178 A.3d at 809. Delegates arguing in favor of the as-adopted version of Section 6 emphasized the importance of keeping the word "equal" in Section 6 to confirm that it broadly protects Kentuckians' "political rights" against all kinds of election interference:

"Mr. Rodes: What would be your caption? What (to imitate the newspapers), would be the large, immense heading in Roman capital letters? The subject matter of which you treat? *It would be "political rights."* ...

The gentleman proposes to go on and define that word "equal" as meaning free from the interference of the civil or military authorities. That is unnecessary.

...

In law, therefore, whenever you have got a word of any kind that will express by its shortness, its compactness, and the fruitfulness of its suggestions, a full definition, I contend it ought to be allowed to stay, with nothing further added to it. This is one of those terms: "All elections shall be free and equal." How equal? Why equal? It is a term that has become more used of later days than ever. It was used in the Fourteenth Amendment to the Constitution of the United States, which expresses it, 'the equal protection of the law.'—not equal otherwise. No man shall interfere—no civilian, no military man. You go to an election at your polling booth, you go freely, you go equally; no one has a superiority; no one can say "stand back;" no one can say "take my vote before yours;" *no one can say "my vote counts two, while yours only counts one."* *It is equal in every sense; so, what is the use of changing it?*

Ky. Const. Debates, Vol. 1, pp. 768-769 (emphasis added). Other delegates arguing in support of "free and equal" elections praised that phrase's ability to apply to all manner of election malfeasance:

“All elections shall be free and equal.” I do not know of any objection to that; but I think I heard one intelligent gentleman from Louisville say “equal” ought to be struck out. That is an old phrase. In the Bill of Rights two hundred years ago it is said, “All elections shall be free,” and the word “equal” was not used—not because they did not want to use it, but because they could not....*the word “equal,” which implies equality, just and honorable dealing should stand... That is my voice, and I believe the voice of this convention.*

Ky. Const. Debates, Vol 1, p. 438. (emphasis added).

To be sure, some delegates opposed including such broad protections for free and equal elections in the new Constitution. They advocated for narrower, more specific language that would have limited Section 6 to preventing physical interference with an individual’s right to vote. That argument, however, was rejected by the delegates, who preferred broad election protections capable of adapting to the threats to free and equal elections in any era.

In the trial court, Appellees ignored this important context and focused on a speech from Delegate Knott that, they claim, illustrates Section 6’s limited application to attempts to physically interfere with the right to vote:

Mr. Knott: ...Of course no sane man will contend that a mere paper guaranty could protect voters from an armed mob, or other lawless body who might throng the polls for the purpose of carrying an election by intimidation and force ; such guarantees are intended to limit the authority of those whom the people may entrust with power, and to them I hope the Convention will address this plain, emphatic, unmistakable language: *No power, civil or military, shall ever interfere to prevent the free exercise of the right of suffrage by those entitled to vote at any election authorized by law.*

See Commonwealth’s Post-Hearing Brief, p. 27; Ky. Const. Debates, Vol 1, p. 731 (emphasis added). The glaring problem with Appellees’ theory is that Delegate Knott was not attempting to clarify the definition of “free and equal”—he was attempting to strike it from the Constitution and replace it with the italicized language in the above quote. In other words, Delegate Knott argued for precisely the same narrow election protections now preferred by the Commonwealth—but was rejected by the Convention.

Moreover, it is clear the Convention opposed Delegate Knott precisely because most delegates wanted Kentucky’s Constitution to prevent more than the rare physical interference with the right to vote. Just before the Convention’s final vote on the “free and equal” clause, Delegate McDermott (an ally of Delegate Knott) argued in support of his own similar “physical interference only” amendment that stated: “all elections shall be free from intimidation, and all legal votes shall have equal weight.” Ky. Const. Debates, Vol. 1, p. 947. After an informative debate, the Convention again rejected limiting Section 6 to the physical interference with the right to vote. Delegate Buram, arguing against McDermott’s amendment, praised the breadth of the “free and equal” elections clause:

Mr. BURNAM. *The word “equal,” in its application here, is a good deal broader than the gentleman proposes. Now, there is involved in the word, according to my idea, the idea also of uniformity... I think that these words, “that all elections shall be free from intimidation from the power of military force,” would be covered by that single word; and every other difficulty growing out of what I have said*

about the lack of uniformity will be all embraced by the word “equal,” so far from desiring a large number of words in the Bill of Rights the fewer and the simpler, the better.

Ky Const. Debates, Vol. 1, p. 947 (emphasis added). After a brief rebuttal from McDermott, Delegate Rodes explained that the “free and equal” clause should remain because its broad meaning was necessary to create Constitutional protections against all manner of schemes to unfairly hijack Kentucky’s election machinery, for whatever reason:

Mr. Rodes: As to my differing with my friend from Madison [Mr. Burnham], I don’t understand that I do...*The gentleman from Madison said the word ‘equal’ was a broad word, and meant a great deal; meant fairness, freedom from everything else that would secure—*

Id. at 947-48. After a brief interruption, Mr. Rodes continued voicing his support of the “free and equal” elections clause:

“I do not say that litigation may not have arisen about it, *or that Courts may not be called upon to determine it, but it has a common sense plain meaning*; and whether we differ from [Mr. McDermott], or whether we have moral courage to stand up and face it or not, or whether our constituents understand us or not, I think we are on an equality with [Mr. McDermott], and it is not for him to call us to an account before his judgment bar to know what we shall do.”

Id. (emphasis added). Immediately after the Convention heard Mr. Rodes’ argument in favor of a broad “free and equal” election clause that ensured “fairness” and freedom from “everything” that would interfere with that

mandate, it voted to adopt Section 6 as we know it today: “All elections shall be free and equal.” *Id.*

This Court must give effect to the Constitutional framers’ decision to enact broad election protections capable of protecting the franchise against any unfair interference with Kentuckians’ right to vote. To do so, it must reverse the Franklin Circuit Court’s erroneous acceptance of Delegates Knott’s and McDermott’s lost convention fight for narrower constitutional text that protects only against physical interference with voting. (R. 1884-86). The Circuit Court determined the meaning of Section 6 by substituting the “physical interference only” arguments advanced by the Commonwealth today—but rejected by the Constitutional Convention in 1891—for the intentionally broad election protections adopted by the framers. That reasoning defies logic and must be reversed.

Third, the Circuit Court compounded its interpretive error by expressly refusing to consider decisions from other jurisdictions interpreting analogues to Section 6—and in particular decisions from Pennsylvania, on whose constitution Section 6 was based. This Court has specifically held that “[d]ecisions of the Pennsylvania Supreme Court interpreting like clauses in the Pennsylvania Constitution are uniquely persuasive in interpreting our own.” *Wasson*, 842 S.W.2d at 498. And it has looked to other states’ constitutions in the context of challenges to apportionment plans. *See, e.g., Fischer II*, 879 S.W.2d at 479 (citing *Lockert*, 656 S.W.2d at 839).

As noted above, the Pennsylvania Supreme Court has repeatedly and forcefully held that an election is not “free and equal” if conducted using a gerrymandered apportionment plan. *See, e.g., Carter*, 270 A.3d at 451; *LWV*, 178 A.3d at 809. Indeed, that court has found that “any legislative scheme which has the effect of impermissibly diluting the potency of an individual’s vote for candidates for elective office relative to that of other voters will violate the guarantee of ‘free and equal’ elections.” *LWV*, 178 A.3d at 809 (emphasis added).

This Pennsylvania authority is certainly more persuasive than a recent decision from North Carolina,¹⁰ for example, because Pennsylvania and Kentucky’s framers consciously chose to include more expansive election protections in their Constitutions. Both Commonwealths declare that all “Elections shall be free and equal.” Pa. Const. art. I, § 5¹¹; Ky. Const. § 6. North

¹⁰ In the Franklin Circuit Court, Appellants cited North Carolina’s *Harper v. Hall*, 868 S.E.2d 499 (N.C. 2022), decision to support their argument that partisan gerrymandering claims are justiciable under Section 6. However, after an election that flipped North Carolina’s Supreme Court majority, that Court reversed itself and held that claims under North Carolina’s “free” elections clause are non-justiciable. *Harper v. Hall*, 886 S.E.2d 393 (N.C. 2023).

¹¹ Article I, § 5 reads in full: “Elections shall be free and equal; and no power, civil or military, shall at any time interfere to prevent the free exercise of the right of suffrage.” The use of the conjunctive “and” makes clear that “Elections shall be free and equal” means more than protection against civil or military “interference to prevent the free exercise of the right of suffrage” as the Commonwealth argues here. Kentucky’s constitutional framers did not include that specifying language in § 6 because, as stated herein, they deemed it unnecessary because protecting “free and equal” elections encompasses all manner of improper election interference.

Carolina, by contrast, states only that “All Elections shall be free.” N.C. Const. art. I, § 10. Kentucky’s decision to include “and equal” in our Constitution means it is capable of addressing election related claims that North Carolina’s cannot. *See Hodgkin v. Kentucky Chamber of Com.*, 246 S.W.2d 1014 (Ky. 1952) (“[E]ach word in the Constitution should be given meaning and effect.”).

III. HB 2 and SB 3 Violate the guarantee of equal protection set forth in Sections 1, 2, and 3 of Kentucky’s Constitution

Kentuckians are guaranteed equal protection of the law by Sections 1, 2, and 3 of our Constitution. *Zuckerman v. Bevin*, 565 S.W.3d 580, 594 (Ky. 2018). HB 2 and SB 3 violate this guarantee of equal protection by drawing maps with the purpose and effect of artificially increasing and entrenching Republican control of the General Assembly and Kentucky’s Congressional delegation.

Equal protection requires that every citizen’s vote carry the same weight. *See Fischer IV*, 366 S.W.3d at 910; *see also Asher v. Arnett*, 132 S.W.2d 772, 776 (Ky. 1939) (“equal” comprehends the principle that every elector has the right to have their vote “counted for all it is worth,” and that, when cast, their vote “shall have the same influence as that of any other voter”).

““In the context of voting rights in redistricting and reapportionment litigation, there are two principles of equal protection, namely that of ‘one person, one vote’—the right to an equally weighted vote—and of ‘fair and effective representation’—the right to group effectiveness or an equally powerful vote.” *Matter of 2021 Redistricting Cases*, 528 P.3d at 57; *see also*

Fischer IV, 366 S.W.3d at 910 (noting that malapportionment violates a Kentucky “citizen’s right to fair and effective representation”). “The former is quantitative, or purely numerical, in nature; the latter is qualitative.” *Hickel v. Southeast Conference*, 846 P.2d 38, 47 (Alaska 1992), *as modified on reh’g* (Mar. 12, 1993).

Here, the trial court found that HB 2 and SB 3 were designed to deprive Democratic voters of the right to fair and effective representation. These plans systematically made it harder for Democrats to elect a governing majority than another group of voters of equal size. As Dr. Caughey noted, even if the statewide vote had split 50-50 between Democrats and Republicans, Republicans would still enjoy a 10-seat advantage in the legislature. (VR 4/6/22, 11:17:45 – 11:18:50). That clear structural bias denies equal protection to Democratic voters.

Because HB 2 and SB 3 implicate Kentuckians’ fundamental right to vote, they are subject to strict scrutiny. *See Mobley v. Armstrong*, 978 S.W.2d 307, 309 (Ky. 1998), *as modified* (Oct. 22, 1998). Under that standard of review, a law “is sustainable only if it is suitably tailored to serve a compelling state interest.” *Zuckerman*, 565 S.W.3d at 595 (cleaned up).

The state obviously has no interest in making it easier for Republican voters to elect representatives of their choice than Democratic voters—let alone a compelling one. After all, “gerrymandering is incompatible with democratic principles.” *Rucho*, 139 S.Ct. at 2506.

Because Appellants made a *prima facie* showing that HB 2 and SB 3 violate the equal protection guarantees in Kentucky’s Constitution, the burden shifts to the Commonwealth to prove a compelling state interest. But here, Appellees made no attempt to prove that HB 2 and SB 3 are narrowly tailored to advance a compelling governmental interest. That renders the law unconstitutional.

IV. HB 2 and SB 3 Violate the Kentucky Constitution’s freedom of speech and assembly clauses.

Section 1 of the Kentucky Constitution provides that all Kentuckians shall have the inalienable rights of “freely communicating their thoughts and opinions” and “assembling together in a peaceable manner for their common good, and of applying to those invested with the power of government for redress of grievances or other proper purposes, by petition, address or remonstrance . . .” Ky. Const. § 1(4) & (6).

Voting for the candidate of one’s choice and associating with the political party of one’s choice are core means of political expression protected by Kentucky’s freedom of speech and assembly clauses. *See Associated Industries of Kentucky v. Commonwealth*, 912 S.W.2d 947, 952 (Ky. 1995) (Section 1 of Kentucky’s Constitution is “designed to protect the rights of citizens in a democratic society to participate in the political process of self-government.”).

Because HB 2 and SB 3 burden constitutionally protected expression and association, they are subject to strict scrutiny. *Id.* Indeed, these laws essentially punish voters for their past speech—*i.e.*, voting for democratic

candidates—by assigning many of them to districts where they will have less chance to elect their preferred candidates in the future. Any law that targets a citizen because of the viewpoint they expressed is presumptively unconstitutional. *See Rosenberger v. Rector & Visitors of University of Virginia*, 515 U.S. 819, 829 (1995); *Champion v. Commonwealth*, 520 S.W.3d 331, 338 (Ky. 2017).

HB 2 and SB 3 also retaliate against voters for their protected speech. Courts carefully guard against retaliation by the party in power. *See Elrod v. Burns*, 427 U.S. 347, 356 (1976); *Branti v. Finkel*, 445 U.S. 507 (1980); *Rutan v. Republican Party of Ill.*, 497 U.S. 62 (1990). When patronage or retaliation restrains citizens’ freedoms of belief and association, it is “at war with the deeper traditions of democracy embodied in the First Amendment.” *Elrod*, 427 U.S. at 357 (quotation marks omitted). Here, Plaintiffs were targeted for disfavored treatment because of a shared marker of political belief—their status as Democratic voters. That suffices. *See Miller v. Johnson*, 515 U.S. 900, 920 (1995) (condemning State’s targeting of areas with “dense majority-black populations”).

V. SB 3 Violates the Constitution’s Prohibition on Absolute and Arbitrary Power

“Absolute and arbitrary power over the lives, liberty and property of freemen exists nowhere in a republic, not even in the largest majority.” Ky. Const. § 2. This constitutional guarantee “is a curb on the legislative as well as on any other public body or public officer in the assertion or attempted exercise

of political power.” *Sanitation Dist. No. 1 of Jeff. Co. v. City of Louisville*, 308 Ky. 368, 375 (Ky. 1948). The General Assembly is just as bound by Section 2 as is any other state actor.

In applying this provision, this Court has held that “[w]hatever is contrary to democratic ideals, customs and maxims is arbitrary.” *Kentucky Milk Marketing v. Kroger Co.*, 691 S.W.2d 893, 899 (Ky. 1985). “Likewise, whatever is essentially unjust and unequal or exceeds the reasonable and legitimate interests of the people is arbitrary.” *Id.* “If . . . the consequences are so unjust as to work a hardship, judicial power may be interposed to protect the rights of persons adversely affected.” *Id.*

Kentucky courts have invoked Section 2 to strike down laws that violate these basic guarantees of due process and equal protection. *See, e.g., Kentucky Milk Marketing*, 691 S.W.2d at 900 (milk marketing statute “is an arbitrary exercise of power by the General Assembly over the lives and property of free men”); *General Electric v. American Buyers Cooperative*, 316 S.W.2d 354, 361 (Ky. App. 1958) (state price-fixing law arbitrary in violation of Section 2); *Sanitation Dist. No. 1*, 308 Ky. at 375 (annexation bill imposed such onerous terms on City of Louisville as to be arbitrary).

That same result is warranted here. HB 3 is pure irrationality; it creates a snakelike district that stretches from the Mississippi River to the state capitol in order to preserve the “core” of a district originally drawn to protect the political power of a legislator (William Natcher) that died 30 years ago,

without ever getting to run in the district created for him. As a result, the residents of Franklin County will now share representation with residents of far Western Kentucky, with whom they have little in common. (VR 4/6/22, 4:45:15 – 4:46:36). Even the Commonwealth’s expert in Kentucky politics conceded that if you simply tried to keep Bowling Green and Owensboro together without attempting to preserve the entire 2nd district, Frankfort would virtually never end up paired with Western Kentucky. (VR 4/7/22, 4:53:15 – 4:53:23). There is thus no logical justification for the harms created by SB 3, other than the raw political ambitions of the Republican supermajority.

CONCLUSION

The trial court got the facts right but the law wrong. This Court should hold that HB 2 and SB 3 are unconstitutional because they enact an impermissible partisan gerrymander that violates the guarantee of “free and equal elections” as well as Kentuckians’ rights to equal protection and free speech. Furthermore, it should hold that HB 2 violates Section 33 by unnecessarily dividing and combining counties in ways not necessary to achieve population equivalence. It should remand the matter to the circuit court with instructions to (1) invalidate the existing maps and (2) compel the legislature to enact new, constitutional maps for use in the 2024 election cycle.

Respectfully Submitted,



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WORD COUNT CERTIFICATE

This document complies with the word limit of RAP 31(G)(2)(c) because, excluding the parts of the document exempted by RAP 15(E), it contains 15,185 words according to the count of Microsoft Word software.

/s/ Michael P. Abate

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In the Kentucky Supreme Court

DERRICK GRAHAM, JILL ROBINSON, MARY LYNN COLLINS,
KATIMA SMITH-WILLIS, JOSEPH SMITH, and THE KENTUCKY
DEMOCRATIC PARTY,

Plaintiffs-Appellants,

v.

MICHAEL ADAMS, in his official capacity of Secretary of State, and
KENTUCKY STATE BOARD OF ELECTIONS,

Defendants-Appellees.

APPEAL FROM FRANKLIN CIRCUIT COURT
CASE NO. 22-CI-00047

APPELLANTS' APPENDIX

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CERTIFICATE OF SERVICE

In accordance with RAP 30(B), on June 26, 2023, the undersigned filed this appendix with the Court's electronic filing system which caused a copy to be served on all counsel of record. The undersigned also served copies of the brief via U.S. Mail on (1) Hon. Thomas Wingate, Franklin Circuit Court, 222 St. Clair St., Frankfort, KY 40601; (2) Victor Maddox, Heather Becker, Alex Magera, Aaron Silletto, Office of Attorney General, 700 Capital Avenue, Suite 118, Frankfort, KY 40601; (3) Taylor Brown, Kentucky State Board of Elections, 140 Walnut Street, Frankfort, KY 40601; (4) Jennifer Scutchfield, Office of the Secretary of State, 700 Capital Avenue, Suite 152, Frankfort, KY 40601. Undersigned counsel further certifies that it did not retrieve the appellate record from the Franklin Circuit Clerk.

s/ Michael P. Abate

APPENDIX CONTENTS

Tab	Document	Record Cite	Trial Exhibit
1	Trial Court Opinion	R. 1832-1903	
2	HB 2 Map	R. 312	DEX 1, Tab 1
3	SB 3 Map	R. 313	DEX 1, Tab 11
4	Imai Report	R. 717-751	PEX 2
5	Caughey Report	R. 703-716	PEX 6
6	Side-by-side city maps		PEX 3
7	Excerpt from "Why Cities Lose"		PEX 10

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**COMMONWEALTH OF KENTUCKY
FRANKLIN CIRCUIT COURT
DIVISION II**

CIVIL ACTION No. 22-CI-00047

**DERRICK GRAHAM, JILL ROBINSON, MARY LYNN
COLLINS, KATIMA SMITH-WILLIS, JOSEPH SMITH, and
THE KENTUCKY DEMOCRATIC PARTY**

PLAINTIFFS

vs.

**MICHAEL ADAMS, in his official capacity as
Secretary of State of the Commonwealth of Kentucky and
THE KENTUCKY STATE BOARD OF ELECTIONS**

DEFENDANTS

and

COMMONWEALTH OF KENTUCKY

INTERVENING DEFENDANT

OPINION AND ORDER

This matter came before the Court for a bench trial on April 5-7, 2022. Upon review of the parties' pleadings, and having considered the testimony of the witnesses, as well as the exhibits that were placed into evidence, the Court hereby issues this Opinion and Order.

PROCEDURAL HISTORY

Every ten (10) years, in accordance with Section 33 of the Kentucky Constitution, the General Assembly undertakes apportioning representation through new boundaries for state Senatorial and House Districts. Additionally, considering population shifts, every ten (10) years the General Assembly is also tasked with drawing new boundaries for Congressional Districts.

The 2020 Census determined that Kentucky's population is 4,505,836. Commonwealth's Exhibit 1, Tabs 18 and 19. Thus, Kentucky is entitled to six (6)

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Congressional representatives. *Id.* The ideal population for each Congressional District in Kentucky is 750,973 people. Section 33 of the Kentucky Constitution establishes one hundred (100) state House Districts with approximate population equality. KY. CONST. § 33. Accordingly, the ideal population for these one hundred (100) districts is 45,058 people. During the 2022 Regular Session, the General Assembly passed new maps for House Districts, House Bill 2 (“HB 2”)¹, Senatorial Districts, Senate Bill 2 (“SB 2”)², and Congressional Districts, Senate Bill 3 (“SB 3”)³ based on data from the 2020 Census.⁴

The General Assembly passed HB 2 on January 8, 2022, and it was then delivered to Governor Andy Beshear. On January 19, 2022, Governor Beshear exercised his constitutional authority and vetoed HB 2 opining that the redistricting plan is an unconstitutional partisan gerrymander, excessively splits counties, and dilutes the voices of certain minority communities. Veto Message, HB 2 (2022RS). The General Assembly overrode Governor Beshear’s veto on January 20, 2022, and HB 2 became effective immediately due to the emergency clause contained within. Similarly, SB 3 was passed and delivered to Governor Beshear on January 8, 2022. On January 19, 2022, Governor Beshear exercised his constitutional authority and vetoed SB 3 claiming it was drafted without public input and is an unconstitutional partisan gerrymander noting that the First Congressional District uncharacteristically spans hundreds of miles from Fulton County to Franklin County. Veto Message, SB 3 (2022RS). The General Assembly overrode

¹ KRS 5.201

² KRS 5.101

³ KRS 118B.110

⁴ Plaintiffs do not challenge the constitutionality of SB 2, however, the Court notes that SB 2 was passed and delivered to Governor Beshear on January 8, 2022. Governor Beshear failed to veto or sign SB 2, so SB 2 became law without Governor Beshear’s signature and became effective immediately due to the emergency clause contained within.

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Governor Beshear's veto on January 20, 2022, and SB 3 became effective immediately due to the emergency clause contained within.

On January 20, 2022, Plaintiffs initiated this action against Secretary of State Michael G. Adams ("Secretary Adams") and the Kentucky State Board of Elections ("the SBE") to challenge the constitutionality of HB 2 and SB 3.⁵ With respect to HB 2, Plaintiffs allege that HB 2 violates Sections 1, 2, 3, 6, and 33 of the Kentucky Constitution. Plaintiffs state that HB 2 is the result of extreme partisan gerrymandering, which they believe is prohibited under Sections 1, 2, 3, and 6 of the Kentucky Constitution. Additionally, Plaintiffs contend that HB 2 violates Section 33 of the Kentucky Constitution because it excessively splits counties more times than necessary. With respect to SB 3, Plaintiffs assert that it also is the result of extreme partisan gerrymandering and violates Sections 1, 2, 3, and 6 of the Kentucky Constitution.

On January 27, 2022, the Commonwealth of Kentucky, by and through Attorney General Daniel Cameron ("the Commonwealth"), moved to intervene to defend the constitutionality of HB 2 and SB 3. The Commonwealth's *Motion to Intervene* was orally granted at the February 10, 2022, hearing and by Order entered February 10, 2022.

On January 28, 2022, a little over a week after initiating this action, Plaintiffs moved for injunctive relief to enjoin the use of HB 2 and SB 3 in the 2022 election cycle. On February 4, 2022, the Commonwealth filed a crossclaim and counterclaim challenging the constitutionality of House Bill 302 (2012RS) and House Bill 1 (2013SS) (collectively "the 2012/2013 districts"). The Commonwealth alleges the 2012/2013 districts were enacted based on 2010 Census data and therefore violate Section 33 of the Kentucky

⁵ The SBE takes no position on this litigation.

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Constitution and the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution. The Commonwealth also filed a *Motion for Temporary and Permanent Injunction* on its crossclaim and counterclaim. Additionally, on February 4, 2022, the Commonwealth and Secretary Adams jointly filed a *Motion to Dismiss*.

The parties appeared before the Court on February 10, 2022, and the Court heard oral argument on Plaintiffs' *Motion for Temporary Injunction* and the Commonwealth's and Secretary Adams' joint *Motion to Dismiss*. By Order entered February 17, 2022, the Court denied the Commonwealth's and Secretary Adams' *Motion to Dismiss* finding that it was premature. Additionally, by separate Order entered February 17, 2022, the Court denied Plaintiffs' *Motion for Temporary Injunction*. The Court determined that "injunctive relief would disrupt the status quo, would unduly harm Secretary Adams and other election officials, and would disserve the public." February 17, 2022, Order at 12. Given the significance of this action, the Court immediately set this matter for a bench trial.

A bench trial was held on April 5-7, 2022. At the trial, the parties offered two (2) stipulations: (1) HB 2 splits twenty-three (23) counties, which is the minimum number of counties that must be split to comply with population variation constitutional requirements; and (2) all material on the Legislative Research Commission's website and the SBE's website is admissible. At trial, Plaintiffs offered ten (10) exhibits into evidence and the Commonwealth offered thirty-five (35) exhibits into evidence. Additionally, Plaintiffs proffered expert testimony from two (2) witnesses: Dr. Kosuke Imai and Dr. Devin Caughey, and lay testimony from three (3) witnesses: Representative Derrick Graham, Jill Robinson, and Trey Heineman. In rebuttal, the Commonwealth proffered expert testimony from two (2) witnesses: Sean Trende and Dr. Stephen Voss.

ANALYSIS**I. Expert Testimony****a. Dr. Kosuke Imai**

Plaintiffs presented testimony from Dr. Kosuke Imai. The Court admitted Dr. Imai, without objection, as an expert in computational science and simulation analysis used to evaluate legislative redistricting proposals. Video Record (“VR”) 4/5/22, 10:51:40-10:51:53. Dr. Imai used Monte Carlo simulation algorithms to generate a representative set of possible redistricting maps under a specified set of criteria.⁶ Plaintiffs’ Exhibit 2, pp. 6-7; VR 4/5/22, 10:31:32-10:37:46. This allows one to evaluate the properties of an enacted map by comparing them against those of the simulated maps. *Id.* If the proposed plan unusually favors one party over another when compared to the ensemble of simulated maps, this serves as empirical evidence that the proposed plan is a partisan gerrymander. *Id.* Statistical analysis then allows one to quantify the degree to which the proposed plan is extreme relative to the ensemble of simulated plans in terms of partisan outcomes. *Id.* The simulation-based approach has the ability to account for a state’s political and geographic features, including spatial distribution of voters and configuration of administrative boundaries. Plaintiffs’ Exhibit 2, p. 7; VR 4/5/22, 10:38:30-10:40:44. Thus, Dr. Imai’s method allows one to compare a proposed plan to a representative set of alternate districting plans subject to Kentucky’s administrative boundaries, political geography, and constitutional requirements. *Id.* Dr. Imai clarified that these simulation algorithms are not designed to generate thousands of maps that would actually be enacted by policy makers.

⁶ Dr. Imai developed these algorithms, and they are widely used by others in the field.

VR 4/5/22, 10:35:47-10:36:49. Instead, their primary purpose is to evaluate a specific proposed or enacted plan for partisan bias or other concerns. *Id.*

i. HB 2

Dr. Imai testified that he used his simulation algorithm to generate 72,000 simulated state House plans. Plaintiffs' Exhibit 2, pp. 21-22; VR 4/5/22, 10:34:20-10:35:46, 11:06:00-11:07:38, 1:42:40-1:43:20. The number of simulated plans that can be devised is astronomical, however, Dr. Imai narrowed the number from 72,000 simulated maps to 10,000 through burning and thinning, which are standard techniques. *Id.* He instructed the algorithm to create one hundred (100) contiguous districts with a population variation not to exceed +/-5%. VR 4/5/22, 11:02:16-11:04:14. He further instructed the algorithm to split the fewest number of counties possible, have fewer multi-split counties, have fewer districts with more than two (2) counties, and fewer counties with multiple districts. *Id.* He did not input any partisan or race data. *Id.* Dr. Imai testified that he did not instruct the algorithm to consider communities of interest, race, school and church locations, neighborhoods, the location of county seats, transportation corridors, natural boundaries like rivers and mountains, incumbent or candidate homes, double bunking, continuity of representation, or core retention of districts. VR 4/5/22, 2:01:33-2:03:40. Dr. Imai stated that he focused on county integrity and splitting as few counties multiple times so the simulation may have those characteristics, especially if they coincide with county boundaries. *Id.*

He evaluated the partisan lean of districts created by HB 2 compared to the simulated state House plans using data from the eight (8) most recent state-wide elections for which precinct-level voting data is available: the 2016 Presidential and United States

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Senate elections, and the 2019 elections for Governor, Attorney General, Secretary of State, Auditor, Treasurer, and Agricultural Commissioner. Plaintiffs' Exhibit 2, p. 24; VR 4/5/22, 10:55:12-10:59:00. Dr. Imai stated it is standard practice in simulation analysis to use this method because it provides a general measure of partisanship, not specific to any particular candidate or race. *Id.*; VR 4/5/22, 2:07:57-2:09:50. He stated the point of combining all eight (8) of the recent statewide elections is to get a good idea of partisanship. VR 4/5/22, 2:07:57-2:09:50. Dr. Imai testified that one does not want to rely on one (1) particular race, and it is best to average all of the different races to get a good measure of partisanship. *Id.* He further testified that this system is not a forecasting model to predict outcomes for future elections and is merely used to measure partisanship. VR 4/5/22, 10:59:01-10:59:47. Dr. Imai testified that one cannot cherry pick maps to analyze and critiqued the Commonwealth's experts for doing so. VR 4/5/22, 11:15:15-11:19:30. He testified that to evaluate the simulated maps, one must look at all 10,000 maps and look for an imposed tendency. *Id.*

For his analysis, Dr. Imai ordered each Representative district under HB 2 by its Democratic vote share, based on the above data, from the district with the lowest Democratic vote share to the district with the highest. Plaintiffs' Exhibit 2, pp. 11-13; VR 4/5/22, 11:21:20-11:29:01. Dr. Imai then did the same with each of the 10,000 simulated House plans. *Id.* He compared the distribution of district level Democratic vote share between the simulated plans and HB 2. *Id.* He focused on the nine (9) most competitive districts. *Id.* He testified that there is a drastic "jump" between D79 and D80, which he explained is a signature showing of partisan gerrymandering because it shows how Republican leaning districts have been made safer whereas Democratic leaning districts

are made more competitive. *Id.* He testified that the simulated plans did not have the drastic “jump” like HB 2’s partisanship did. Instead, he stated it was a smooth transition between D73 and D84. *Id.* So, in conclusion, Dr. Imai testified that his analysis shows that HB 2 makes Democratic leaning districts more competitive while Republican leaning districts become safer. *Id.* He testified that this clearly demonstrates that HB 2 is a partisan gerrymander. *Id.*

Dr. Imai conducted an analysis of the district divisions in Kentucky’s two (2) largest cities: Louisville (Jefferson County) and Lexington (Fayette County). In Louisville/Jefferson County electors typically vote Democratic, but Jefferson County shares borders with many Republican-leaning counties: Oldham, Shelby, Spencer, and Bullitt. Dr. Imai testified that his simulations demonstrate that under HB 2 the districts—specifically Districts 33, 37, and 48—have been drawn to craft more “safe” Republican districts by combining areas in Jefferson County that are likely to be more competitive with Republican safeholds in neighboring counties. Plaintiffs’ Exhibit 2, pp. 13-15; VR 4/5/22, 11:33:06-11:38:45. Dr. Imai found this pattern was repeated in Lexington/Fayette County. Plaintiffs’ Exhibit 2, p. 15, Figure 5; VR 4/5/22, 11:38:47-11:43:18. In the heart of Fayette County electors typically lean Democratic, but Fayette County shares borders with Woodford, Scott, Bourbon, Clark, and Madison Counties, which have many Republican electors. Dr. Imai opined that HB 2 packs Fayette County’s Democratic electors into districts, specifically Lexington’s city center, to reduce the Democratic vote share in the surrounding districts. *Id.* He stated that his simulations show that Districts 45 and 88 have taken areas of Fayette County that are likely to be more competitive and combined them

with Republican safeholds in neighboring counties to create additional Republican safe districts. *Id.*

Dr. Imai also testified about his analysis of multi-split counties, which focused on how the split counties were further split. He testified that HB 2 has eighteen (18) counties that are split multiple times (into more than two (2) districts) whereas his ensemble has fifteen (15) such counties on average, with a range from thirteen (13) to seventeen (17). VR 4/5/22, 11:09:52-11:10:32. He then stated that HB 2 has a total number of eighty (80) multi-county splits and on average his simulated plans produced less. Plaintiffs’ Exhibit 2, p. 22; VR 4/5/22, 11:12:55-11:13:49. He concluded that HB 2 “unnecessarily splits a greater number of counties into more than two (2) districts.” VR 4/5/22, 11:10:32-11:11:38. Similarly, he analyzed the number of Representative districts that include part of more than two (2) counties. *Id.* He stated that under HB 2 there are thirty-one (31) districts containing more than two (2) counties whereas under his simulated ensemble there are twenty-four (24) such districts, with a range from twenty-one (21) to thirty (30). VR 4/5/22, 11:11:40-11:12:28. He testified that this difference is statistically significant, making HB 2 an outlier. *Id.*

ii. SB 3

Dr. Imai also evaluated SB 3’s Congressional districts. He testified that he had the algorithm create 10,000 simulated plans and instructed the algorithm to create these simulated plans with six (6) contiguous districts with an overall population deviation of +/- .1% and included a compactness parameter of one (1). Plaintiffs’ Exhibit 2, pp. 16-18; VR 4/5/22, 11:50:00-11:55:55. He also stated that he instructed the algorithm to split the fewest number of counties and did not use any race or partisan criteria. *Id.* Dr. Imai testified that

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he instructed the algorithm to make the simulated maps the same level of compactness as SB 3 and as a result this has demonstrated that the First District is highly uncompact. VR 4/5/22, 3:09:06-3:11:19. Dr. Imai also criticized the use of “freezing” a district. VR 4/5/22, 11:56:41-11:57:19. He stated that when evaluating compactness, one must be careful with freezing a district because freezing a district has a direct impact on the compactness of surrounding districts. *Id.*

He opined that SB 3’s First District is less compact than 99% of the simulated plans. *Id.* Dr. Imai further stated that his simulations demonstrate that the Democratic vote share in SB 3’s First District is 35%, which is an extreme outlier as it is lower than more than 99% of simulated districts containing Franklin County. Plaintiffs’ Exhibit 2, pp. 17-18; VR 4/5/22, 12:10:05-12:12:00. He testified that the simulated plans place Franklin County in districts with a much higher Democratic vote share than the First District. *Id.* He stated that in the simulated Congressional plans there is an average Democratic vote share of 43.6% in the districts that contain Franklin County. VR 4/5/22, 1:41:23-1:42:37. When asked to keep the historic pairing of Franklin County with Fayette County in the Sixth District, Dr. Imai’s simulation produced a Democratic vote share of 47.8%. Plaintiff’s Exhibit 2, pp. 17-18.

b. Dr. Devin Caughey

Plaintiffs also offered expert testimony from Dr. Devin Caughey. The Court admitted Dr. Caughey as an expert in political science, particularly in the evaluation of partisan bias in legislative redistricting maps. VR 4/6/22, 10:38:00-10:38:50, 10:59:17-10:59:50. Like Dr. Imai, Dr. Caughey has testified in other state cases concerning allegations of partisan gerrymandering. VR 4/6/22, 10:57:40-10:59:16.

i. HB 2

For this case, Dr. Caughey conducted his analysis in part using a publicly available website, PlanScore. VR 4/6/22, 11:01:36-11:06:29, 2:57:55-3:00:17. He was asked to provide an assessment of the partisan fairness of HB 2 and he testified about his process of using PlanScore. *Id.* PlanScore uses past election data and a prediction algorithm to make predictions about state legislative races and calculate the expected Efficiency Gap, Declination, and other metrics of partisan gerrymandering. VR 4/6/22, 10:41:25-10:49:28. He noted that there is a range of uncertainty built in. VR 4/6/22, 1:35:18-1:36:28. Notably, PlanScore does not rely on state election returns, but uses presidential election returns when making predictions. VR 4/6/22, 10:32:53-10:35:42.

Dr. Caughey opined two (2) basic techniques that map drawers can use to engage in partisan gerrymandering to “maximize the number of seats that one’s own party wins subject to the number of votes they are likely to earn statewide.” VR 4/6/22, 10:22:58-10:24:54. First, he stated map drawers can use “cracking,” where they take the electors of the opposing party and spread them across districts where there is a majority for the party drawing the maps. *Id.* Second, map drawers can use “packing,” where they take the electors of the opposing party and pack them into a few “hyper-lopsided districts.” *Id.* He stated that it is typical, as he opined was done in HB 2, to use both methods to maximize partisan gains statewide. *Id.*

Dr. Caughey then explained some objective metrics used to measure partisan gerrymandering such as the “Efficiency Gap,” which measures how efficient each party is at translating votes into seats. Plaintiffs’ Exhibit 6 § 4.2; VR 4/6/22, 10:50:10-10:54:05, 11:23:50-11:24:50. He explained that the Efficiency Gap compares the number of “wasted”

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votes for each party (the number of votes cast for a losing candidate) and if one party's votes are being wasted at a lower rate than its opponent's, that is an advantage because the party with lower wasted votes has a chance of winning more seats with comparatively fewer votes. *Id.* Dr. Caughey confirmed that there is no definitive Efficiency Gap score that, if exceeded, constitutes per se partisan gerrymandering, but he noted political scientists generally agree that an Efficiency Gap over 7-8% is a sign that electors have been systematically packed and cracked into districts to minimize their expected seat share. VR 4/6/22, 11:44:25-11:46:00. Dr. Caughey determined that HB 2 "is likely to waste 13.4% more of Democratic votes than Republican votes." Plaintiffs' Exhibit 6 § 5.1.1; VR 4/6/22, 11:20:50-11:21:58. This means that under HB 2, Republicans can expect an extra thirteen (13) seats on top of what would normally be considered a "winner's bonus." *Id.* Dr. Caughey concluded that HB 2 is more favorable towards Republicans than 99% of all enacted plans that have ever been scored by PlanScore. VR 4/6/22, 11:22:45-11:23:21.

Dr. Caughey also explained "Declination" and evaluated HB 2's Declination. To measure Declination, one creates a plot of all the legislative districts, arranged by the percentage of vote share expected for one party. VR 4/6/22, 10:54:09-10:56:42. Next, starting from the point on the graph where each party is expected to win 50% of the two (2) party vote, a political scientist would create two (2) trend lines—a line through each party's expected vote share "cloud." *Id.*; Plaintiffs' Exhibit 6 § 4.4. To find the Declination, one measures the angle between the trend lines. *Id.* A non-gerrymandered map would not produce a sharp angle between the two (2) lines; the expected vote share plot will increase smoothly from left to right. *Id.* Partisan gerrymandering is signaled when the angle between the lines increases because the majority party has packed many of its opponent's electors

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into a few heavily concentrated districts and spread the rest across a larger number of districts where the majority's votes will translate into more seats. *Id.* Dr. Caughey concluded that HB 2's Declination is "off the charts," and shows a pro-Republican bias larger than he has ever seen. Plaintiffs' Exhibit 6 § 5.1.1; VR 4/6/22, 11:29:29-11:30:00, 11:46:40-11:45:55.

Dr. Caughey stated that only seven (7) out of the one hundred (100) districts give either party at least a 25% chance of winning. Plaintiffs' Exhibit 6 § 5.1; VR 11:34:16-11:35:29. Dr. Caughey and PlanScore predict over eighty (80) districts to go Republican under HB 2.⁷ Plaintiffs' Exhibit 6 § 5.1; VR 4/6/22, 3:40:35-3:41:48. Under the Democrats' proposed map, HB 191, PlanScore predicts about seventy-six (76) districts to go Republican. His conclusions also demonstrate that under HB 2 there may not be any Democrats elected to the state House outside of Fayette County (Lexington) and Jefferson County (Louisville) and possibly Franklin County (Frankfort) (leans Democratic). Plaintiffs' Exhibit 6 § 5.1. In sum, Dr. Caughey concluded that HB 2 is the most extreme advantage for a party in a legislative map that he has ever seen. VR 4/6/22, 4:20:31-4:21:01.

c. Sean Trende

The Commonwealth first elicited expert witness testimony from Sean Trende. The Court admitted Mr. Trende as an expert in political science and gerrymandering. VR 4/7/22, 10:20:12-10:20:37. He stated that in this redistricting cycle he has testified as an expert in Ohio, North Carolina, Maryland, and New York. VR 4/7/22, 10:17:29-10:18:00.

⁷ Although the results from the November 8, 2022, election are currently unofficial, the Court takes judicial notice that it has been reported that, as predicted, Republicans have won eighty (80) House districts.

The Commonwealth had asked Mr. Trende to review the works of Drs. Imai and Caughey. Commonwealth's Exhibit 30; VR 4/7/22, 10:20:45-10:21:00.

i. HB 2

Mr. Trende testified that in evaluating HB 2, the Efficiency Gap is unreliable in places like Kentucky because “in some states, the political geography just naturally results in a circumstance where it becomes hard to draw districts for one party or the other in certain regions.” VR 4/7/22, 10:59:50-11:01:46. Mr. Trende believed an Efficiency Gap of 13.4% in Kentucky is expected. VR 4/7/22, 11:01:46-11:02:14. But, he continued to discredit its reliability in cases of partisan gerrymandering because of Kentucky's makeup. VR 4/7/22, 11:03:00-11:04:26. Mr. Trende calculated the Efficiency Gap of Dr. Imai's simulated maps and opined that HB 2 fell within what he considered a similar, but admittedly still less, distribution of Dr. Imai's simulations when compared by Efficiency Gap metrics. VR 4/7/22, 11:04:24-11:06:55. He then concluded that Kentucky's political geography naturally wastes Democratic votes. VR 4/7/22, 11:08:30-11:08:40. Finally, for HB 2, he agreed that algorithms do not outright consider communities of interest, race, schools, neighborhoods, county seats, transportation corridors, natural boundaries, where incumbents live, double bunking, continuity of representation, and core retention, but noted that those considerations can be inserted and are also given different priority based on who is drawing the map. VR 4/7/22, 10:32:10-10:35:25.

ii. SB 3

With respect to SB 3, Mr. Trende stated that Kentucky Congressional Districts “have retained what we call district cores, the same basic idea that corresponds to Kentucky's political geographies since the 90s.” VR 4/7/22, 10:25:43-10:26:04. He

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admitted that the purpose of these simulations is to remove all partisan concerns, but then testified that out of the thousands of possible maps that Dr. Imai's program simulated, that none of them bear resemblance to what a Kentucky map maker would actually draw. VR 4/7/22, 10:26:40-10:28:51. Although Mr. Trende agreed with Dr. Imai that you cannot cherry pick maps, he only offered testimony on a few select maps in an apparent effort to support the theory that SB 3 is not arbitrary. VR 4/7/22, 10:47:02-10:47:59. He opined that SB 3 supports the trend that the First District should not encompass other areas in Western Kentucky in the Second District or continue to stretch east across the lower portion of the Commonwealth, but instead should continue to shoot up through the central part of the state to preserve the Second District for William Natcher. VR 4/7/22, 10:30:00-10:31:55.

Mr. Trende credited the bizarre shape of the First District to an alleged goal of the 1992 General Assembly to protect former Second District Congressman William Natcher, who was a Bowling Green resident and died in early 1994. VR 4/7/22, 10:40:00-10:40:10, 10:54:40 12:22:16-12:24:10, 12:27:25-12:27:50. Mr. Trende did not offer testimony that he had personal knowledge from the 1992 General Assembly that redistricting was done to protect William Natcher. He testified that he personally froze the Second District when running Dr. Imai's simulation. Despite calling Dr. Imai's maps that he reviewed "bizarre" and "inexplicable," Mr. Trende agreed that simulation analysis is meant to remove partisan considerations that have informed previous maps and one should not instruct the algorithm to adhere to partisan criteria. VR 4/7/22, 12:24:11-12:25:25. Mr. Trende stated SB 3 is predicted to elect five (5) Republicans and one (1) Democrat to Kentucky's Congressional delegation. VR 4/7/22, 10:48:12-10:52:54. He testified that one (1) in seven (7) of Dr. Imai's simulated plans would elect six (6) Republicans to represent Kentucky in Congress,

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but he only used 2016 Presidential election results to reach this conclusion, unlike Dr. Imai who used data from eight (8) previous statewide elections. *Id.* He then stated that when the Second District is frozen in place none of the simulated maps would be expected to yield two (2) Democrats. VR 4/7/22, 10:57:10-10:57:27.

d. Dr. Stephen Voss

The Commonwealth also offered expert testimony from Dr. Stephen Voss. The Court admitted Dr. Voss as an expert in elections, Southern and Kentucky politics, and voting behavior. VR 4/7/22, 2:47:39-2:48:00. Dr. Voss stated that he was asked to review and respond to the works of Drs. Imai and Caughey and to look for any errors or concerns with the methodologies employed. Commonwealth's Exhibit 32; VR 4/7/22, 2:49:10-2:50:27.

i. HB 2

With respect to HB 2, Dr. Voss used Dr. Caughey's method of PlanScore to assess the 2012/2013 districts, the Democrats' proposed 2022 plan (HB 191), and HB 2. He concluded that Kentucky has a baseline unavoidable Efficiency Gap of at least 9.6% and that Kentucky should continue to expect a Republican supermajority. Dr. Voss opined that HB 191 has an Efficiency Gap of 10.7%. Commonwealth's Exhibit 32, p. 23. Dr. Voss testified that he replicated Dr. Caughey's PlanScore work and noted that the Efficiency Gap is not only based on the lines drawn, but where people live, and therefore a lay person can be misled by results. VR 4/7/22, 3:25:00-3:27:16. He stated that as a result, Kentucky naturally has a higher Efficiency Gap based on its political geography. *Id.* However, he testified that he did not find any material inaccuracies in Dr. Caughey's work. VR 4/7/22, 4:16:50-4:17:28.

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Dr. Voss outright disagreed with Mr. Trende's statement that the most reliable data is from the 2016 President election. VR 4/7/22, 3:52:27-3:53:08. Dr. Voss testified that the 2016 Presidential election was an outlier and was where Kentuckians were most Republican, and thus, a good forecast cannot be predicted from an extreme. *Id.* He stated that Dr. Imai used 2019 election data, which is less extreme, and therefore a better indicator. *Id.* He specifically disagreed with Mr. Trende's criticism of including the data from the 2019 gubernatorial election because he stated that data shows where electors reside that typically vote Republican, but are willing, for certain reasons, to vote Democratic. VR 4/7/22, 3:54:00-3:55:17. Dr. Voss testified that there could have been fewer multi-split counties in HB 2 and if the law requires HB 2 to multi-split counties the fewest number of times possible, then HB 2 would violate this. VR 4/7/22, 4:19:49-4:21:14. Dr. Voss also testified that cherry picking maps to critique is bad. VR 4/7/22, 4:17:40-4:18:25.

ii. SB 3

Turning to SB 3, Dr. Voss analyzed some of Dr. Imai's simulations and concluded that "the vast bulk of [Dr. Imai's] simulations are not more favorable to the Democrats than the enacted plan." Commonwealth's Exhibit 32, p. 5; VR 4/7/22, 2:52:43-2:56:00. Dr. Voss examined the "best map" for Democrats to increase their Congressional seats and noted that it would bisect Metro Louisville, which would dilute the Black vote in Jefferson County. VR 4/7/22, 3:01:58-3:04:16. Dr. Voss also stated this is the same strategy that would be used to create the "best map" for Republicans to gain all six (6) seats. *Id.* He noted that Franklin County finds itself outside of the Sixth Congressional District in about 62% of Dr. Imai's simulations. VR 4/7/22, 3:05:55-3:07:00. However, Dr. Voss testified

that when the algorithm is instructed to keep Warren, Daviess, and Bullitt Counties together, rather than gridlocking the entire Second District, Franklin County does not end up in the First District. VR 4/7/22, 4:52:50-4:53:38. In fact, he testified that if the simulation is left alone, Franklin County does not appear in the First District. *Id.* Dr. Voss again disagreed with Mr. Trende's obsession with freezing the Second District "for historical reasons" and said that rooting an analysis too deeply in past precedent and failing to give way to legal requirements and guidelines is an error. VR 4/7/22, 4:54:40-4:55:14. Finally, Dr. Voss stated Dr. Imai's choice of a permitted greater population variance of 0.1% was a function of the method. VR 4/7/22, 2:57:10-2:59:49

II. Lay Testimony

a. Trey Heineman

Plaintiffs elicited testimony from Trey Heineman, the Political Director for the Kentucky Democratic Party. VR 4/5/22, 3:28:53-3:28:58. He admitted that he is not an expert in redistricting techniques. VR 4/5/22, 5:23:24-5:23:30. He testified that in his role he maintains relationships with interested groups, organizations, and county parties, he is the in-house campaign strategist for several campaigns, and works closely with the Democratic legislative caucuses with recruitment. VR 4/5/22, 3:29:07-3:29:40, 4:44:58-4:45:20. Mr. Heineman stated that in his previous role he advised Kentucky Democratic legislators on redistricting during the 2012 redistricting cycle and in his current role he worked with Democratic legislative leadership to formulate HB 191. VR 4/5/22, 3:30:35-3:32:43, 5:17:36-5:17:47. He opined that HB 191 complied with the +/-5% population variance standard that is required and twenty-three (23) counties (the minimum number of counties) were split. VR 4/5/22, 3:32:49-3:34:37. He also testified that HB 191 minimized

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the total number of times counties were divided and how many times three (3) or more counties were aggregated together. *Id.*

He analyzed HB 2 under the same factors he did for HB 191. VR 4/5/22, 3:34:48-3:35:47. He compared each time the twenty-three (23) counties were divided and for example noted McCracken County had parts of four (4) districts, thus was split three (3) times. VR 4/5/22, 3:36:56-3:38:24. He testified that HB 2 split the twenty-three (23) divided counties eighty (80) times and HB 191 split the twenty-three (23) divided counties sixty (60) times. VR 4/5/22, 3:38:30-3:38:55. He stated that he also analyzed the number of times HB 2 took a portion of a county and joined it with a neighboring county to form a district, which was forty-five (45) times, compared to HB 191 which did the same thirty-one (31) times. VR 4/5/22, 3:39:35-3:41:09. Finally, he testified that HB 2 creates a district with three (3) or more counties thirty-one (31) times while HB 191 did so twenty-three (23) times. VR 4/5/22, 3:41:13-3:41:37.

Mr. Heineman testified that he closely examined district layouts in cities (Bowling Green, Covington, Erlanger, Florence, Georgetown, Hopkinsville, and Richmond) under the 2012/2013 districts, HB 2, and HB 191. Plaintiffs' Exhibit 3; VR 4/5/22, 3:42:32-3:3:55:27. He stated that HB 2 divides these cities more times than necessary in ways that intentionally create more Republican districts when the cities/districts were previously Democratic districts or competitive districts. *Id.* He testified that HB 191 kept these districts similar to their historic bounds. *Id.* However, he admitted that the 2012/2013 districts had six (6) different districts in Warren County, but under HB 2 there are four (4). VR 4/5/22, 5:31:19-5:32:05. He testified that under the 2012/2013 districts, Erlanger encompassed three (3) districts, and under HB 2 Erlanger is also in three (3) districts. VR

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4/5/22, 5:32:26-5:32:41. Mr. Heineman then testified that under the 2012/2013 districts, Florence had four (4) districts within its bounds and under HB 2 it has three (3) districts. VR 4/5/22, 5:33:25-5:34:01. Next, Mr. Heineman stated that under the 2012/2013 districts, Georgetown had three (3) districts and under HB 2 it has two (2) districts. VR 4/5/22, 5:35:26-5:35:50. He testified that under the 2012/2013 districts, Hopkinsville had three (3) districts and under both HB 2 and HB 191 it has two (2) districts, but he stated that HB 2 dilutes the Black voting population in Hopkinsville. VR 4/5/22, 5:37:31-5:38:20. Finally, Mr. Heineman testified that under the 2012/2013 districts and HB 191, Richmond had one (1) district, but now under HB 2 is has three (3). VR 4/5/22, 5:40:24-5:40:55. However, he testified that you cannot look at these isolated incidents but must look at the map at large to understand the partisan disadvantage. VR 4/5/22, 5:36:58-5:37:06.

He stated that he was involved in candidate recruitment for the 2022 election cycle and worked closely with the Democratic legislative leadership to find leads of interested individuals to run for state representative and that HB 2 impacted recruitment ability for the 2022 elections. VR 4/5/22, 4:00:27-4:01:10, 4:06:35-4:07:22, 4:13:33-4:13:55. He testified that several recruited candidates were drawn out of their districts and the Democratic Party was then left with no candidate for the district. VR 4/5/22, 4:01:12-4:02:21. He stated there are only fifty-seven (57) contested races as a result versus the previous seventy-seven (77) contested races. VR 4/5/22, 4:02:28-4:02:53. Mr. Heineman also testified that because HB 2 has significantly changed the makeup of districts, it has dissuaded Democratic candidates from wanting to run in a district where the results are predetermined. VR 4/5/22, 4:02:56-4:03:27. Mr. Heineman stated that HB 2 makes it more difficult to get financial and volunteer support for candidates that do choose to run in

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Republican favored counties. VR 4/5/22, 4:07:24-4:08:29. Yet, Mr. Heineman admitted that in 2021 the Kentucky Democratic Party out fundraised the Kentucky Republican Party, but this was before HB 2 and SB 3 were enacted. VR 4/5/22, 5:49:00-5:49:33.

Mr. Heineman admitted that HB 191 would still have given Republicans a supermajority, but he emphasized the importance of not excessively splitting counties in order to dilute the votes of Democratic electors in certain areas of the state to impact elections years down the line and policy that comes out of the legislature. VR 4/5/22, 4:09:22-4:10:47, 4:48:100-4:48:19. Mr. Heineman admitted that Democrats have been losing seats in the House, absent HB 2, since 2016. VR 4/5/22, 4:51:52-4:54:18. Mr. Heineman further admitted that Kentucky's geographic makeup, and the tendency for Democrats to congregate more heavily in urban areas and Republicans in rural areas, make some districts impossible to draw any less favorable to a certain party. VR 4/5/22, 4:58:32-5:04:37. But, he also blamed redlining for limiting the ability of where people could historically live. VR 4/5/22, 5:05:17-5:05:57.

With respect to SB 3, Mr. Heineman testified that the Kentucky Democratic Party's concern is the placement of Franklin County and it not being grouped with its historic district of Central Kentucky. VR 4/5/22, 5:42:34-5:43:23. He confirmed that the 2012/2013 districts placed part of Jessamine County in the Second District. VR 4/5/22, 5:43:40-5:43:54.

b. Representative Derrick Graham

Plaintiffs offered testimony from Plaintiff Representative Derrick Graham. Representative Graham stated that he is presently serving as the Representative for the fifty-seventh (57th) District and has served in said capacity for twenty (20) years. VR

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4/6/22, 4:22:21-4:22:38. He testified that he is a resident of Franklin County and has been for sixty-four (64) years. 4:22:00-4:22:13. Representative Graham confirmed that he is affiliated with the Kentucky Democratic Party and is the leader of the House Democratic Caucus. VR 4/6/22, 4:22:52-4:22:58. With respect to HB 2, he acknowledged that the Democratic Party is the minority in the House, and he that stated without the ability to elect more Democratic members it the hurts overall recruitment, the ability to raise funds for those on the ballot, policy, and he specifically noted that if a party does not have enough members it hurts the party's ability to negotiate with the opposite party because a few members can make the difference of whether or not a bill passes. VR 4/6/22, 4:24:07-4:26:09.

Representative Graham testified that he personally works to recruit persons to run for office in the House and did so this year. VR 4/6/22, 4:26:18-4:26:44. He stated that out of the one hundred (100) House seats, himself and other members of the Kentucky Democratic Party were only able to recruit fifty-nine (59) people to run, which includes incumbents. VR 4/6/22, 4:26:53-4:27:02. Representative Graham testified that based on his personal involvement with recruitment, HB 2 has directly impacted his and the Kentucky Democratic Party's ability to recruit candidates to run for office. VR 4/6/22, 4:27:28-4:28:18, 4:33:55-4:35:19.

Regarding SB 3, Representative Graham stated SB 3 alters the Congressional District he resides in from the Sixth District to the First District. VR 4/6/22, 4:28:31-4:28:38. He observed how SB 3 is not compact and stated that a person driving from Fayette County (Lexington) to Jefferson County (Louisville) would travel through five (5) of Kentucky's six (6) Congressional Districts. VR 4/6/22, 4:28:51-4:29:04. Accordingly,

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he stated that he finds SB 3 very unusual. VR 4/6/22, 4:29:32-4:29:35. He testified that as a resident and elector in Franklin County, he believes SB 3 will negatively impact Franklin County as Franklin County has always shared common interests culturally, socially, and economically with the Sixth District. VR 4/6/22, 4:29:40-4:30:00. He noted that counties in the First District are mainly rural, agricultural counties. VR 4/6/22, 4:30:02-4:30:19. Representative Graham then testified that he believes it will be difficult for someone to represent Western Kentucky and Franklin County given the social, political, and economical differences between the areas. VR 4/6/22, 4:31:00-4:32:00. He stated that, in his opinion, Franklin County voters will have less influence than they have had in their previous Congressional District given the strong Republican lean in the First District and the presence of more Democratic leaning voters in the Sixth District. VR 4/6/22, 4:32:01-4:32:25. Representative Graham stated that although Franklin County does not have a constitutional right to be in the Sixth District, by precedent, and as far as he can remember, Franklin County has always been in the Sixth District. VR 4/6/22, 4:35:43-4:35:55.

c. Jill Robinson

Plaintiffs also offered testimony from Plaintiff Jill Robinson, a resident of Franklin County. VR 4/6/22, 4:40:23-4:40:27, 4:51:20-4:51:22. Ms. Robinson disclaimed concern with HB 2 and focused her testimony on SB 3. VR 4/6/22, 4:51:23-4:51:35. She stated that SB 3 altered the Congressional District in which she resides from Central Kentucky's Sixth District to Western Kentucky's First District. VR 4/6/22, 4:40:39-4:40:13. Ms. Robinson testified that in the over forty (40) years that she has resided in Franklin County, it has always been paired with Fayette County in a Congressional District. VR 4/6/22, 4:41:14-4:41:25. Ms. Robinson stated that she was appalled when she first saw SB 3. VR 4/6/22,

4:41:33-4:41:49. She testified that she considers Franklin County to be part of Central Kentucky. VR 4/6/22, 4:44:40-4:44-44.

Ms. Robinson discussed her significant community involvement and noted that she has always had active contact with her congressman and has worked with Congressman Andy Barr on a project for Franklin County. VR 4/6/22, 4:41:56-4:42:50. Ms. Robinson testified that she believes Franklin County being placed in a Congressional District with far Western Kentucky will harm its ability to ensure adequate representation. VR 4/6/22, 4:46:15-4:46:40. She gave an example of when Franklin County was in the compact and contiguous Sixth District how Congressman Barr was able to send a staff member to Franklin County once a month to speak to any citizen that had a need or wanted to be heard. VR 4/6/22, 4:46:44-4:49:44. She also testified about her work with the Bluegrass Development District and the importance that area development districts were compact and contiguous. VR 4/6/22, 4:44:29-4:46:00. She proclaimed that fairness requires compact and contiguous districts. VR 4/6/22, 4:52:04-4:52:20. Ultimately, the testimony of Ms. Robinson was very passionate and persuasive.

III. Jurisdiction

This Court has jurisdiction and a duty to decide this matter. Moreover, as has been consistently held, Plaintiffs' claims do not present non-justiciable political questions.

The judiciary has the ultimate power, and the duty, to apply, interpret, define, construe all words, phrases, sentences and sections of the Kentucky Constitution as necessitated by the controversies before it. It is solely the function of the judiciary to do so. This duty must be exercised even when such action serves as a check on the activities of another branch of government or when the court's view of the constitution is contrary to that of other branches, or even that of the public.

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Rose v. Council for Better Educ., Inc., 790 S.W.2d 186, 209 (Ky. 1989). “The Court’s power to determine the constitutional validity of a statute ‘does not infringe upon the independence of the legislature.’” *Bevin v. Commonwealth ex rel. Beshear*, 563 S.W.3d 74, 82-83 (Ky. 2018) (quoting *Stephenson v. Woodward*, 182 S.W.3d 162, 174 (Ky. 2005)).

Well over a century ago, Kentucky’s highest court rejected the general idea that redistricting is a political question not within the bounds of judicial review. *Ragland v. Anderson*, 100 S.W. 865, 867 (Ky. 1907) (“And no matter how distasteful it may be for the judiciary to review the acts of a co-ordinate branch of the government their duty under their oath of office is imperative.”). As recently as the last round of redistricting in 2012, the Kentucky Supreme Court reaffirmed the judiciary’s duty to “ascertain whether a particular redistricting plan passes constitutional muster [.]” *Legislative Research Comm’n v. Fischer*, 366 S.W.3d 905, 911 (Ky. 2012) (quoting *Jensen v. State Board of Elections*, 959 S.W.2d 771, 776 (Ky. 1997)). In respecting Kentucky’s strict separation of powers, the judiciary will never force the General Assembly to adopt a specific redistricting plan, but if an enacted redistricting plan violates a constitutional mandate, it is the judiciary’s “constitutional responsibility...to tell them what is the constitutional ‘minimum.’” *Rose*, 790 S.W.2d at 494.

Similarly, Kentucky courts have flatly rejected the argument “that congressional redistricting is a political question and one not justiciable by the courts.” *Watts v. O’Connell*, 247 S.W.2d 531, 532 (Ky. 1952). The *Watts* Court agreed that the *act* of redistricting is crafted at the discretion of the General Assembly; however, “where the redistricting does violence to some provision of the Constitution or an Act of Congress,” it becomes a concern of the judiciary. *Id.* ““When the Legislature has exceeded its legitimate

powers by enacting laws in conflict with the Constitution or that are prohibited by it, we have not hesitated to interpose the veto power lodged in the judiciary for the purpose of preserving the integrity of the organic law under which all departments of the state government were created and live, and to which all of them owe obedience.” *Id.* (quoting *Richardson v. McChesney*, 108 S.W. 322, 323 (Ky. 1908)). Since *Marbury v. Madison*, it has been clear that it is “the very essence of judicial duty” to interpret the Constitution. 5 U.S. 137, 177 (1803). The Court will not shirk this responsibility.

The Commonwealth asserts that because Section 33 of the Kentucky Constitution sets out specifics for redistricting that the Court cannot consider any other section of the Kentucky Constitution with respect to HB 2. The Court disagrees. When general and specific provisions conflict, specific provisions generally control. However, “[i]f one constitutional provision addresses a subject in general terms, and another addresses the same subject with more detail, the two provisions should be harmonized, if possible, but if there is any conflict, the special provision will prevail.” 16 C.J.S. Constitutional Law § 101. Again, the Court emphasizes that it is solely the role of the judiciary to interpret the Kentucky Constitution and determine if such a conflict exists and whether harmonization is possible. Accordingly, the Court holds that Plaintiffs present a justiciable controversy ripe for decision.

IV. Standing

The Commonwealth argues that Plaintiffs lack standing to challenge HB 2 and SB 3. Essentially, the Commonwealth takes the position that Plaintiffs have only offered “generalized grievances” and have failed to offer specific constitutional issues with District 57—the Representative district that all Plaintiffs reside in. Plaintiffs dispute the

Commonwealth’s position and assert that they have standing to challenge HB 2 and SB 3. Plaintiffs point to Kentucky’s long history of “map challenges” to support this notion and offer that the Commonwealth’s argument would set up a “byzantine and formalistic” system where no party would ever have standing to challenge an apportionment plan. Plaintiffs reason that no effective state-wide challenge could be mounted by allowing a plaintiff to only sue over an alleged error in their own district, and would result in dozens of lawsuits with likely conflicting rulings.

a. Individual Standing

Standing is an essential element of a justiciable case or controversy. *Commonwealth Cabinet for Health and Family Servs., Dep’t for Medicaid Servs. v. Sexton ex rel. Appalachian Reg’l Healthcare, Inc.*, 566 S.W.3d 185, 196 (Ky. 2018). In the pivotal *Sexton* case, the Kentucky Supreme Court concluded that “the existence of a plaintiff’s standing is a constitutional requirement to prosecute any action in the courts of this Commonwealth,” and it formally adopted the *Lujan v. Defenders of Wildlife*, 504 U.S. 555 (1992) test for standing. *Id.* at 188. Under the *Lujan* test, the plaintiff must have suffered an “injury in fact” which he or she can causally connect to the conduct at issue. *Lujan*, 504 U.S. at 560–61. The injury must be “concrete and particularized” and “either actual or imminent.” *Sexton*, 566 S.W.3d at 196 (quoting *Massachusetts v. E.P.A.*, 549 U.S. 497, 517 (2007)). The injury must impact the plaintiff in a “personal and individual way.” *Lujan*, 504 U.S. at 560. A plaintiff “must possess a ‘direct stake in the outcome’ of the case.” *Hollingsworth v. Perry*, 570 U.S. 693, 706 (2013) (quoting *Arizonaans for Off. Eng. v. Arizona*, 520 U.S. 43, 64 (1997)). A general grievance, one which claims injury to the plaintiff and every other citizen, is not a justiciable case or controversy. *Id.* (citing *Lujan*,

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taxpayer, and voter. In fact, there are over one hundred (100) years of cases that support challenging an apportionment plan as a citizen, taxpayer, and voter and pleading a constitutional violation caused by the apportionment plan establishes the requisite injury to satisfy standing. Starting with *Ragland*, each plaintiff alleged “that he was a citizen, taxpayer, and voter” and the 1906 apportionment plan violated his rights under Section 33 of the Kentucky Constitution. 100 S.W. at 865. In *Stiglitz v. Schardien*, the plaintiffs stated that they were citizens, taxpayers, and voters and the apportionment plan at issue deprived them of equal representation. 40 S.W.2d 315, 317 (Ky. 1931).

The defendants in *Stiglitz* questioned the right of a citizen, taxpayer, and voter to bring an action to challenge an apportionment plan contending that “no pecuniary right is involved.” 40 S.W.2d at 317. The *Stiglitz* Court rejected the idea that a person pleading as a citizen, taxpayer, and voter did not possess the right to challenge an apportionment act. Rather, the Court opined “[i]t is settled that the courts, in a proper case, may interpose for the protection of political rights, and the right to be equally represented in the legislative bodies of the state is not only a political but a constitutional right.” *Id.* Thus, “[i]f an act of the Legislature infringes the constitutional rights of a citizen, taxpayer, and voter, he may invoke the processes of the courts to prevent the performance of a duty attempted to be imposed by such void act.” *Id.* (citing *Hager v. Robinson*, 157 S.W. 1138 (Ky. 1913); *Schardein v. Harrison*, 18 S.W.2d 316 (Ky. 1929); *Ragland v. Anderson*, 100 S.W. 865 (Ky. 1907); *Yates, Clerk v. Collins*, 82 S.W. 282 (Ky. 1904)).

The basis of the jurisdiction is that the unconstitutional law infringes the right of a citizen to be equally represented, and it does not rest upon any right peculiar to a candidate for office. The primary right of the citizen, taxpayer, and voter to equality of representation in the lawmaking bodies in accordance with the Constitution is of greater dignity than his derivative right to be a candidate or even to be a

representative...The citizen possess the political as well as pecuniary and personal rights which may be the subject of an action to prevent the operation of unconstitutional legislation. It is not merely the right of the citizen under the Constitution to be fairly represented in the government, but also his right to prevent unequal and unconstitutional discrimination against his own favor of other districts, that enables the court to intervene. Every citizen, taxpayer, and voter has an undoubted right to have the districts for representatives and senators created in accordance with the Constitution...The rights of the whole state are linked up with the representation of the several districts. We entertain no doubt of the right of the plaintiff to invoke the power of the court to protect his constitutional rights.

Id. at 317-18.

The most recent apportionment challenges have had similar set ups. In *Jensen*, the plaintiff offered that he was “a citizen, taxpayer, resident, and qualified voter” and that the 1996 apportionment scheme deprived him of fair representation. *See* Complaint, *Jensen v. Kentucky State Board of Elections*, Franklin Circuit Court Civil Action No. 96-CI-00071. Similarly, in the 2012 redistricting challenge, the plaintiffs stated that they were “citizens, residents, taxpayers, and qualified voters” and the 2012 apportionment plan violated their constitutional rights under Sections 1, 2, 3, 6, and 33 of the Kentucky Constitution along with some federal constitutional violations. *See* Complaint, *Fischer v. Grimes*, Franklin Circuit Court Civil Action No. 12-CI-00109. With all of this in mind, the Court must assess whether each individual plaintiff has standing to bring this action.

i. Representative Derrick Graham

The Court finds that Representative Graham has standing to bring this action. In the Complaint, Representative Graham offers that he “is a resident of Franklin County, a member of the Kentucky Democratic Party, a member of the Kentucky House of Representatives representing District 57, and the current Democratic Minority Caucus Chair.” Complaint ¶ 20. On April 6, 2022, Representative Graham testified about the

impact of HB 2 and SB 3 on him. He testified that without the ability to elect more Democratic members it hurts his ability to recruit persons to run for office as Democrats, impacts his ability to raise funds for those on the ballot, his ability to bring forth policy, and specifically noted that if a party does not have enough members, it hurts the party’s ability to negotiate with the opposite party because a few members can make the difference of whether a bill passes or not. VR 4/6/22, 4:24:07-4:26:09. Representative Graham also testified that based on his personal involvement with recruitment, HB 2 directly impacted his and the Kentucky Democratic Party’s ability to recruit candidates to run for office. VR 4/6/22, 4:27:28-4:28:18, 4:33:55-4:35:19. Additionally, he stated the negative impact that SB 3 has on him as a resident of Franklin County and as a leader in the Kentucky Democratic Party.

The Court holds that Representative Graham has adequately established a non-generalized injury. As to causation, Representative Graham contends HB 2 and SB 3 have caused him injury by intentionally diluting the power of Democratic votes to impact Democratic recruitment, fundraising, policy, and negotiations. On redressability, Representative Graham seeks a permanent injunction and declaration that HB 2 and SB 3 are unconstitutional. Therefore, the Court holds that Representative Graham has standing to challenge the constitutionality of HB 2 and SB 3.

ii. Jill Robinson

Ms. Robinson has standing to challenge the constitutionality of SB 3. In the Complaint, Ms. Robinson states she “is a Kentucky citizen, taxpayer, qualified voter and resident of Franklin County” and “has supported Democratic candidates for the Kentucky and the United States House of Representatives in the past and anticipates supporting such

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candidates in the future.” Complaint ¶ 21. At trial she disclaimed any concern with HB 2 and focused her testimony on SB 3. VR 4/6/22, 4:51:23-4:51:35. As to injury, Ms. Robinson stated that she believes Franklin County being placed in a Congressional District with far Western Kentucky will harm its ability to ensure adequate representation. VR 4/6/22, 4:46:15-4:46:40. Generally, her concern is that she will be deprived “of a meaningful opportunity to petition her Congressional Representative.” Complaint ¶ 21; VR 4/6/22, 4:46:44-4:49:44.

Ms. Robinson’s classification as a Kentucky citizen, taxpayer, qualified voter, and resident of Franklin County coupled with her allegation that SB 3 interferes with her constitutional rights under Sections 1, 2, 3, and 6 of the Kentucky Constitution confers standing on her to challenge SB 3. Ms. Robinson testified about her sincere concerns with SB 3, and although the Commonwealth believes that her grievances with SB 3 do not personally and uniquely impact her as a Kentucky citizen, taxpayer, qualified voter, and resident of Franklin County, the Court disagrees. Dating back to 1907, Kentucky’s highest courts have found that pleading a constitutional grievance in this form allows a plaintiff to maintain a viable action to question the validity of an apportionment scheme. “It is not merely the right of the citizen under the Constitution to be fairly represented in the government, but also his right to prevent unequal and unconstitutional discrimination against his own in favor of other districts, that enables the court to intervene.” *Stiglitiz*, 40 S.W.2d at 317.

Ms. Robinson also satisfies the second and third elements of constitutional standing. As to causation, Ms. Robinson alleges that SB 3 has caused her injury by intentionally diluting the power of her vote and other Democratic electors which interferes

with her interest in translating her vote into fair representation. On redressability, Ms. Robinson seeks a permanent injunction and declaration that SB 3 is unconstitutional. Accordingly, the Court finds that Ms. Robinson has standing to challenge the constitutionality of SB 3.

iii. Mary Lynn Collins

The Court also holds that Mary Lynn Collins has standing to bring this action. However, the Court must note that Ms. Collins did not testify at trial. In the Complaint, Ms. Collins states she “is a Kentucky citizen, taxpayer, qualified voter and resident of Franklin County” and “has supported Democratic candidates for the Kentucky and the United States House of Representatives in the past and anticipates supporting such candidates in the future.” Complaint ¶ 22. She alleges that her “interest in translating her vote into representation under fair and constitutional maps has been prejudiced by...HB 2 and SB 3.” *Id.*

Ms. Collins’ classification as a Kentucky citizen, taxpayer, qualified voter, and resident of Franklin County coupled with her allegation that HB 2 and SB 3 interfere with her constitutional rights under Sections 1, 2, 3, 6, and 33 of the Kentucky Constitution confers standing on her to challenge HB 2 and SB 3. Again, while the Commonwealth may argue that her grievances with HB 2 and SB 3 do not personally and uniquely impact her, and that any Kentuckian dissatisfied with HB 2 or SB 3 could assert identical injuries to those of Ms. Collins, the Court disagrees. Kentucky’s highest courts have found that pleading a constitutional grievance in this form allows a plaintiff to maintain a viable action to question the validity of an apportionment plan because “the rights of the whole state are

linked up with the representation of several districts.” *Stiglitz*, 40 S.W.2d at 317. Thus, the Court concludes that Ms. Collins has standing to challenge HB 2 and SB 3.

iv. Katima Smith-Willis

Additionally, the Court holds that Katima Smith-Willis has standing to challenge HB 2 and SB 3. Ms. Smith-Willis also did not testify at trial. In the Complaint, Ms. Smith-Willis states she “is a Kentucky citizen, taxpayer, qualified voter and resident of Franklin County.” Complaint ¶ 23. She disclaims any interest in partisan politics, “but wants the Kentucky House of Representatives to be populated with elected leaders who pursue common sense solutions that benefit all Kentuckians.” *Id.* Ms. Smith-Willis believes HB 2 and SB 3 impact her interest in “translating her vote into representation under a fair and constitutional map.” *Id.*

Ms. Smith-Willis’ classification as a Kentucky citizen, taxpayer, qualified voter, and resident of Franklin County coupled with her allegation that HB 2 and SB 3 interfere with her constitutional rights under Sections 1, 2, 3, 6, and 33 of the Kentucky Constitution gives her standing to challenge HB 2 and SB 3. Like her co-plaintiffs, the Commonwealth contends that her grievances with HB 2 and SB 3 do not personally and uniquely impact her because any Kentuckian dissatisfied with HB 2 or SB 3 could assert identical injuries to those of Ms. Smith-Willis. The Court must disagree given the precedent set by Kentucky’s highest courts in apportionment cases. Therefore, the Court holds that Ms. Smith-Willis has standing to challenge HB 2 and SB 3.

v. Joseph Smith

The Court holds that Joseph Smith has standing to challenge HB 2 and SB 3. Mr. Smith did not testify at trial. In the Complaint, Mr. Smith states he “is a Kentucky citizen,

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taxpayer, qualified voter and resident of Franklin County” and “has supported Democratic candidates for the Kentucky and the United States House of Representatives in the past and anticipates supporting such candidates in the future.” Complaint ¶ 24. He believes that his “interest in translating his vote into representation under fair and constitutional maps has been prejudiced by...HB 2 and SB 3” and SB 3 deprives him “of a meaningful opportunity to petition his Congressional Representative.” *Id.*

Mr. Smith’s classification as a Kentucky citizen, taxpayer, qualified voter, and resident of Franklin County coupled with his allegation that HB 2 and SB 3 interfere with his constitutional rights under Sections 1, 2, 3, 6, and 33 of the Kentucky Constitution gives him standing to challenge HB 2 and SB 3. Despite the Commonwealth’s argument that his grievances with HB 2 and SB 3 do not personally and uniquely impact him because any Kentuckian dissatisfied with HB 2 or SB 3 could assert identical injuries to those of Mr. Smith, the Court disagrees. It has been made clear that “[e]very citizen, taxpayer, and voter has an undoubted right to have the districts for representatives...created in accordance with the Constitution.” *Stiglitiz*, 40 S.W.2d at 317. Thus, the Court finds that Mr. Smith has standing to challenge HB 2 and SB 3.

vi. The Kentucky Democratic Party

Finally, the Court holds that the Kentucky Democratic Party has individual standing to bring this action. The Kentucky Democratic Party “is an association of Democratic voters and politicians seeking to help Democrats win elections in Kentucky, including for the Kentucky House of Representatives.” Complaint ¶ 25. The Kentucky Democratic Party contends that it presents a cognizable injury because HB 2 and SB 3 will make it extremely difficult for the Kentucky Democratic Party to fulfill its purposes of recruiting, electing,

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and retaining Democratic candidates in Kentucky. Further, the Kentucky Democratic Party states that HB 2 and SB 3 impact the policy-making process. At trial, Representative Graham, a member of the Kentucky Democratic Party, confirmed these injuries and noted that if a party does not have enough members, it hurts the party's ability to negotiate with the opposite party because a few members can make the difference of whether or not a bill passes. VR 4/6/22, 4:24:07-4:26:09.

Mr. Heineman testified that he was involved in candidate recruitment for the 2022 election cycle and worked closely with the Democratic legislative leadership to find leads of interested individuals to run for state representative and that HB 2 impacted recruitment ability for the 2022 elections. VR 4/5/22, 4:00:27-4:01:10, 4:06:35-4:07:22, 4:13:33-4:13:55. He stated that several recruited candidates were drawn out of their districts and the Democratic Party was then left with no candidate for the district. VR 4/5/22, 4:01:12-4:02:21. With respect to SB 3, Mr. Heineman testified that the Kentucky Democratic Party's concern is the placement of Franklin County and it not being grouped with its historic district of Central Kentucky. VR 4/5/22, 5:42:34-5:43:23.

The Court finds that the Kentucky Democratic Party has presented a non-generalized grievance. As to causation, the Kentucky Democratic Party contends HB 2 and SB 3 have caused it injury by intentionally diluting the power of Democratic votes to impact Democratic recruitment, fundraising, policy, negotiations, and the Kentucky Democratic Party's overall purpose and existence. On redressability, the Kentucky Democratic Party seeks a permanent injunction and declaration that HB 2 and SB 3 are unconstitutional. Therefore, the Court holds that the Kentucky Democratic Party has standing to bring this action.

b. Associational Standing

The Court holds that the Kentucky Democratic Party also has associational standing to challenge HB 2 and SB 3. At the federal level, the United States Supreme Court has established three (3) requirements that must be met to demonstrate associational standing:

- (a) its members would otherwise have standing to sue in their own right;
- (b) the interests it seeks to protect are germane to the organization's purpose; and
- (c) neither the claim asserted nor the relief requested requires the participation of the individual members in the lawsuit.

Commonwealth, ex. rel. Brown v. Interactive Media Entertainment and Gaming Association, 306 S.W.3d 32, 38 (Ky. 2010) (quoting *Hunt v. Wash. State Apple Advert. Comm'n*, 432 U.S. 333, 343 (1977) (internal quotation marks omitted)). Although the Kentucky Supreme Court has not formally adopted the entirety of this three (3) part test, it has held that “at least the first requirement must apply.” *Id.*

In *City of Ashland v. Ashland F.O.P No. 3*, 888 S.W.2d 667, 668 (Ky. 1994), the Kentucky Supreme Court found that the Fraternal Order of Police had standing to challenge a city ordinance because its members—the police—had a “real and substantial interest” in striking the ordinance. In this action, the Kentucky Democratic Party’s members are registered Democratic leaders and electors in every Representative and Congressional district throughout the Commonwealth that have a “real and substantial interest” in protecting the interests of Democratic electors and helping Democrats win elections in Kentucky. Trey Heineman testified on behalf of the Kentucky Democratic Party and stated that HB 2 has directly impacted the Kentucky Democratic Party’s recruitment for the 2022 elections. VR 4/5/22, 4:00:27-4:01:10, 4:06:35-4:07:22, 4:13:33-4:13:55. He also testified that because HB 2 has significantly changed the makeup of districts, it has dissuaded

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candidates from wanting to run in a district where the results are predetermined. VR 4/5/22, 4:02:56-4:03:27. Further, with SB 3 the Kentucky Democratic Party has alleged its members in Franklin County have had their votes intentionally diluted by the new Congressional Districts. Additionally, through Representative Graham, the Kentucky Democratic Party has established that “its members would otherwise have standing to sue in their own right.” *Interactive Media*, 306 S.W.3d at 38.

Although the Kentucky Supreme Court has not formally adopted the second and third prongs of the federal test for associational standing, because the Kentucky Democratic Party has met the first element for associational standing, the Court feels compelled to assess whether the Kentucky Democratic Party meets the remaining elements. The Court finds that the Kentucky Democratic Party satisfies the second prong as the purpose of the organization is to elect Democratic candidates to office, and influence policy in the Commonwealth, thus the interest it seeks to protect, striking alleged unconstitutional and gerrymandered districts, is germane to the Kentucky Democratic Party’s purpose. Finally, the Kentucky Democratic Party has met the third prong because “neither the claim asserted nor the relief requested requires the participation of the individual members in the lawsuit.” *Id.* There can be no dispute that the Kentucky Democratic Party has a real and substantial interest in ensuring its members can continue to be elected throughout the Commonwealth and bring forward policy. Thus, the Kentucky Democratic Party has standing to challenge the constitutionality of HB 2 and SB 3.

V. Acts of the General Assembly are Presumed Constitutional

Acts of the General Assembly are given a “strong presumption of constitutionality.” *Wynn v. Ibold, Inc.*, 969 S.W.2d 695, 696 (Ky. 1998). Thus, a party challenging a duly

enacted statute by the General Assembly is faced with the burden of proving the challenged act unconstitutional. *Id.* In order to declare an act unconstitutional, the constitutional violation “must be clear, complete and unmistakable.” *Ky. Indus. Util. Customers, Inc. v. Ky. Utils. Co.*, 983 S.W.2d 493, 499 (Ky. 1998). The Court is bound to resolve “any doubt in favor of constitutionality rather than unconstitutionality.” *Teco/Perry Cty. Coal v. Feltner*, 582 S.W.3d 42, 45 (Ky. 2019) (citations omitted).

VI. House Bill 2 is a Partisan Gerrymander

Plaintiffs have alleged that HB 2 is a partisan gerrymander that violates Sections 1, 2, 3, 6, and 33 of the Kentucky Constitution. After consideration of the testimony and evidence presented at trial, the Court concludes that HB 2 is a partisan gerrymander. The Court is compelled to reach this conclusion. First, Dr. Imai testified that HB 2 is a partisan gerrymander. After comparing HB 2 to 10,000 simulated plans, and ordering the districts based on Democratic vote share, his analysis showed that HB 2 is an outlier. He noted the drastic “jump” in HB 2 between D79 and D80, which he stated is a signature of partisan gerrymandering because it shows how Republican leaning districts have been made safer whereas Democratic leaning districts have been made more competitive. He also confirmed that under HB 2, Democratic electors in Jefferson and Fayette Counties have been cracked and packed to create additional Republican safe districts. Dr. Imai made this analysis using data from the eight (8) most recent state-wide elections for which precinct-level voting data is available, which he opined is not only standard but also provides a general measure of partisanship, not specific to any particular candidate or race. *Id.*; VR 4/5/22, 2:07:57-2:09:50.

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Dr. Caughey's and Dr. Voss's analyses of Kentucky's Efficiency Gap demonstrate that although Kentucky should expect a higher Efficiency Gap given its political geography, under HB 2, the Efficiency Gap is significantly higher. Every expert witness seemed to agree that Kentucky's political geography makes it difficult to draw *some* districts "less Republican." But Dr. Imai's work concludes that HB 2's partisan skew is not due to Kentucky's political geography, but due to the cracking and packing of Democratic electors in districts to allow Republicans to maximize partisan gains statewide. Again, he even specifically looked at Kentucky's most populated Democratic areas and specified districts where HB 2 has packed Democratic electors into a few districts and then combined other Democratic electors with Republican leaning neighboring counties. The Commonwealth did offer expert testimony from Mr. Trende and Dr. Voss to support that HB 2 is not a partisan gerrymander. Mr. Trende took no issue with the high Efficiency Gap in Kentucky and noted that it was what he expected based on Kentucky's political geography. The Court is unpersuaded by Mr. Trende's testimony.

Moreover, after evaluating HB 2's Declination, Dr. Caughey testified that HB 2's Declination is "off the charts," and shows a pro-Republican bias larger than he has ever seen. Plaintiffs' Exhibit 6 § 5.1.1; VR 4/6/22, 11:29:29-11:30:00, 11:46:40-11:45:55. He sufficiently demonstrated that HB 2 is a partisan gerrymander because the angle between the lines on the plot of HB 2's districts does not increase smoothly, but rather at a sharp angle, which supports that Democratic electors have been cracked and packed into districts to ensure more seats for Republicans. VR 4/6/22, 10:54:09-10:56:42.

Based on these findings, and numerous others contained in this Opinion and Order, it is abundantly clear that HB 2 is a partisan gerrymander. Although the Court has found

that HB 2 is a partisan gerrymander, the Court must next determine not whether partisan gerrymandering is morally wrong, but whether the Kentucky Constitution prohibits partisan gerrymandering.

VII. Senate Bill 3 is a Partisan Gerrymander

Turning to SB 3, Plaintiffs argue that SB 3 is a partisan gerrymander and is purely irrational and creates an uncompact and noncontiguous district (the First District). The Court finds that the evidence presented at trial sufficiently demonstrates that SB 3 is a partisan gerrymander. The Court finds Dr. Imai's testimony extremely reliable and gives it significant weight. Dr. Imai's simulations found that SB 3's First District is less compact than 99% of simulated plans that contain Franklin County. Dr. Imai criticized freezing a previously enacted district because freezing a district has a direct impact on the compactness of surrounding districts. Dr. Imai also testified that the Democratic vote share in SB 3's First District is 35%, which is an extreme outlier. His simulations also demonstrated that Franklin County is typically placed in districts with much higher Democratic vote shares with an average Democratic vote share of 43.6%. Dr. Imai's analysis confirmed that when Franklin County is placed in its historic district, the Sixth District, the Democratic vote share is 47.8%.

The Commonwealth's experts failed to rebut Dr. Imai's findings. Mr. Trende, failed to offer any explanation for the uncompact First District besides his belief that the Second District must remain gridlocked for William Natcher. The Court gives no weight to Mr. Trende's testimony. As stated, his testimony oddly focused on "freezing" the Second District in political consideration of a man who passed away in March 1994 and has not represented the Second District for almost thirty (30) years. In fact, Mr. Trende reached

this conclusion absent any personal knowledge that the 1992 General Assembly, and every General Assembly since, has intended to preserve the Second District in perpetuity for William Natcher. In solely focusing on preserving the memory of William Natcher, Mr. Trende gave no consideration to Kentucky’s remaining five (5) districts, which share equal importance. Mr. Trende’s decision to “freeze” the Second District, which directly borders the First District that Plaintiffs are challenging, truly leaves nowhere for the First District to go other than, as Mr. Trende’s ten (10) simulated maps demonstrate, across Southern Kentucky into Central Kentucky. Thus, his analysis is circular as he is imposing his conclusion by virtue of creating a restraint that requires the First District to create a “U” shape around the Second District, as it is in SB 3.

Mr. Trende again debunked his own analysis about the importance of preserving the Second District for William Natcher when he testified that his goal of “freezing” the Second District was to keep Bowling Green (Warren County) and Owensboro (Davies County) together, but he admitted it was possible to just “freeze” those two counties together without “freezing” all of the Second District, something he admittedly failed to do. VR 4/7/22, 12:44:30-12:45:08.

Mr. Trende also opined on “rules” that the General Assembly has when drawing maps but could not cite to any “rules” and admitted that he had not consulted with any members of the General Assembly, so he did not know what criteria or “rules” they used when drawing SB 3. His “rule” testimony mainly focused on preserving “historical pairings,” clearly to support his belief that the Second District must remain as is forever. But his obsession with freezing the entire Second District still falls flat in supporting the validity of SB 3 because he admitted that the “historic pairing” of Owensboro (Davies

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County) and Bowling Green (Warren County) could be done without, to borrow a word from him, “bizarrely” crafting the First District into an uncompact district spanning over 350 miles. Oddly, Mr. Trende did not seem interested in preserving other “historic pairings.” Further, his testimony concerning “historic pairings” is unpersuasive because he testified that mapmakers clearly considered communities of interest when drawing SB 3, again without any personal knowledge of that fact, but then admitted that he was unaware of a time that Frankfort (Franklin County) and Lexington (Fayette County) have ever been in different districts. VR 4/7/22, 12:28:55- 12:29:43. He even admitted that it is possible to draw a map that keeps the historic pairing of Frankfort (Franklin County) and Lexington (Fayette County) in a district together while still “freezing” the Second District. VR 4/7/22, 12:30:45-12:30:57. Accordingly, the Court finds Mr. Trende’s testimony self-serving and unreliable.

The Commonwealth’s other expert witness, Dr. Voss, actually supported Dr. Imai’s testimony. Dr. Voss testified that when the algorithm is instructed to keep Warren, Daviess, and Bullitt Counties together, rather than gridlocking the entire Second District, Franklin County does not end up in the First District. VR 4/7/22, 4:52:50-4:53:38. In fact, he testified that if you leave the simulation alone, Franklin County does not appear in the First District. *Id.* Dr. Voss again disagreed with Mr. Trende’s obsession with freezing the Second District “for historical reasons” and said that rooting an analysis too deeply in past precedent and failing to give way to legal requirements and guidelines is an error. VR 4/7/22, 4:54:40-4:55:14.

In sum, after consideration of the testimony and evidence offered, it is clear from the record that SB 3 is a partisan gerrymander aimed at diluting the Democratic vote share

by creating an uncompact First District based on rationale that was not applied across all districts.

VIII. The Kentucky Constitution does not Expressly Prohibit Partisan Gerrymandering

Today, the Court holds that although HB 2 and SB 3 are partisan gerrymanders, Plaintiffs have failed to plead cognizable claims that HB 2 and SB 3 violate Sections 1, 2, 3, 6, or 33 of the Kentucky Constitution. An examination of Sections 1, 2, 3, 6, and 33 of the Kentucky Constitution is necessary to understand the Court's conclusion that the Kentucky Constitution does not expressly prohibit partisan gerrymandering in redistricting and does not require the General Assembly to minimize the number of times that the required split counties are further divided.

a. Section 33

Plaintiffs contend that HB 2 repeatedly violates Section 33 of the Kentucky Constitution because it disrupts Section 33's dual mandate of achieving approximate population equality while maintaining county integrity. Plaintiffs believe that Section 33 requires the General Assembly to multi-split counties as few times as possible to maintain county integrity.

Despite Plaintiffs' persuasive argument that Section 33 of the Kentucky Constitution precludes excessively splitting counties more times than necessary, the Court must disagree. In full, Section 33 of the Kentucky Constitution provides:

The first General Assembly after the adoption of this Constitution shall divide the State into thirty-eight Senatorial Districts, and one hundred Representative Districts, as nearly equal in population as may be without dividing any county, except where a county may include more than one district, which districts shall constitute the Senatorial and Representative Districts for ten years. Not more than two counties shall be joined together to form a Representative

District: Provided, In doing so the principle requiring every district to be as nearly equal in population as may be shall not be violated. At the expiration of that time, the General Assembly shall then, and every ten years thereafter, redistrict the State according to this rule, and for the purposes expressed in this section. If, in making said district, inequality of population should be unavoidable, any advantage resulting therefrom shall be given to the district having the largest territory. No part of a county shall be added to another county to make a district, and the counties forming a district shall be contiguous.

Over time, Section 33 has remained at the forefront of Kentucky “map challenges.” Kentucky’s highest courts have considered the Framers’ intent behind Section 33 and how to harmonize its requirements with Kentucky’s population and geographic makeup. It is prudent to examine the holdings in some of these cases to understand how Plaintiffs’ Section 33 claim fails.

In 1907, Kentucky’s highest court confirmed that Section 33, but also democracy, require equality of representation. *Ragland*, 100 S.W. at 869. Although, *Ragland* recognized that perfect equality of representation is unattainable, the Court emphasized the importance of maintaining approximate population equality in each district to ensure all Kentuckians have equal representation in the General Assembly. *Id.*

The Kentucky Supreme Court was faced with a flood of cases stemming from redistricting in the 1990s, the outcomes of which have shaped our present understanding of Section 33’s “dual mandate.” In *Fischer v. State Board of Elections* (“*Fischer I*”), the Kentucky Supreme Court discussed the importance of county integrity acknowledging that historically the “dominant political subdivision in Kentucky is the county.” 879 S.W.2d 475, 478 (Ky. 1994). However, *Fischer II* accepted that it was impossible, given Kentucky’s 120 county makeup, to literally follow Section 33 and not divide any county. *Id.* But, *Fischer II* concluded that it was possible to harmonize county integrity and

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population equality. Thus, *Fischer II* imposed a rule that permitted the General Assembly to achieve population equality by a variation which does not exceed +/-5% from an ideal legislative district while reducing the minimum number of counties which must be divided to make full use of Section 33's requirements. *Id.* at 479. Also included in *Fischer II* is the infamous "footnote 5," which became the center of *Fischer II*'s notable successor *Jensen v. Kentucky State Board of Elections*, 959 S.W.2d 771 (Ky. 1997). In footnote 5 of *Fischer II*, the Kentucky Supreme Court stated "[w]e recognize that the division of some counties is probable and have interpreted Section 33 to permit such division to achieve population requirements. However, we can scarcely conceive of a circumstance in which a county or part thereof which lacks sufficient population to constitute a district would be subjected to multiple divisions." 879 S.W.2d at 479, fn. 5.

In *Jensen*, Kentucky's high court was faced with the question of whether a county that has a sufficient population to encompass a whole representative district is entitled to such. Meaning, that such a county could not be divided in ways that would inhibit it from an elected representative who is a resident of the county. The *Jensen* Court cited *Fischer II*'s holding that population equality and county integrity can be harmonized, but also recognized the long held ideal that when they collide, approximate population equality must control. *Id.* at 774 (citing *Combs v. Matthews*, 364 S.W.2d 674 (Ky. 1963); *Stiglitz v. Schardien*, 40 S.W.2d 315 (Ky. 1931); *Ragland v. Anderson*, 100 S.W. 865 (Ky. 1907)).

Turning to the issue at hand, Kentucky's high court opined:

The delegates probably did not foresee that a county with sufficient population to contain a whole district within its borders might not be given such a district. However, regardless of what the delegates may or may not have foreseen, that requirement was not included in the language of Section 33.

Id. at 775. The *Jensen* Court continued its analysis finding that creating a district in each county with sufficient population to contain a whole district would violate the spirit of Section 33 and the holding in *Fischer II* because it would require splitting more counties than necessary. *Id.* The *Jensen* Court was also faced with addressing *Fischer II*'s footnote 5.

Like the delegates to the 1890 convention, we could not envision that a county with sufficient population to support a whole district within its borders might not be awarded such a district, or that a county or remnant thereof might be subjected to multiple divisions. However, we did not hold in footnote 5 that such is constitutionally prohibited. In fact, what we thought was scarcely conceivable has been proven to be unavoidable...No one now suggests that any redistricting plan could be drafted without some such multiple divisions.

Id. at 776. The Kentucky Supreme Court concluded with “apportionment is primarily a political and legislative process.” *Id.*

Nevertheless, the mere fact that a particular apportionment scheme makes it more difficult for a particular group in a particular district to elect the representatives of its choice does not render that scheme constitutionally infirm. Unconstitutional discrimination in reapportionment occurs only when the electoral system is arranged in a manner that will consistently degrade a voter's or group of voters' influence on the political process as a whole.

Id.

Most recently, in 2012, the General Assembly was again tasked with apportioning Representative, Senatorial, and Congressional districts. As is typical, the outcome was challenged. In *Legislative Research Commission v. Fischer* (“*Fischer IV*”), the Kentucky Supreme Court reaffirmed its “dual mandate” holding from *Fischer II* of county integrity and population equality. 366 S.W.3d 905, 911 (Ky. 2012). In *Fischer IV*, Kentucky's high court was asked to reassess the +/-5% rule for population variation and adopt the federal standard which is more relaxed and generally permits a population variation of +/-10%.

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The Kentucky Supreme Court declined to embrace the federal standard opining that Kentucky's +/-5% standard promotes Section 33's goal of approximate population equality. *Id.* at 914. Although, it was noted that Kentucky's +/-5% rule is not an absolute mandate and that staying within or slightly straying outside may still result in unconstitutional or constitutional maps, respectively. *Id.* at 915 ("That is not to say it is impossible to prove a reapportionment plan is unconstitutional if it complies with the 5 percent rule. Staying within a 5 percent deviation from the ideal district is not a safe harbor. But the burden is on the plan's challenger to show it is arbitrary or discriminatory."). Straying from the +/-5% rule places the burden on the legislature to prove the plan "consistently advances a rational state policy." *Id.* In *Fischer IV*, it was determined that the legislature failed to show the 2012 plan "consistently advance[d] a rational state policy" as the goal of preserving county integrity by dividing the fewest number of counties was ignored along with the goal of approximate population equality. *Id.* Thus, the plan was deemed unconstitutional because the population deviations from the +/-5% rule were not done to advance the goal of maintaining county integrity.

Since *Fischer II*'s release in 1992, the "dual mandate" of population equality and county integrity has held strong. The Kentucky Supreme Court has continued to uphold or strike down House redistricting plans solely based on whether the plan (1) splits the minimum number of counties required and (2) keeps a population variation between +/-5%. Turning back to *Jensen*, the Kentucky Supreme Court specifically held that the General Assembly is not constitutionally prohibited from dividing the minimum number of counties multiple times. 959 S.W.2d at 776. Also in *Jensen*, the Court emphasized that "[t]here is a difference between what is perceived to be unfair and what is unconstitutional"

and “[a]pportionment is primarily a political and legislative process.” *Id.* Thus, the Court holds that under Section 33 of the Kentucky Constitution there is no prohibition against partisan gerrymandering or excessively dividing the split counties.

Accordingly, the Court must evaluate HB 2 under the standard set for Section 33 challenges. As the parties have stipulated, the minimum number of counties that must be divided is twenty-three (23). There is also no dispute that the ideal population for each of the one hundred (100) districts is 45,058 people. HB 2 divides exactly twenty-three (23) counties and each district is within the +/-5% range of 45,058 people. Plaintiffs have sufficiently established that HB 2 unnecessarily divides the twenty-three (23) split counties more times than necessary. Dr. Imai testified that HB 2 has eighteen (18) counties that are split multiple times (into more than two (2) districts) whereas his ensemble has fifteen (15) such counties on average, with a range from thirteen (13) to seventeen (17). VR 4/5/22, 11:09:52-11:10:32. He stated that under HB 2 there are thirty-one (31) districts containing more than two (2) counties whereas under his simulated ensemble there are twenty-four (24) such districts, with a range from twenty-one (21) to thirty (30). VR 4/5/22, 11:11:40-11:12:28. Dr. Imai then stated that HB 2 has a total number of eighty (80) multi county splits and on average his simulated plans produced less. Plaintiffs’ Exhibit 2, p. 22; VR 4/5/22, 11:12:55-11:13:49. Dr. Imai concluded that HB 2 is a statistical outlier. VR 4/5/22, 11:11:40-11:12:28. Dr. Voss agreed that there could have been fewer multi-split counties in HB 2 and if the law requires HB 2 to divide counties the fewest number of times possible, then HB 2 would violate this. VR 4/7/22, 4:19:49-4:21:14.

Although Plaintiffs have demonstrated that HB 2 is a partisan gerrymander and that HB 2 excessively splits the twenty-three (23) counties more times than necessary,

Kentucky Supreme Court precedent, in this Court's eyes, does not prohibit such. Thus, the Court finds that Plaintiffs have failed to meet their burden that HB 2 violates Section 33 of the Kentucky Constitution.

b. Sections 1, 2, 3, and 6

Although the Court has foreclosed relief under Section 33 of the Kentucky Constitution, Plaintiffs have also alleged that because HB 2 and SB 3 are partisan gerrymanders, the apportionment plans violate Sections 1, 2, 3, and 6 of the Kentucky Constitution.

For well over the last century, apportionment cases have centered on ensuring that the Kentucky Constitution's guarantee of equal power of each elector's vote is upheld. The past century of apportionment cases have all generally concluded that the government can only reflect the will of the people if it is elected from districts that provide the same voting power to all electors.

Plaintiffs argue that partisan gerrymandering creates the same harm as malapportionment by giving certain electors' votes more power than others. Partisan gerrymandering is not a new concept, but rampant changes in technology have made it more prevalent and easier to detect. The new technology is a double-edged sword for mapmakers. Changes in technology have given a political party the ability to essentially guarantee itself a supermajority for the lifespan of an apportionment plan. However, these algorithms likewise make it simple to reliably evaluate apportionment plans for partisan bias.

In *Jensen*, the Court emphasized that “[t]here is a difference between what is perceived to be unfair and what is unconstitutional” and “[a]pportionment is primarily a

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political and legislative process.” 959 S.W.2d at 776. While the *Jensen* Court acknowledged the partisan nature behind redistricting, the *Jensen* Court did *not* give an explicit blessing that partisan gerrymandering is constitutional. In fact, the Court opined “[u]nconstitutional discrimination in reapportionment occurs only when the electoral system is arranged in a manner that will consistently degrade a voter’s or group of voters’ influence on the political process as a whole.” *Id.* That is exactly what Plaintiffs have alleged that HB 2 and SB 3 do.

Although *Jensen*’s citation in support of this finding is to *Davis v. Bandemer*, 478 U.S. 109, 131-33 (1986)⁹, which was abrogated by *Rucho v. Common Cause*, 139 S.Ct. 2484, 2493-2508 (2020), *Rucho* held that claims for partisan gerrymandering are nonjusticiable in federal court, but the Court did not foreclose the idea that partisan gerrymanders are prohibited. *Rucho* instead left to the states to look to their own constitutions and laws for prohibitions against partisan gerrymandering. *Id.* at 2507 (“Provisions in state statutes and state constitutions can provide standards and guidance for state courts to apply.”). The Court can somewhat appreciate the reasoning behind *Rucho*’s decision to throw it to the states to assess partisan gerrymandering under state constitutions. The Kentucky Constitution, like most state constitutions, is much more specific than the United States Constitution. Also, as recognized by the North Carolina Supreme Court, on the state level, it is easier to craft a set of criteria to evaluate an alleged partisan gerrymander than it is on the federal level. *Harper v. Hall*, 868 S.E.2d 499, 533 (N.C. 2022).

⁹ *Bandemer* was at the center of *Vieth v. Jubelirer*, 541 U.S. 267 (2004), but Justice Kennedy only joined the judgment of the Court and refused to hold partisan gerrymandering nonjusticiable believing that a manageable standard might emerge.

i. Section 6

Plaintiffs first contend that partisan gerrymandering violates Section 6 of the Kentucky Constitution which declares “[a]ll elections shall be free and equal.” KY. CONST. § 6. As has been established, HB 2 and SB 3 are partisan gerrymanders, thus Plaintiffs reason the apportionment plans are unconstitutional under Section 6 of the Kentucky Constitution. Section 6 has no analogue in the federal Constitution, which signals it was crafted to ensure greater protection for Kentuckians. It has been present in each of Kentucky’s constitutions. Other states’ constitutions have similar provisions to Kentucky’s Section 6 that have recently been used to hold partisan gerrymandering unconstitutional. This Court, however, must examine Kentucky precedent and the 1890-91 constitutional debates to find support for Plaintiffs’ claim that Section 6 prohibits partisan gerrymandering. Although Plaintiffs present a compelling argument, and the evidence and testimony presented at trial support that HB 2 and SB 3 are partisan gerrymanders, the Court holds that Section 6 of the Kentucky Constitution does not prohibit partisan gerrymandering because Section 6 has nothing to do with state or Congressional apportionment.

The 1890-91 constitutional debates are particularly instructive on the true meaning of Section 6. The Framers, concerned that others might struggle to ascertain the exact meaning of the simple phrase “[a]ll elections shall be free and equal,” discussed the adaption of the phrase from the English Declaration of Rights.

[T]he English people promulgated when they deposed James II and elevated William and Mary to the throne. After complaining that James had sought to subvert the laws and liberties of the kingdom ‘by violating the freedom of election of members to serve in Parliament,’ they declared ‘that election of members of Parliament ought to be free.’ Their purpose was clear. They did not mean that all persons

should have a vote, or that no registration should be required. They meant simply that no troops should intimidate voters.

1890-91 Debates at 670. The Framers long debated the historical roots of Section 6 and whether their intent behind Section 6 could be more clearly expressed. Throughout their discussion, the consensus continued to be that Section 6 be enacted to prohibit election day interferences at polling places that had disgraced English history and had even made way to our great Commonwealth.

Within the memory of every Delegate on this floor, our own State—the Commonwealth of Kentucky, our glory and our pride—has been the scene of outrages against this sacred privilege that would have made the most unscrupulous despot that ever disgraced the throne of England, from King John to James II, hang his head in shame. You have seen here, in our own State, nearly every polling place within its limits surrounded by an armed soldiery. The military satrap dictated who should be candidates for office, and the subaltern was the sole judge as to who should be permitted to cast his ballot in the election of every officer of the Commonwealth from Governor down.

...

But that is not all. You and I have not only seen the freedom of election interfered with by military power, but long since the war we have seen the elective franchise prostrated and trampled in the dust by civil authority. You have seen it violated in the most atrocious manner by swarms of deputy marshals...selected and appointed to crowd about the polls and intimidate the honest voter under the pretext of enforcing the law in order to insure a fair election.

...

But what has been done by one power may hereafter be done by another...Those who are to come after us; those who are to be trusted with power in our government hereafter, may, under the influence of ambition, for the aggrandizement of their own fortunes, or in the blindness of passion, be tempted to rob those who may be opposed to their views of this inestimable heritage, unless it shall be hedged about in such terms as cannot be mistaken by an idiot...I hope the Convention will address this plain, emphatic, unmistakable language: *No power, civil or military, shall ever interfere to prevent the free exercise of the right of suffrage by those entitled to vote at any election authorized by law.*

Id. at 730-31 (emphasis in original). Like Delegate Knott, other delegates proposed different phrases to more clearly explain the intent behind Section 6 because many were worried that the ambiguity of the simple phrase “[a]ll elections shall be free and equal” may lead to a divided judiciary, as had occurred in other states. During the debates, Delegate McDermott proposed clearer language for Section 6 such as: “All elections shall be free from intimidations, and all legal votes shall have equal weight” and “The privilege of free suffrage shall be supported by laws regulating elections, and prohibiting under adequate penalties all undue influence thereon from power, bribery, tumult or other improper practices.” *Id.* at 945-46. Ultimately, the Framers decided that everyone understood what “[a]ll elections shall be free and equal” meant. “We have had this particular clause in all three Constitutions. We have never had any difficulty about its explanation hitherto. We certainly know the meaning of the word ‘free.’ We know what the word ‘equal’ means. It means that nobody shall have any paramount superiority or claim at the poll against any other man.” *Id.* at 946. Thus, confident that nobody, most importantly the judiciary, could find the clause ambiguous, it simply remained “[a]ll elections shall be free and equal.”

Historically Section 6 has infrequently been raised to challenge acts relating to elections and has never been used to strike down a redistricting plan. Despite its infrequent use, acts governing elections are subject to its requirements. Kentucky’s high court has generally construed “free and equal elections” to mean:

[A]n election is free and equal within the meaning of the Constitution when it is public and open to all qualified electors alike; when every voter has the same right as any other voter; when each voter under the law has the right to cast a ballot and have it honestly counted; when the regulation of the right to exercise the franchise does not deny the franchise itself or make it so difficult as to amount to a denial; and

when no constitutional right of the qualified elector is subverted or denied him.

Asher v. Arnett, 132 S.W.2d 772, 776 (Ky. 1939). The *Asher* Court took a deeper look at what “equal” means in this sense and opined:

The word ‘equal’ comprehends the principle that every elector has the right to have his vote counted for all its worth in proportion to the whole number of qualified electors desiring to exercise their privilege. The guaranty, therefore, mean that every qualified voter may freely exercise the right to cast his vote without restraint or coercion of any kind and that his vote, when cast, shall have the same influence as that of any other voter.

Id. In *Wallbrecht v. Ingram*, Kentucky’s then highest court confirmed that Section 6 is meant to convey a prohibition against election-day interferences with the vote-placement and vote-counting processes.

Strictly speaking, a free and equal election is an election at which every person entitled to vote may do so if he desires...They very purpose of elections is to obtain a full, fair, and free expression of the popular will upon the matter, whatever it may be, submitted to the people for their approval or rejection; and when any substantial number of legal voters are, from any cause, denied the right to vote, the election is not free and equal in the meaning of the Constitution.

175 S.W. 1022, 1026 (Ky. 1915). Kentucky precedent consistently supports that Section 6 has nothing to do with apportionment, but rather prohibition against interferences with the vote-placement and vote-counting process. See *Queenan v. Russell*, 339 S.W.2d 475 (Ky. 1960) (holding a statute that effectively prevented absentee voters from voting at all unconstitutional under Section 6); *Smith v. Kelly*, 58 S.W.2d 621 (Ky. 1933) (holding that only having one (1) polling place that was insufficient to accommodate the number of electors in the time period permitted to vote would violate Section 6); *Perkins v. Lucas*, 246 S.W. 150 (Ky. 1922) (holding that a registration statute which only allowed electors

to register on one (1) day each year violated Section 6 because it deprived electors of the opportunity to register).

The Court understands that partisan gerrymandering challenges have been sweeping the nation and that Plaintiffs want this Court to look at and rely upon decisions made by other states' high courts, but this Court is only concerned with the Kentucky Constitution and what is permitted under it. Defendants classify the opinions of other states' high courts that have struck down redistricting maps based on partisan gerrymandering as "failures," "flawed," and "unfaithful to the state's constitution," but again, this Court has no opinion on the decisions of other states as they are free to interpret their constitutions as they see fit. Accordingly, the Court declines to address the validity or applicability of other states' partisan gerrymandering decisions in this action because the Court finds that the 1890-91 constitutional debates, coupled with Section 6 precedent authored by Kentucky's high courts, satisfactorily lead the Court to conclude that Section 6 of the Kentucky Constitution does not prohibit partisan gerrymandering because it does not apply to apportionment, but rather to interferences with the vote-placement and vote-counting process. Therefore, Plaintiffs do not present a viable claim under Section 6 that HB 2 or SB 3 are unconstitutional because Plaintiffs have not alleged that HB 2 or SB 3 interfere with the vote-placement or vote-counting process.

ii. Equal Protection Under Sections 1, 2, and 3

Moreover, Plaintiffs assert that HB 2 and SB 3 violate Sections 1, 2, and 3 of the Kentucky Constitution. They contend partisan gerrymandering violates the guarantee of equal protection because drawing districts based on partisan affiliation denies certain electors equal voting power and dilutes their votes, preventing them from aggregating their

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votes to elect a desired representative. A reviewing court may conclude that partisan gerrymandering claims are cognizable under Sections 1, 2, and 3 of the Kentucky Constitution, but for the reasons provided herein, the Court finds that Plaintiffs' equal protection claim for partisan gerrymandering fails.

“Citizens of Kentucky enjoy equal protection of the law under the 14th Amendment of the United States Constitution and Section 1, 2, and 3 of the Kentucky Constitution.” *Zuckerman v. Bevin*, 565 S.W.2d, 594 (Ky. 2018) (citing *D.F. v. Codell*, 127 S.W.3d 571, 575 (Ky. 2003)). “The goal of equal protection provisions is to ‘keep [] governmental decisionmakers from treating differently persons who are in all relevant respects alike.’” *Id.* (quoting *Nordlinger v. Hahn*, 505 U.S. 1, 10 (1992)). There are three (3) levels of review for equal protection claims: strict scrutiny, intermediate scrutiny, and rational basis. When a statute affects a fundamental right, it is “sustainable only if the statute is suitably tailored to serve a ‘compelling state interest.’” *Steven Lee Enters. v. Varney*, 36 S.W.3d 391, 394 (Ky. 2000). The seldom applied intermediate scrutiny “applies to quasi-suspect classes, such as gender or illegitimacy” and a statute is upheld under this standard if it is “substantially related to a legitimate state interest.” *Zuckerman*, 565 S.W.2d at 595 (quoting *Varney*, 36 S.W.3d at 394)). “On the other hand, ‘if the statute merely affects social or economic policy, it is subject only to a ‘rational basis’ analysis.” *Codell*, 127 S.W.3d at 575 (quoting *Varney*, 36 S.W.3d at 394)).

As mentioned in this Opinion and Order, the Kentucky Supreme Court has made clear that “the mere fact that a particular apportionment scheme makes it more difficult for a particular group in a particular district to elect the representatives of its choice does not render that scheme constitutionally infirm.” *Jensen*, 959 S.W.2d at 776. Although the Court

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in *Jensen* was not examining how apportionment was arranged across Kentucky, but only in Pulaski County and Laurel County, the Court cannot find support to apply an equal protection claim in this action because Kentucky has never recognized the existence of a partisan gerrymandering claim. Nor does the Court believe it is the Court's role to craft a judicially manageable standard for such a claim.

To the Court, "vote dilution" to trigger an equal protection claim occurs only when the one-person, one-vote rule is not respected or when racial gerrymandering occurs. Specifically, for example, when each vote cast does not carry equal weight because each representative is not assigned to approximately the same number of electors or when a redistricting map is crafted to intentionally dilute the vote of a racial minority.

Plaintiffs' concern is that their political affiliation is being used to dilute their votes, however, there is no guarantee or even requirement that political parties be ensured representation commensurate to its share of statewide support. The Kentucky Constitution is not concerned with election returns, but rather with equal representation based on population and county lines. Also, to guarantee representation based on statewide party affiliation would ignore unaffiliated electors. Kentucky has electors that do not identify as members of the Republican or Democratic parties. Further, although many Kentucky electors may identify as a Republican or Democrat, they may still choose to vote for a candidate of the opposing party. Nevertheless, the Kentucky Constitution is silent as to the consideration of partisan interests in apportionment, which leads the Court to conclude that such consideration is not prohibited, otherwise, apportionment would not have been assigned to the General Assembly—a political body—but rather to a politically neutral

committee.¹⁰ Historically Kentucky courts have only been concerned with addressing the equality of voting power as it pertains to population and racial equality, not partisan vote balance. The Court will not attempt to craft a judicially manageable standard when Kentucky law has never recognized a viable claim.

The Court will quickly evaluate HB 2 and SB 3 for what the Court believes are the only recognized equal protection claims—population and racial equality—to see if Plaintiffs have raised a plausible equal protection claim. The undisputed ideal population for Kentucky’s one hundred (100) house districts is 45,058 people. As set forth in *Fischer II*, the population variation must be between +/-5%. In Section VIII(a) of this Opinion and Order the Court determined that HB 2 meets this requirement of the *Fischer II* test, as well as the first prong (splitting the minimum number of counties necessary). In fact, Plaintiffs do not contend that any of the one hundred (100) districts stray outside of the required +/-5% population variation. Moreover, Plaintiffs have not alleged that HB 2 is a racial gerrymander. Turning to SB 3, the undisputed ideal population for Kentucky’s six (6) Congressional districts is 750,973 people. Each of the six (6) Congressional districts contained in SB 3 fit this requirement. District 1 has 750,973 people; District 2 has 750,972 people; District 3 has 750,973 people; District 4 has 750,973 people; District 5 has 750,973 people; and District 6 has 750,972 people. Nevertheless, Plaintiffs do not challenge that the population variation of these districts is unconstitutional. Also, Plaintiffs have not alleged that SB 3 is a racial gerrymander.

¹⁰ The General Assembly has the power to create a politically neutral committee to handle redistricting. However, the Court recognizes that doing so is solely at the discretion of the General Assembly given that the Kentucky Constitution specifically assigns the act of redistricting to the General Assembly.

Thus, the Court concludes Plaintiffs have failed to raise a viable equal protection claim. Kentucky law supports that an equal protection claim can be raised for population or race inequality and Plaintiffs have not alleged such an equal protection violation for HB 2 or SB 3. Instead, Plaintiffs have only raised an unrecognized equal protection violation of partisan gerrymandering, and, as the Court has opined, Kentucky law has never recognized such a claim and there is no judicially manageable standard to measure a partisan gerrymandering claim. Therefore, HB 2 and SB 3 do not violate the Kentucky Constitution's guarantee of equal protection.

iii. Section 1

Next, Plaintiffs argue that as partisan gerrymanders, HB 2 and SB 3 violate Section 1 of the Kentucky Constitution. They assert that partisan gerrymandering targets certain electors and subjects them to disfavored status based on their political affiliation and voting history. Plaintiffs thus allege that partisan gerrymandering violates free speech and association protected by Section 1 of the Kentucky Constitution. Section 1 of the Kentucky Constitution provides that all Kentuckians shall have the inalienable rights of "freely communicating their thoughts and opinions" and "assembling together in a peaceable manner for their common good, and of applying to those invested with the power of government for redress of grievances or other proper purposes, by petition, address or remonstrance..." KY. CONST. § 1(4) & (6). Voting for the candidate of one's choice and associating with the political party of one's choice are forms of political expression protected by Section 1 of the Kentucky Constitution. *Associated Industries of Kentucky v. Commonwealth*, 912 S.W.2d 947, 952 (Ky. 1995) ("Section 1 of the Kentucky Constitution [is] designed to protect the rights of citizens in a democratic society to participate in the

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political process of self-government.”). Plaintiffs assert that partisan gerrymandering uses the political affiliation and voting history of electors to crack and pack an opponent’s electors into districts to dilute the power and influence of the electors’ votes.

Plaintiffs heavily rely on the recent North Carolina Supreme Court opinion in which the majority held that partisan gerrymandering unconstitutionality “imposes a burden on...the fundamental right to equal voting power...when legislators apportion district lines in a way that dilutes the influence of certain voters based on their prior political expression—their partisan affiliation and their voting history.” *Harper*, 868 S.E.2d at 546. The Court appreciates the opinion issued by the North Carolina Supreme Court, but that opinion was based on the North Carolina Constitution. Again, the Court must base its findings on the Kentucky Constitution and Kentucky has long recognized that Section 33 of the Kentucky Constitution controls apportionment of state legislative districts. The Kentucky Constitution assigned the duty of apportionment to the General Assembly—a partisan body. Section 33 does not contain a requirement of political neutrality for redistricting, nor does any other section of the Kentucky Constitution. Under HB 2 and SB 3, Democrats, Republicans, Independents, and members of every other political party in Kentucky are still entitled to engage in Section 1 protected activities. Nonetheless, the Kentucky Supreme Court has recognized that “[a]pportionment is primarily a *political* and legislative process,” which seemingly defeats any claim that partisan considerations in redistricting are prohibited. *Jensen*, 959 S.W.2d at 776 (emphasis added). Accordingly, the Court must reject Plaintiffs’ Section 1 claim and hold that HB 2 and SB 3 do not violate Section 1 of the Kentucky Constitution.

iv. Section 2

Finally, Plaintiffs argue that HB 2 and SB 3 violate Section 2 of the Kentucky Constitution because HB 2 and SB 3 are partisan gerrymanders that were crafted by the General Assembly in an arbitrary exercise of power to ensure a Republican supermajority for the next decade and dilute the votes of Democratic electors. “Absolute and arbitrary power over the lives, liberty and property of freemen exists nowhere in a republic, not even in the largest majority.” KY. CONST. § 2. “Section 2 of the Constitution is a curb on the legislative as well as on any other public body or public officer in the assertion or attempted exercise of political power.” *Sanitation Dist. No. 1 of Jeff. Co. v. City of Louisville*, 213 S.W.2d 995, 1000 (Ky. 1948). In applying Section 2, the Kentucky Supreme Court has held that “[w]hatever is contrary to democratic ideals, customs and maxims is arbitrary.” *Kentucky Milk Marketing v. Kroger Co.*, 691 S.W.2d 893, 899 (Ky. 1985). “Likewise, whatever is essentially unjust and unequal or exceeds the reasonable and legitimate interests of the people is arbitrary.” *Id.*

As the Court has noted throughout its analysis of HB 2 and SB 3, there is no doubt that HB 2 and SB 3 are partisan gerrymanders, *but* the Court must recognize that the Kentucky Constitution instills the power of apportionment in the hands of the General Assembly—a political body. As continuously noted throughout this Opinion and Order, the Kentucky Supreme Court has recognized that apportionment is a political process. *Jensen*, 959 S.W.2d at 776. And the Kentucky Constitution does not explicitly forbid the consideration of partisan interests in apportioning representation. The Democratic Party long controlled Kentucky’s General Assembly and was responsible for crafting the apportionment scheme that resulted in the current legislative makeup. Thus, proving that

political preferences in Kentucky are not stagnant and that it is possible for the opposing party to gain control of the General Assembly under a map crafted for partisan advantage. The Court again notes that HB 2 complies with Section 33 of the Kentucky Constitution. Because HB 2 complies with Section 33 of the Kentucky Constitution, which provides explicit direction for apportioning state legislative districts, the Court holds that HB 2 does not violate Section 2 of the Kentucky Constitution because it is not arbitrary. Similarly, because SB 3 meets the requirements of population and racial equality, the Court holds that SB 3 does not violate Section 2 of the Kentucky Constitution. There is no doubt that the First District in SB 3 is unusual and not compact, but in *Watts v. Carter*, Kentucky's then highest court disclaimed that the esthetics of an apportionment scheme has any bearing on its constitutionality. 355 S.W.2d 657, 659 (Ky. 1962).

In sum, the Court holds that Section 2 of the Kentucky Constitution is not a mechanism to render unconstitutional legitimate exercises of the General Assembly that are perceived as unfair. *City of Lebanon v. Goodin*, 436 S.W.3d 505, 516-19 (Ky. 2014). It is not the role of this Court to inquire into the motives of the General Assembly when it crafted HB 2 and SB 3. *Id.* The Court respects the Kentucky Constitution's strong separation of powers and given the lack of obvious unconstitutionality to HB 2 and SB 3, the Court will not overstep the explicit role given to the judiciary in assessing the constitutionality of an apportionment scheme by delving into legislative motive.

IX. The Commonwealth's Crossclaim and Counterclaim

The Commonwealth has filed a crossclaim and counterclaim challenging the constitutionality of the 2012/2013 districts (HB 302 (2012RS) and HB 1 (2013SS)). The Commonwealth asks the Court to hold the 2012/2013 districts unconstitutional and

permanently enjoin the use of those apportionment plans in any future election. In support, the Commonwealth argues that applying current Census population data to the 2012/2013 districts plainly shows that the 2012/2013 districts violate provisions of both the Kentucky Constitution and the United States Constitution. The Commonwealth alleges that there is no dispute that the 2012/2013 districts are unconstitutional as no party in this case has disputed the Commonwealth’s claim and the record contains sufficient evidence to support the Commonwealth’s claim that the 2012/2013 districts are now unconstitutionally malapportioned.

Although no party in this action has disputed the Commonwealth’s crossclaim and counterclaim challenging the constitutionality of the 2012/2013 districts, the Court holds that the Commonwealth is not entitled to judgment on its crossclaim and counterclaim because, given the holding in this Opinion and Order, the Commonwealth’s crossclaim and counterclaim is moot as it pertains to the relief sought by Plaintiffs, is not otherwise independently ripe for review, and this Court does not issue advisory opinions.

First, the Court holds that the Commonwealth’s crossclaim and counterclaim is moot. “A ‘moot case’ is one which seeks to get a judgment...upon some matter which, when rendered, for any reason, cannot have any practical legal effect upon a *then* existing controversy.” *Morgan v. Getter*, 441 S.W.3d 94, 98-99 (Ky. 2014) (*quoting Benton v. Clay*, 223 S.W. 1041, 1042 (Ky. 1921) (emphasis in original)). In addition to a declaration that HB 2 and SB 3 are unconstitutional, Plaintiffs seek “[a]n injunction directing Defendants to implement, enforce, and conduct elections for the Kentucky House of Representatives and Congress pursuant to the district maps previously enacted as KRS 5.200, et seq....” Complaint, Jan. 20, 2022, at 35; Motion for Temporary Injunction, Jan.

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28, 2022, at 3, 44. The Court initially denied Plaintiffs' requested relief to conduct the 2022 elections for the Kentucky state House and Congress under the 2012/2013 districts in its February 17, 2022, Order denying injunctive relief. Additionally, in this Opinion and Order, the Court has declared HB 2 and SB 3 constitutional. Therefore, the Court concludes that the Commonwealth's crossclaim and counterclaim is moot as it pertains to the relief sought by Plaintiffs.

Nevertheless, the Commonwealth's crossclaim and counterclaim is not ripe for review. This is an action for a Declaration of Rights. This Court has jurisdiction pursuant to KRS. 418.040, which provides:

In any action in a court of record of this Commonwealth having general jurisdiction wherein it is made to appear that an actual controversy exists, the plaintiff may ask for a declaration of rights, either alone or with other relief; and the court may make a binding declaration of rights, whether or not consequential relief is or could be asked.

As a condition precedent, a party seeking a declaration must present an actual controversy for the Court to address.

The existence of an actual controversy respecting justiciable questions is a condition precedent to an action under the [Declaratory Judgment Act]. The court will not decide speculative rights or duties which may or may not arise in the future, but only rights and duties about which there is a present actual controversy presented by adversary parties, and in which a binding judgment concluding the controversy may be entered.

Foley v. Commonwealth, 306 S.W.3d 28, 31 (Ky. 2010) (citing *Veith v. City of Louisville*, 355 S.W.2d 295, 297 (Ky. 1962) (quoting *Black v. Elkhorn Coal Corp.*, 233 Ky. 588, 26 S.W.2d 481, 483 (1930))) (citations omitted in original); *Nordike v. Nordike*, 231 S.W.3d 733, 739 (Ky. 2007) ("It is a fundamental tenet of Kentucky jurisprudence that courts cannot decide matters that have not yet ripened into concrete disputes. Courts are not

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permitted to render advisory opinions.”) (citations omitted). “An actual controversy for purposes of the declaratory judgment statute requires a controversy over present rights, duties, and liabilities; it does not involve a question which is merely hypothetical or an answer which is no more than an advisory opinion.” *Id.* (quoting *Barrett v. Reynolds*, 817 S.W.2d 439 441 (Ky.1991) (citing *Dravo v. Liberty Nat'l Bank & Trust Co.*, 267 S.W.2d 95 (Ky.1954))). “A declaratory judgment should not or cannot be made as to questions which may never arise or which are merely advisory, or academic, hypothetical, incidental or remote, or which will not be decisive of any present controversy....The criterion that should govern the courts is not that there is a present controversy but a justiciable controversy over present rights, duties or liabilities.” *Dravo*, 267 S.W.2d at 97 (citations omitted). “Further, many of these questions are prematurely raised in [] litigation because of the rather complex inter-workings of the various provisions under challenge.” *W.B. v. Commonwealth, Cabinet for Health and Family Services*, 388 S.W.3d 108, 113 (Ky. 2012).

The Court holds that the Commonwealth does not present an “actual controversy” to invoke this Court’s jurisdiction under the Declaratory Judgment Act because the Commonwealth’s claim that the 2012/2013 districts are unconstitutionally malapportioned is not ripe for review. “Ripeness is a threshold issue: ‘Because an unripe claim is not justiciable, the circuit court has no subject matter jurisdiction over it.’” *Berger Family Real Estate, LLC v. City of Covington*, 464 S.W.3d 160, 166 (Ky. Ct. App. 2015) (quoting *Doe v. Golden & Walters, PLLC*, 173 S.W.3d 260, 270 (Ky. Ct. App. 2005)). In *W.B.*, the Cabinet for Health and Family Services initiated an investigation into allegations of child abuse by an individual. 388 S.W.3d at 110. During the administrative proceeding, the individual brought a declaratory action in the Jefferson Circuit Court facially challenging

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the constitutionality of the related statutory and regulatory provisions. *Id.* at 109. The Jefferson Circuit Court and the Kentucky Court of Appeals affirmed the constitutionality of the statutes and regulations, but the Kentucky Supreme Court reversed, instead finding that the case was not ripe for review due to the absence of an administrative record. *Id.* at 111. In its holding, the Kentucky Supreme Court emphasized judicial restraint against prematurely deciding constitutional challenges.

[T]wo of the most fundamental rules applied by the courts when considering constitutional challenges are ‘one, never to anticipate a question of constitutional law in advance of the necessity of deciding it; the other, never to formulate a rule of constitutional law broader than is required by the precise facts to which it is to be applied.’

Id. at 113-14 (quoting *Liverpool, New York & Philadelphia S.S. Co. v. Commissioners*, 113 U.S. 33, 39 (1885); *Communist Party of United States v. Subversive Activities Control Board*, 367 U.S. 1, 71-72 (1961)). “The basic rationale of the ripeness requirement is ‘to prevent the courts, through avoidance of premature adjudication, from entangling themselves in abstract disagreements[.]’” *Id.* at 114 (quoting *Abbott Labs v. Gardner*, 387 U.S. 136, 148 (1967)). Similarly, the Declaratory Judgment Act “anticipates that there will be occasions when it will not be best to address the controversy at the time of the petition, and so authorizes the courts to defer consideration until the circumstances are more favorable for a resolution of the issue presented[.]” *Id.* at 112; KRS 418.065 (“The Court may refuse to exercise the power to declare rights, duties or other legal relations in any case where a decision under it would not terminate the uncertainty or controversy which gave rise to the action, or in any case where the declaration or construction is not necessary or proper at the time under all the circumstances.”).

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In this Opinion and Order the Court has affirmed the constitutionality of HB 2 and SB 3 and discussed how such decision renders the Commonwealth's crossclaim and counterclaim moot as it relates to the relief sought by Plaintiffs to reimpose the 2012/2013 districts. Nevertheless, in its crossclaim and counterclaim the Commonwealth generally seeks a declaration that the 2012/2013 districts are unconstitutionally malapportioned to prevent the 2012/2013 districts from being used in any future Kentucky election. But the doctrine of ripeness clearly cautions the Court from deciding the Commonwealth's crossclaim and counterclaim. The 2012/2013 districts were repealed and replaced by the districts contained in HB 2 and SB 3 by the General Assembly during the 2022 Regular Session. Accordingly, the 2012/2013 districts are no longer viable law. The Court understands that the Commonwealth has raised its crossclaim and counterclaim to prevent the 2012/2013 districts from being used in case this Court, or a reviewing court, holds HB 2 and/or SB 3 unconstitutional and reimposes the use of the 2012/2013 districts. However, the Commonwealth's crossclaim and counterclaim is not ripe until that specific trigger occurs.

Again, “the existence of a justiciable controversy...is a prerequisite to declaratory relief” under KRS Chapter 418.” *Id.* The declarations the Commonwealth seeks would compel this Court to evaluate the constitutionality of repealed apportionment plans. Presently, it is unknown if the Commonwealth's crossclaim and counterclaim will ever ripen. Until then, the Commonwealth is seeking an advisory opinion, which this Court is not at liberty to issue. If a reviewing court holds HB 2 and/or SB 3 unconstitutional and the 2012/2013 districts are reimposed, then the Commonwealth's crossclaim and counterclaim will be viable and may prove successful. However, until that time, any challenge to the

2012/2013 districts is premature. As this Court has affirmed the constitutionality of HB 2 and SB 3, the Court must exercise judicial restraint and refrain from addressing the Commonwealth's crossclaim and counterclaim until the claim is ripe.

X. Conclusion

“Apportionment is primarily a political and legislative process.” *Jensen*, 959 S.W.2d at 776. The Kentucky Constitution assigns the task of apportionment to the General Assembly—a political body. Plaintiffs have made an admirable effort to prosecute their claims and successfully established at trial that HB 2 and SB 3 are partisan gerrymanders. However, as the Court has thoroughly detailed in this Opinion and Order, the Kentucky Constitution does not explicitly prohibit the General Assembly from making partisan considerations during the apportionment process. The Court acknowledges that other states' constitutions prohibit partisan gerrymandering or assign redistricting to a nonpartisan committee, but this Court's concern is only with the Kentucky Constitution.

First, Section 33 is the specific section of our Constitution that addresses apportionment. Section 33 assigns the duty of apportionment to the General Assembly and sets forth the requirements for state House and Senatorial Districts. Over one hundred (100) years of litigation has resulted in a straightforward baseline “dual mandate” of population equality and county integrity. HB 2 meets these requirements. Second, Section 6 has nothing to do with state or Congressional apportionment. The Court examined the 1890-91 constitutional debates and the handful of Kentucky cases addressing Section 6 to reach this conclusion. Third, the Court concluded that Plaintiffs have raised an unrecognized equal protection claim for partisan gerrymandering with no judicially manageable standard. Fourth, the Court rejected Plaintiffs' Section 1 claim finding that under HB 2 and

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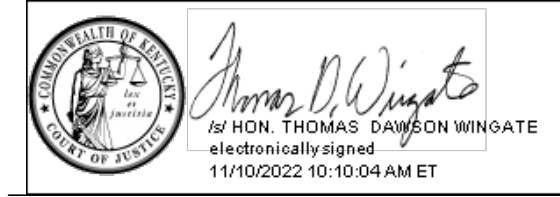
SB 3 Plaintiffs are still able to engage in Section 1 protected activities. Fifth, the Court found no merit in Plaintiffs' Section 2 claim given the political nature of redistricting and the Kentucky Constitution's assignment of the task to the General Assembly—a partisan body. Finally, the Court concluded that the Commonwealth's crossclaim and counterclaim is seeking an advisory opinion because the declaration sought is not ripe for review. Further, given the Court's holding that HB 2 and SB 3 are constitutional, the issue of whether the Court would reimpose the 2012/2013 districts is moot.

Plaintiffs “undertook a yeoman’s task” in bringing this challenge. *Family Trust Foundation of Kentucky v. Kentucky Horse Racing Commission*, 620 S.W.3d 595, 603 (Ky. 2020) (Keller, J. concurring). Ultimately, however, the Court must base its holding not on what is perceived as being most just or fair, but instead on what is provided for in the Kentucky Constitution. Therefore, as to the claims brought by Plaintiffs, the Court must award judgment in favor of Defendants, Secretary Adams and the SBE and Intervening Defendant, the Commonwealth of Kentucky. Further, the Court must exercise judicial restraint and decline to issue an advisory opinion on the Commonwealth's unripe crossclaim and counterclaim.

WHEREFORE, based the findings and conclusions contained in this Opinion and Order, **IT IS HEREBY ADJUDGED** that House Bill 2 (2022RS) is **CONSTITUTIONAL** and Senate Bill 3 (2022RS) is **CONSTITUTIONAL**. The Court further **HOLDS** that the Commonwealth's crossclaim and counterclaim concerning the constitutionality of House Bill 302 (2012RS) and House Bill 1 (2013SS) is moot as it pertains to Plaintiffs' requested relief and is not otherwise ripe for review, thus the Court declines to issue an advisory opinion.

This order is final and appealable and there is no just cause for delay.

SO ORDERED, this 10th day of November, 2022.



THOMAS D. WINGATE
Judge, Franklin Circuit Court

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Order was mailed, this _____ day of November, 2022, to the following:

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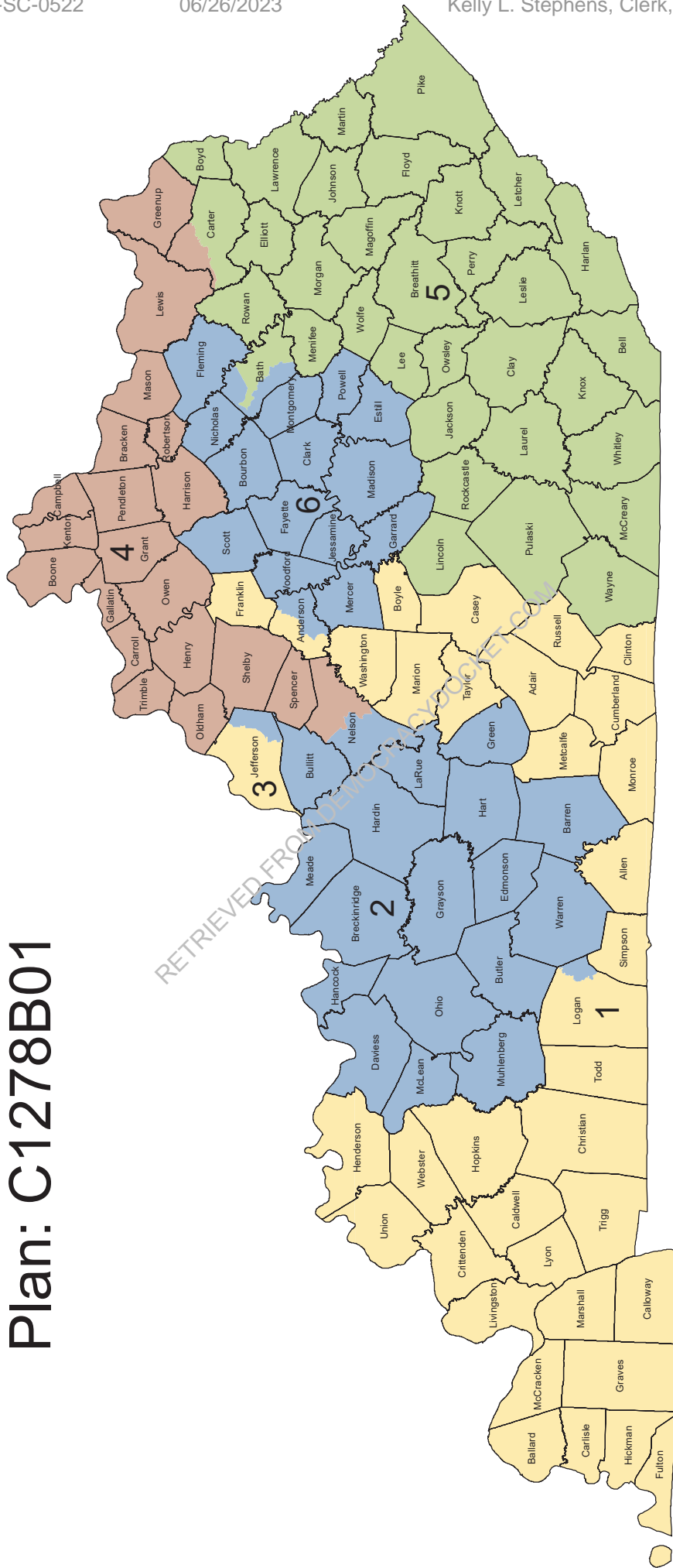
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COMMONWEALTH OF KENTUCKY FRANKLIN CIRCUIT COURT DIVISION 2

Derrick Graham, *et al.*

Plaintiffs,

v.

Michael Adams, *et al.*

Defendants.

NO. 22-CI-00047

EXPERT REPORT
Kosuke Imai, Ph.D.
February 16, 2022

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EXPERT REPORT

I. INTRODUCTION AND SCOPE OF WORK

1. My name is Kosuke Imai, Ph.D., and I am a Professor in the Department of Government and the Department of Statistics at Harvard University. I specialize in the development of statistical methods for and their applications to social science research. I am also affiliated with Harvard's Institute for Quantitative Social Science.

2. I have been asked by counsel representing the plaintiffs in this case to analyze relevant data and provide my expert opinions regarding whether the enacted General Assembly House of Representative redistricting plan (HB2; hereafter "the enacted House plan") violates Section 33 of Kentucky's Constitution more than necessary. In addition, I have been asked by counsel to analyze relevant data and provide my expert opinions regarding the extent to which the enacted Congressional plan (SB3; hereafter "the enacted Congressional plan") as well as the enacted House plan favor one party over another.

II. SUMMARY OF OPINIONS

3. I simulated 10,000 alternative House plans that are at least as compliant with Section 33 of the Kentucky Constitution as the enacted House plan. The comparison of these simulated House plans with the enacted House plan yields the following findings:

- The enacted House plan unnecessarily splits a greater number of counties into more than two districts when compared with the simulated House plans. In fact, none of the 10,000 simulated plans split multiple times as many counties as the enacted House plan.
- The enacted House plan unnecessarily creates a greater number of districts that contain more than two counties. In fact, none of the 10,000 simulated plans contain as many such districts as the enacted plan.
- The enacted House plan has more Republican-leaning districts than the simulated House plans. In comparison with the simulated House plans, the enacted House plan makes Republican-leaning districts safer while making Democratic-leaning districts less safe.

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- In Jefferson and Fayette Counties, the enacted House plan creates additional safe Republican districts by unnecessarily splitting county boundaries to include many Republican voters from the neighboring counties.

4. I also simulated 10,000 alternative Congressional plans. The comparison of these simulated Congressional plans with the enacted Congressional plan yields the following findings:

- When compared to the simulated Congressional plans, District 1 of the enacted Congressional plan, which contains Franklin County, is unusually non-compact. In fact, more than 99% of the simulated Congressional plans that do not split Franklin County have a more compact district containing this county than the enacted Congressional plan.
- Voters in Franklin County belong to a much more Republican-leaning district under the enacted Congressional plan than under the simulated Congressional plans. In fact, more than 99% of the simulated Congressional plans that do not split Franklin County have a more Democratic district containing this county than the enacted Congressional plan.

III. QUALIFICATIONS, EXPERIENCE, AND COMPENSATION

5. I am trained as a political scientist (Ph.D. in 2003, Harvard) and a statistician (MA in 2002, Harvard). I have published more than 70 articles in peer reviewed journals, including premier political science journals (e.g., *American Journal of Political Science*, *American Political Science Review*, *Political Analysis*), statistics journals (e.g., *Biometrika*, *Journal of the American Statistical Association*, *Journal of the Royal Statistical Society*), and general science journals (e.g., *Lancet*, *Nature Human Behavior*, *Science Advances*). My work has been widely cited across a diverse set of disciplines. For each of the past four years, Clarivate Analytics, which tracks citation counts in academic journals, has named me as a highly cited researcher in the cross-field category for producing “multiple highly cited papers that rank in the top 1% by citations for field and year in Web of Science.”

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6. I started my academic career at Princeton University, where I played a leading role in building interdisciplinary data science communities and programs on campus. I was the founding director of Princeton's Program in Statistics and Machine Learning from 2013 to 2017. In 2018, I moved to Harvard, where I am Professor jointly appointed in the Department of Government and the Department of Statistics, the first such appointment in the history of the university. Outside of universities, between 2017 and 2019, I served as the president of the Society for Political Methodology, a primary academic organization of more than one thousand researchers worldwide who conduct methodological research in political science. My introductory statistics textbook for social scientists, *Quantitative Social Science: An Introduction* (Princeton University Press, 2017), has been widely adopted at major research universities in the United States and beyond.

7. Computational social science is one of my major research areas. As part of this research agenda, I have developed simulation algorithms for evaluating legislative redistricting since the beginning of this emerging literature. At Harvard, I lead the Algorithm-Assisted Redistricting Methodology (ALARM; <https://alarm-redist.github.io/>) Project, which studies how algorithms can be used to improve legislative redistricting practice and evaluation.

8. Back in 2014, along with Jonathan Mattingly's team at Duke, my collaborators and I were the first to use Monte Carlo algorithms to generate an ensemble of redistricting plans. Since then, my team has written several methodological articles on redistricting simulation algorithms (Fifield, Higgins, et al. 2020; Fifield, Imai, et al. 2020; McCartan and Imai 2020; Kenny et al. 2021).

9. I have also developed an open-source software package titled `redist` that allows researchers and policy makers to implement the cutting-edge simulation methods developed by us and others (Kenny et al. 2020). This software package can be installed for free on any personal computer with a Windows, Mac, or Linux operating system. According to a website that tracks the download statistics of R packages, our software package has been downloaded about 30,000 times since 2016.¹

1. <https://ipub.com/dev-corner/apps/r-package-downloads/> (accessed on January 17, 2022)

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10. In addition to redistricting simulation methods, I have also developed the methodology for ecological inference referenced in voting rights cases (Imai, Lu, and Strauss 2008; Imai and Khanna 2016). For example, my methodology for predicting individual's race using voter files and census data was extensively used in a recent decision by the Second Circuit Court of Appeals regarding a redistricting case (Docket No. 20-1668; Clerveaux *et al.* v. East Ramapo Central School District).

11. Previously, I have submitted my expert reports, based on similar redistricting simulation analyses, to the Congressional and General Assembly redistricting cases in Ohio (*League of Women Voters of Ohio et al. v. Ohio Redistricting Commission et al.* The Supreme Court of Ohio, Case No. 2021-1449; *League of Women Voters of Ohio et al. v. Ohio Redistricting Commission et al.* The Supreme Court of Ohio, Case No. 2021-1193). In both cases, the Ohio Supreme court heavily relied upon my analyses in its decisions (*League of Women Voters of Ohio v. Ohio Redistricting Commission*, Slip Opinion No. 2022-Ohio-65 and Slip Opinion No. 2022-Ohio-342; *Adams v. DeWine*, Slip Opinion No. 2022-Ohio-89). I have also submitted expert reports, which also utilizes a redistricting simulation analysis, to the Congressional redistricting case in Alabama in the United States District Court Northern District of Alabama Southern Division (*Milligan et al. v. Merrill et al.* No. 2:2021cv01530) and the State House redistricting case in South Carolina in the United States District Court of South Carolina Columbia Division (*The South Carolina State Conference of the NAACP et al. v. McMaster et al.* No. 3-21-cv-03302-JMC-TJH-RMG).

12. A copy of my curriculum vitae is attached as Exhibit A.

13. I am being compensated at a rate of \$450 per hour. My compensation does not depend in any way on the outcome of the case or on the opinions and testimony that I provide.

IV. METHODOLOGY

14. I conducted simulation analyses to evaluate the enacted House and Congressional plans. Redistricting simulation algorithms generate a representative set of alternative plans under a specified set of criteria. This allows one to evaluate the properties of a proposed plan by comparing

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them against those of the simulated plans. If the proposed plan unusually favors one party over another *when compared to* the ensemble of simulated plans, this serves as empirical evidence that the proposed plan is a partisan gerrymander. Furthermore, statistical theory allows one to quantify the degree to which the proposed plan is extreme relative to the ensemble of simulated plans in terms of partisan outcomes.

15. A primary advantage of the simulation-based approach, over the traditional methods, is its ability to account for the political and geographic features that are specific to each state, including spatial distribution of voters and configuration of administrative boundaries. Simulation methods can also incorporate each state's redistricting rules. These state-specific features limit the types of redistricting plans that can be drawn, making comparison across states difficult. The simulation-based approach therefore allows one to compare a proposed plan to a representative set of alternate districting plans subject to Kentucky's administrative boundaries, political geography, and constitutional requirements. Appendix A provides a brief introduction to redistricting simulation.

A. Setup for the State House Simulation

16. For the analysis of the enacted House plan, I have ensured that all of my 10,000 simulated House plans have the following properties:

- there are a total of 100 geographically contiguous districts
- all districts do not exceed an overall population deviation of $\pm 5\%$
- districts are at least as compact as those of the enacted plan, on average
- minimize the number of counties that are split
- simulated House plans have fewer county boundaries split in comparison to the enacted plan, on average
- simulated House plans have fewer districts with more than two counties in comparison to the enacted plan
- simulated House plans have fewer counties with more than two districts in comparison to the enacted plan

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- no partisan or racial information is used for simulation

These simulated House plans were generated by only considering the above criteria, using the merge-split type simulation algorithm with the enacted House plan as a starting plan (E. A. Autry et al. 2021; Carter et al. 2019; briefly described in Appendix A). I provide the detailed information about my simulation procedure in Appendix B.

B. Setup for the Congressional Simulation

17. For the analysis of the enacted Congressional plan, I have ensured that all of my 10,000 simulated House plans have the following properties:

- there are a total of 6 geographically contiguous districts
- all districts do not exceed an overall population deviation of $\pm 0.1\%$
- districts are as compact as those of the enacted plan, on average
- simulated Congressional plans have fewer than the number of counties split under the enacted plan
- each county is split at most once, as in the enacted plan
- no partisan or racial information is used for simulation

These simulated Congressional plans were generated by only considering the above criteria, using the Sequential Monte Carlo (SMC) simulation algorithm (McCartan and Imai 2020; Kenny et al. 2021; briefly described in Appendix A). I provide the detailed information about my simulation procedure in Appendix C.

C. Description of Redistricting Simulation Software

18. In my analysis, I used the open-source software package for redistricting analysis `redist` (Kenny et al. 2020), which implements a variety of redistricting simulation algorithms as well as other evaluation methods. My collaborators and I have written the code for this software package, so that other researchers and the general public can implement these state-of-the-art methods on their own. I supplemented this package with code written primarily to account for the redistricting rules and criteria that are specific to Kentucky. All of my analyses were conducted on

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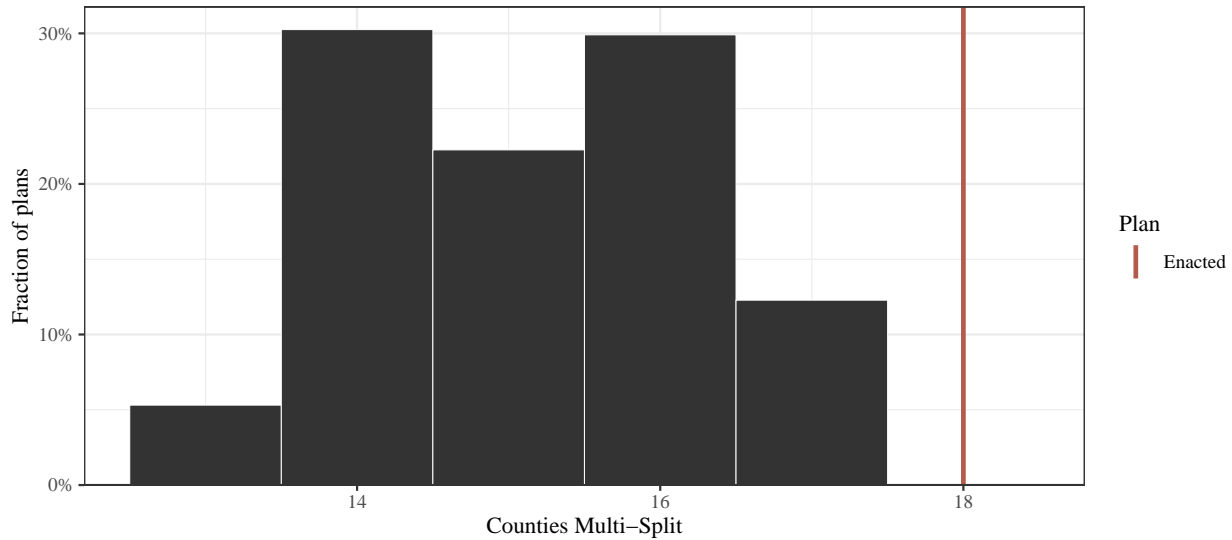


Figure 1: Number of counties containing more than two districts. Of the 10,000 simulated House plans, none of them split multiple times as many counties as the enacted House plan.

a personal computer. Indeed, all of the findings in this report can be replicated by running my code on any personal computer once the required software packages, which are also freely available and open-source, are installed.

V. EVALUATION OF THE ENACTED HOUSE PLAN

19. I start with the evaluation of the enacted House plan. I first show that the enacted House plan unnecessarily splits more counties than the simulated House plans. In comparison to the simulated House plans, the enacted plan also favors the Republican party by increasing the number of Republican-leaning districts while reducing the number of Democratic-leaning districts. The enacted plan also makes Republican-leaning districts safer while making Democratic-leaning districts less safe. I then conduct local analyses to show how these patterns manifest in Franklin and Fayette Counties.

A. Statewide Analysis

20. As explained in Section A, the simulation algorithm is instructed to minimize the number of counties split. As a result, all of my 10,000 simulated House plans yield exactly the same number of counties split as the enacted House plan — 23 counties are split at least once. The key

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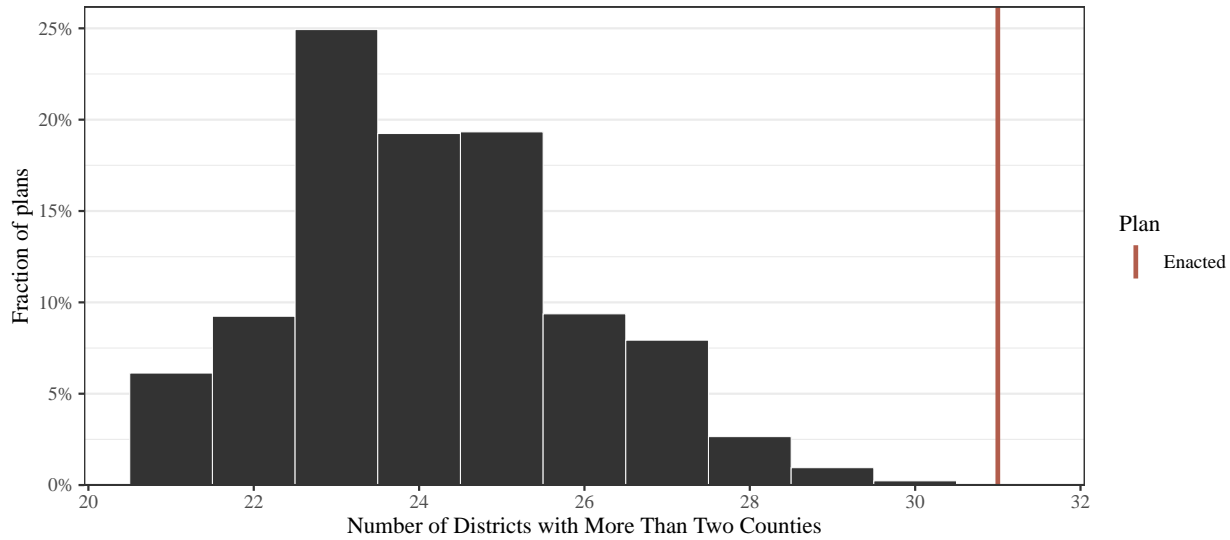


Figure 2: Number of districts containing more than two counties. Of the 10,000 simulated House plans, none of them have as many districts with more than two counties as the enacted House plan.

difference is that the enacted plan unnecessarily splits a greater number of counties multiple times than the simulated House plans. Figure 1 shows the number of counties containing more than two districts across the simulated House plans (grey histogram) with the corresponding number under the enacted House plan (vertical red line). The figure shows that the enacted plan has 18 such counties while the simulated House plans have about 15 such counties on average. This difference is statistically significant. Indeed, none of my 10,000 simulated House plans split multiple times as many counties as the enacted House plan.

21. Similarly, Figure 2 shows the number of districts containing more than two counties across my 10,000 simulated House plans (grey histogram) with the corresponding number under the enacted House plan (vertical red line). The figure shows that the enacted House plan has 31 districts with more than two counties while the simulated House plans have, on average, about 24 such districts. This difference is statistically significant. Indeed, none of my 10,000 simulated House plans have as many districts with more than two counties as the enacted House plan.

22. Finally, Figure 9 in Appendix B shows that the simulated House plans, on average, have fewer total number of county splits than the enacted plan. All together, the results show that the enacted House plan unnecessarily splits counties multiple times in comparison with the

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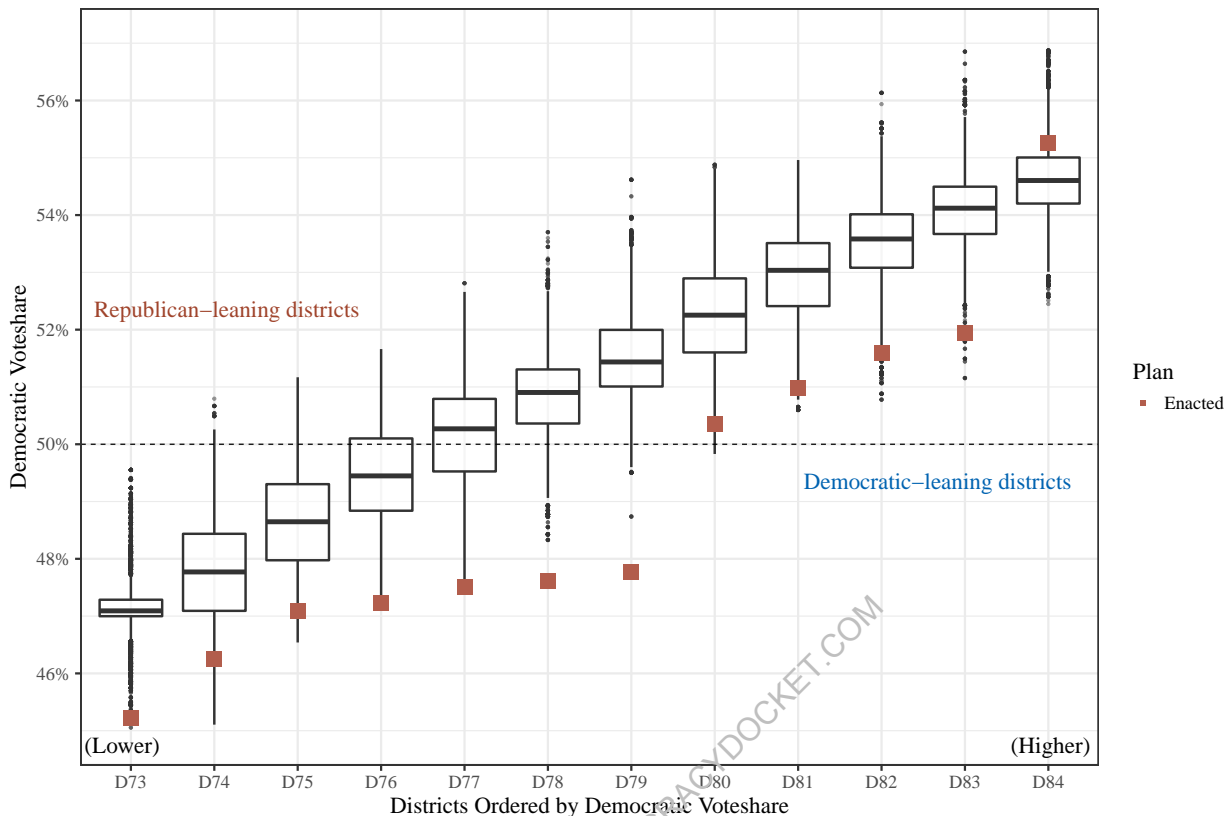


Figure 3: Distributions of Democratic vote share for a total of 12 districts whose Democratic vote shares are close to 50%, across the simulated plans. Boxplots represent the distributions of district-level Democratic vote share ordered by its magnitude, ranging from the district with the 73rd lowest Democratic vote share (left; denoted by “D73”) to the district with the 84th lowest Democratic vote share (right; denoted by “D84”). The red squares indicate the Democratic vote shares under the enacted plan.

simulated House plans.

23. Next, I examine the partisan implications of these significant differences in county splits between the simulated and enacted House plans. To do this, I order each district under the enacted House plan by the magnitude of its Democratic vote share averaged across 8 statewide elections in 2016 and 2019 (see Appendix D for the list of these elections and data sources). That is, I order the districts from the district with the lowest Democratic vote share to the one with the highest. I conduct the same operation on each of the 10,000 simulated House plans by sorting its districts according to their Democratic vote shares. I then compare the distribution of district-level Democratic vote share between the simulated and enacted House plans.

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24. In Figure 3, a red square represents the Democratic vote share of each ordered districts under the enacted plan, focusing on a total of 12 districts, ranging from the district with the 73rd lowest Democratic vote share (denoted by “D73”) to the one with the 84th lowest (denoted by “D84”). These ordered districts are selected because their vote shares are among the closest to the 50% threshold (dotted horizontal line). I use a boxplot to represent the distribution of Democratic vote share for each corresponding ordered district under the simulated House plans. In a boxplot, the box represents the range that contains 50% of the simulated data whereas the horizontal line represents the median value. The vertical lines that come out of the box (called “whiskers”) represent the typical range of data. Any data points falling outside of these lines, including those indicated by black dots, are considered outliers.

25. A clear pattern emerges in this figure. Under the enacted plan, there exists a large jump of about 2.6 percentage points between the Republican-leaning district with the highest Democratic vote share (D79) and the Democratic-leaning district with the lowest Democratic vote share (D80). Such a gap, known as a “signature of gerrymandering” in the academic literature (Herschlag et al. 2020), serves as empirical evidence for efforts to make Republican-leaning districts safer while reducing the Democratic advantage of Democratic-leaning districts. In contrast, the simulated House plans do not exhibit such a discontinuous gap. In fact, the boxplots change smoothly from the lowest district-level Democratic vote share (D73) to the highest (D84) within this figure.

26. Furthermore, when compared to the simulated House plans, the enacted House plan has more Republican-leaning districts (i.e., those below the 50% threshold) while reducing the number of the Democratic-leaning districts (i.e., those above the 50% threshold). Under a majority of the simulated House plans, ordered districts D77, D78, and D79 have a Democratic majority. Yet, the enacted plan makes these ordered districts Republican-leaning by a more than 2 percentage point margin. Indeed, none of my 10,000 simulated House plans have a lower Democratic vote share for these three ordered districts than the enacted House plan, implying that the enacted plan is a clear statistical outlier in this regard.

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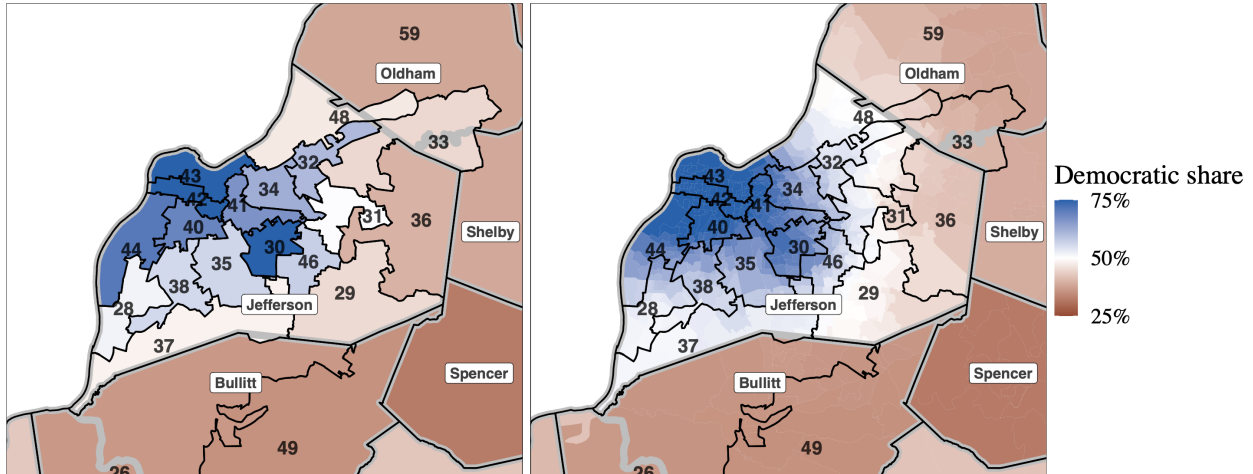


Figure 4: State House districts in Jefferson County. The left map presents the expected two-party vote shares of districts under the enacted House plan, while the right map shows, for each precinct, the average expected two-party vote share of districts to which the precinct is assigned across the simulated House plans. The enacted district boundaries are shown with thick black lines whereas the grey lines indicate county boundaries.

27. Finally, the figure also shows that the enacted House plan makes the Republican-leaning districts safer while reducing the vote share margin of the Democratic-leaning districts. Under the enacted House plan, Republican-leaning ordered districts D73, D74, D75, and D76 have much lower Democratic vote share than most simulated House plans, making these districts safer for the Republican party. In contrast, Democratic-leaning ordered districts D80, D81, D82, and D83 have much lower Democratic vote share, leading to less safer districts for the Democratic party. This asymmetric treatment of Republican-leaning and Democratic-leaning districts represents clear empirical evidence that the enacted House plan favors the Republican party.

B. Local Analysis

28. I next conduct local analyses focusing on Jefferson and Fayette Counties where two largest cities of Kentucky — Louisville and Lexington, respectively — are located. I show that in these two counties the enacted House plan unnecessarily splits county boundaries to create additional safe Republican districts by including many Republican voters from the neighboring counties.

B.1. Jefferson County

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29. Jefferson County is the home to Louisville, which is the largest city in Kentucky. Voters in Louisville generally lean towards the Democratic Party while the precincts closer to the county border with neighboring Oldham, Shelby, Spencer and Bullitt Counties are more Republican-leaning (see the left map of Figure 12 in Appendix E). The left map of Figure 4 presents the district-level vote share under the enacted House plan. Under the enacted House plan, Districts 33 and 48 spill over into the neighboring Oldham County to make them safe Republican districts. Specifically, the enacted House plan turns District 33 into a safe Republican district (the average Democratic vote share of about 45%) by combining the Republican-leaning areas in east Louisville (e.g., Lyndon and Anchorage) with Republican strongholds in Oldham County (e.g., Pewee Valley and South Crestwood). Similarly, the enacted House plan makes District 48 Republican-leaning (the average Democratic vote share of about 47%) by, again, combining the Republican areas in east Louisville (e.g., Indian Hills and Glenview) with a part of Oldham County where many Republican voters live (e.g., the north of Crestwood).

30. The right map of Figure 4 shows the expected two-party vote share of district to which each precinct belongs under the simulated House plans. The map shows that the parts of District 33, which belong to Jefferson County, are likely to be part of a much more competitive district under the simulated House plans (indicated by white color) than under the enacted House plan. Furthermore, the parts of District 48, which belong to Jefferson County, are likely to be part of either a slightly Democratic-leaning district in the case of east Louisville (indicated by light blue color) or a more competitive district in the case of precincts near the county border (indicated by white color). Thus, my analysis of Jefferson County shows that the enacted House plan creates additional safe Republican districts by combining some voters who live in Jefferson County with many Republican voters from neighboring counties.

31. Finally, District 37 of the enacted House plan connects strongly Republican-leaning precincts located along the border between Jefferson and Bullit Counties to create a Republican-leaning district with the Democratic vote share of about 48%. Under the simulated House plans, however, these areas are expected to belong to a Democratic-leaning district. It is also worth noting

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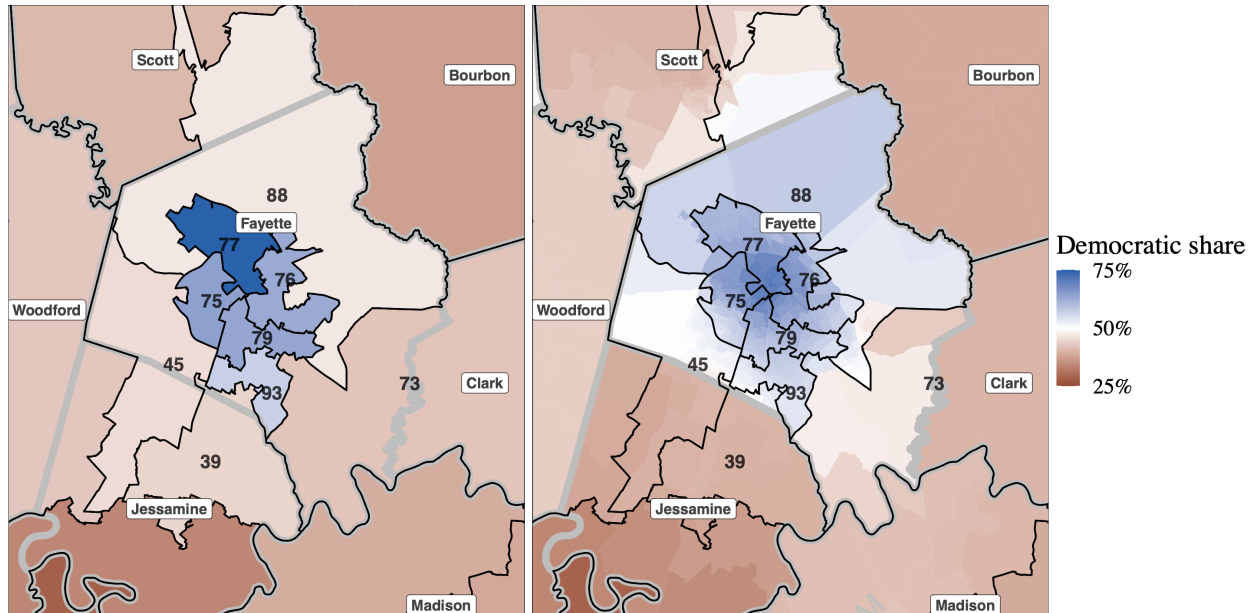


Figure 5: State House districts in Fayette County. The left map presents the expected two-party vote shares of districts under the enacted House plan, while the right map shows, for each precinct, the average expected two-party vote share of districts to which the precinct is assigned across the simulated House plans. The enacted district boundaries are shown with thick black lines whereas the grey lines indicate county boundaries.

that some of the precincts, which are included in Districts 29 and 36, are expected to be part of a much more competitive district under the simulated House plans when compared to the enacted House plan.

B.2. Fayette County

32. Fayette County covers exactly the city of Lexington, which is the second largest city of Kentucky. As shown in the right map of Figure 12 in Appendix E, voters in the center city generally lean towards the Democratic party, whereas the precincts located on the border with Woodford, Scott, Bourbon, Clark, and Madison have many Republican voters. Note that some of the precincts near the border with Jessamine County have a reasonably large number of Democratic voters.

33. The left map of Figure 5 presents the district-level Democratic vote share under the enacted House plan. The enacted House plan divides a large number of Democratic voters into four districts located near the city center. District 77 has the largest Democratic vote share

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of about 76.2%, followed by Districts 75 (64.4%), 79 (63.4%), and 76 (62.8%), all of which are packed with many Democratic voters. In contrast, the enacted House plan makes District 88 safely Republican by combining the Republican-leaning precincts on the county border with Republican strongholds from the neighboring Scott County. Similarly, the enacted House plan makes District 45 strongly lean toward the Republican party (Democratic vote share of about 45.3%) by taking some Democratic-leaning and Republican-leaning precincts of Fayette County and combining them with strongly Republican-leaning precincts from the neighboring Jessamine County.

34. The right map of Figure 5 shows the expected two-party vote share of district to which each precinct belongs under the simulated House plans. Under the simulated House plans, the precincts in the northern part of Fayette County are more likely to belong to Democratic districts while the enacted House plan assigns these precincts to District 88, which strongly lean towards the Republican party. Similarly, the precincts in the south west corner of Fayette County belong to a much more competitive district under the simulated House plans than under the enacted plan, which assign these precincts to District 45. Thus, my analysis of Fayette County shows that the enacted plan packs Democratic voters in a small number of districts and create additional safe Republican districts by combining some voters who live in Fayette County with many Republican voters from neighboring counties.

VI. EVALUATION OF THE ENACTED CONGRESSIONAL PLAN

35. I next evaluate the enacted Congressional plan by focusing on how Franklin County is treated. Under the enacted Congressional plan, the entire Franklin County is part of District 1, which extends all the way from the western corner of the state. I first evaluate the compactness of this district. To do this, I compute the Polsby-Popper compactness score for this district and compare it with the corresponding score under the simulated Congressional plans. Like the enacted Congressional plan, a vast majority of my 10,000 simulated Congressional plans (9,357 or 93.5% to be exact) do not split Franklin County, and so I focus on this subset of the simulated Congressional plans. I then simply compare the compactness of District 1 under the enacted plan with that of simulated district that contains Franklin County as a whole, across simulations.

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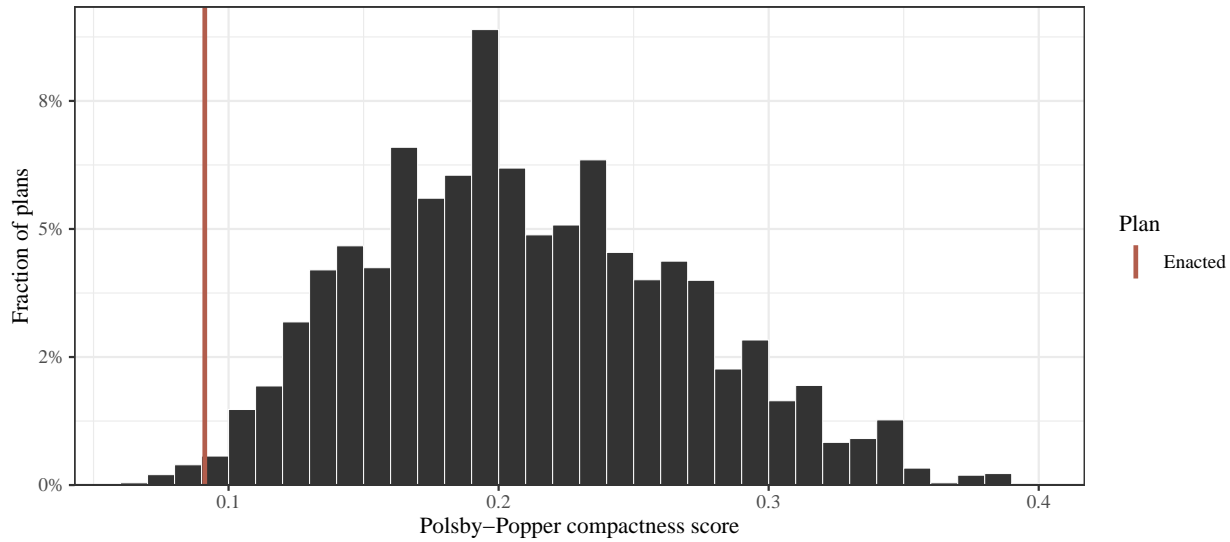


Figure 6: Polsby–Popper compactness scores for districts containing Franklin County, across the simulated redistricting plans that do not split Franklin County. Of the 10,000 sampled Congressional plans, 9,357 (93.5%) of them do not split Franklin County. The compactness score for the district containing Franklin under the enacted Congressional plan is shown as a red vertical line. Larger values indicate more compact districts. Under more than 9,289 (99%) of these simulated Congressional plans, Franklin County belongs to a more compact district than under the enacted plan.

36. Figure 6 shows that District 1 of the enacted Congressional plan (red vertical line) is unusually non-compact when compared to the simulated Congressional plans (grey histogram). Note that a larger value of Polsby-Popper compactness score indicates a more compact district. Indeed, more than 99% of the simulated Congressional plans that do not split Franklin County have a more compact district that contains Franklin County. In other words, voters of Franklin County would belong to a much more compact district under the simulated Congressional plans than the enacted Congressional plan. Figure 13 in Appendix E shows that this conclusion does not change if one uses another common measure of compactness (viz. the Reock score).

37. I next examine the partisan implication of this lack of compactness. Figure 7 shows the Democratic vote share of the district that contains Franklin County under the enacted (red vertical line) and simulated (grey histogram) Congressional plans. Again, I use the 9,357 simulated Congressional plans that do not split Franklin County. The figure shows that the Democratic vote share of District 1 under the enacted Congressional plan is much lower than the corresponding

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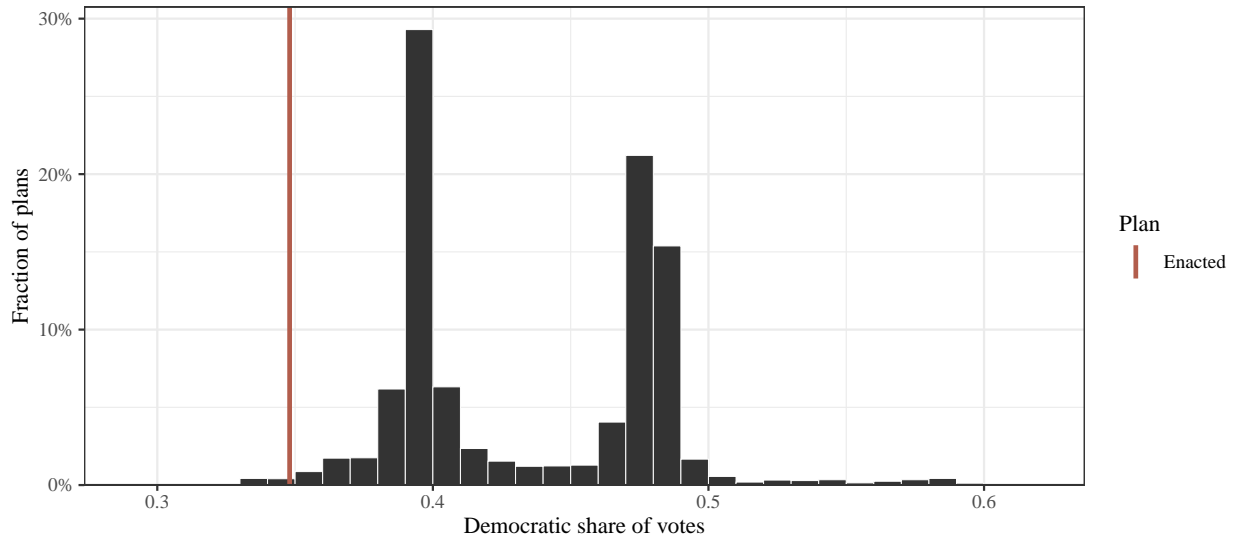


Figure 7: Democratic share of two-party votes for districts containing Franklin County, across the simulated Congressional plans that do not split Franklin County. Of the 10,000 sampled Congressional plans, 9,357 (93.5%) of them do not split Franklin County. The Democratic vote share of the district containing Franklin under the enacted Congressional plan is shown as a red vertical line. Under more than 9,280 (99%) of these simulated plans, voters in Franklin County belong to a more Democratic district than under the enacted Congressional plan. Furthermore, if we focus on the 3,785 (37.9%) simulated Congressional plans that combine Franklin and Fayette Counties in a district without splitting them, the average Democratic vote share of the district is 47.8%.

Democratic vote share under the simulated Congressional plans. Under these simulated Congressional plans, the Democratic vote share for the district that contains Franklin County is 43.6% on average with the maximum Democratic vote share being 61.8%. Indeed, more than 99% of these simulated Congressional plans have a higher Democratic vote share for the district that contains Franklin County. The difference is statistically significant. Furthermore, if we focus on the 3,785 (37.9%) simulated Congressional plans that combine Franklin and Fayette Counties in a district without splitting them, the average Democratic vote share of the district is 47.8%.

38. In other words, voters in Franklin County belong to a district with a greater number of Democratic voters under the simulated Congressional plans than under the enacted Congressional plan. The figure provides empirical evidence that the enacted Congressional plan creates a non-compact district by combining Franklin County with more Republican-leaning counties, significantly reducing the chance of Democratic voters electing a candidate of their choice.

EXPERT REPORT**VII. APPENDIX****A. Introduction to Redistricting Simulation**

1. In recent years, redistricting simulation algorithms have played an increasingly important role in court cases involving redistricting plans. Simulation evidence has been presented to courts in many states, including Michigan, North Carolina, Ohio, and Pennsylvania.²

2. Over the past several years, researchers have made major scientific advances to improve the theoretical properties and empirical performance of redistricting simulation algorithms. All of the state-of-the-art redistricting simulation algorithms belong to the family of Monte Carlo methods. They are based on random generation of spanning trees, which are mathematical objects in graph theory (DeFord, Duchin, and Solomon 2021). The use of these random spanning trees allows these state-of-the-art algorithms to efficiently sample a representative set of plans (E. Autry et al. 2020; E. A. Autry et al. 2021; Carter et al. 2019; McCartan and Imai 2020; Kenny et al. 2021). Algorithms developed earlier, which do not use random spanning trees and instead rely on incremental changes to district boundaries, are often not able to do so.

3. These algorithms are designed to sample plans from a specific probability distribution, which means that every legal redistricting plan has certain odds of being generated. The algorithms put as few restrictions as possible on these odds, except to ensure that, on average, the generated plans meet certain criteria. For example, the probabilities are set so that the generated plans reach a certain level of geographic compactness, on average. Other criteria, based on the state in question, may be fed into the algorithm by the researcher. In other words, this target distribution is based on the weakest assumption about the data under the specified constraints.

4. In addition, the algorithms ensure that all of the sampled plans (a) are geographi-

2. Declaration of Dr. Jonathan C. Mattingly, *Common Cause v. Lewis* (2019); Testimony of Dr. Jowei Chen, *Common Cause v. Lewis* (2019); Testimony of Dr. Pegden, *Common Cause v. Lewis* (2019); Expert Report of Jonathan Mattingly on the North Carolina State Legislature, *Rucho v. Common Cause* (2019); Expert Report of Jowei Chen, *Rucho v. Common Cause* (2019); Amicus Brief of Mathematicians, Law Professors, and Students in Support of Appellees and Affirmance, *Rucho v. Common Cause* (2019); Brief of Amici Curiae Professors Wesley Pegden, Jonathan Rodden, and Samuel S.-H. Wang in Support of Appellees, *Rucho v. Common Cause* (2019); Intervenor's Memo, *Ohio A. Philip Randolph Inst. et al. v. Larry Householder* (2019); Expert Report of Jowei Chen, *League of Women Voters of Michigan v. Benson* (2019). Expert Report of Kosuke Imai, *League of Women Voters of Ohio et al. v. Ohio Redistricting Commission et al.* (2021). Expert Report of Kosuke Imai, *Milligan et al. v. Merrill et al.* (2021). Expert Report of Kosuke Imai, *The South Carolina State Conference of the NAACP et al. v. McMaster et al.* (2022).

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cally contiguous, and (b) have a population which deviates by no more than a specified amount from a target population.

5. There are two types of general Monte Carlo algorithms which generate redistricting plans with these guarantees and other properties: sequential Monte Carlo (SMC; Doucet, Freitas, and Gordon 2001) and Markov chain Monte Carlo (MCMC; Gilks, Richardson, and Spiegelhalter 1996) algorithms.

6. The SMC algorithm (McCartan and Imai 2020; Kenny et al. 2021) samples many redistricting plans in parallel, starting from a blank map. First, the algorithm draws a random spanning tree and removes an edge from it, creating a “split” in the map, which forms a new district. This process is repeated until the algorithm generates enough plans with just one district drawn. The algorithm calculates a weight for each plan in a specific way so that the algorithm yields a representative sample from the target probability distribution. Next, the algorithm selects one of the drawn plans at random. Plans with greater weights are more likely to be selected. The algorithm then draws another district using the same splitting procedure and calculates a new weight for each updated plan that comports with the target probability distribution. The whole process of random selection and drawing is repeated again and again, each time drawing one additional district on each plan. Once all districts are drawn, the algorithm yields a sample of maps representative of the target probability distribution.

7. The MCMC algorithms (E. Autry et al. 2020; E. A. Autry et al. 2021; Carter et al. 2019) also form districts by drawing a random spanning tree and splitting it. Unlike the SMC algorithm, however, these algorithms do not draw redistricting plans from scratch. Instead, the MCMC algorithms start with an existing plan and modify it, merging a random pair of districts and then splitting them a new way.

8. Diagnostic measures exist for both these algorithms which allow users to make sure the algorithms are functioning correctly and accurately. The original papers for these algorithms referenced above provide more detail on the algorithm specifics, empirical validation of their performance, and the appropriateness of the chosen target distribution.

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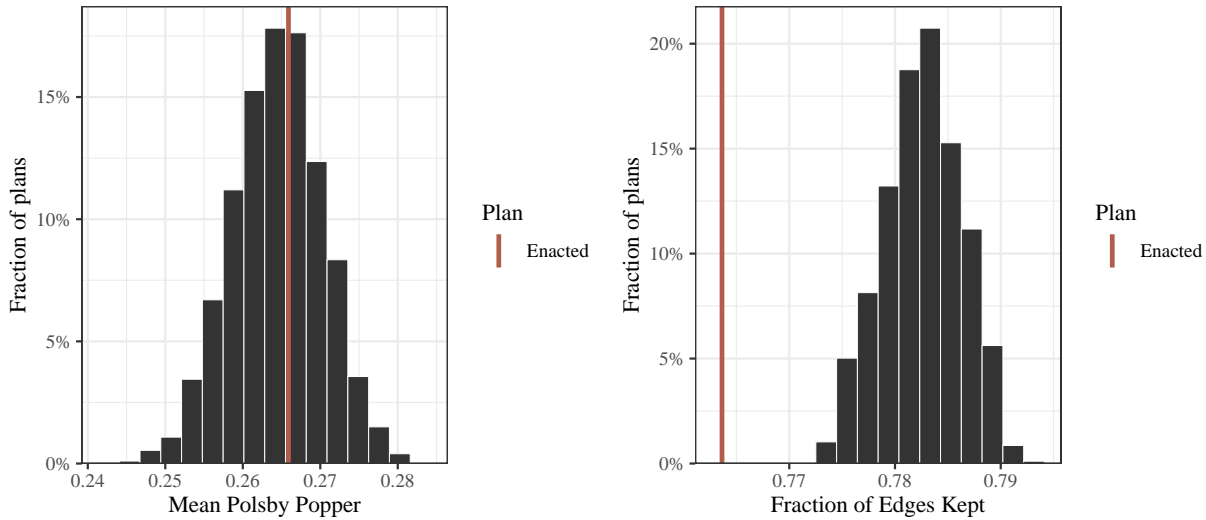


Figure 8: Polsby–Popper (left) and fraction of edges kept (right) compactness scores for the simulated House plans. Overlaid is the average score for the enacted House plan, shown as a red vertical line. For both measures, larger values indicate more compact districts.

B. Implementation Details for the State House Simulation

9. In my State House simulation analysis, I used the merge-split type MCMC algorithm, which allows one to incorporate necessary constraints relatively easily. To obtain 10,000 plans, I first generated a total of 72,000 plans separately from 12 independent Markov chains. Second, I discarded the first 1,000 iterations of each Markov chain, a procedure commonly called burn-in, so that initial values have little impact on the results. Finally, I kept every 6th plan from the remaining 60,000 plans, a procedure commonly called thinning, resulting in the final 10,000 plans. Below I give the details of the algorithmic inputs.

Upon the instruction of counsel, I set the maximum population deviation to be $\pm 5\%$ so that every district of the simulated House plans have a total population within this range. The MCMC algorithm I used is designed to generate a total of 100 contiguous and relatively districts. Figure 8 shows that most of the simulated House plans are as compact as the enacted plan, on average, according to the Polsby-Popper measure (left; Polsby and Popper 1991). The fraction of edges removed (right) measure shows that the simulated House plans are much more compact than the enacted House plan. Together, the results show that the simulated House plans are at least as

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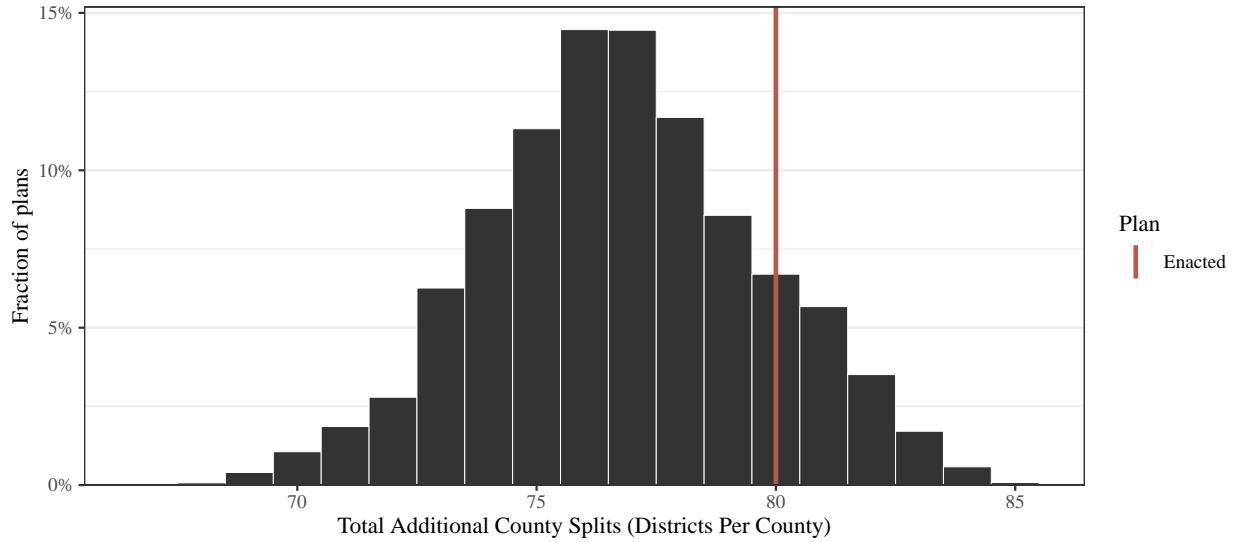


Figure 9: Total number of additional county splits, as defined by the total number of districts within each county across all counties.

compact as the enacted House plan.

10. In addition, to comply with Section 33 of the Kentucky Constitution, I instructed the MCMC algorithm to minimize the total number of counties split by setting the county split avoidance constraint to strength 10. As a result, like the enacted House plan, the total number of counties split is 23 for all of my simulated House plans.

11. Finally, upon the instruction of counsel, I added two additional constraints that reduce the number of districts with more than two counties and the number of counties with more than two districts. This is done by a county multi-split avoidance constraint of strength 7 and a custom constraint of strength 10 that avoids more than two multi-splits of a district. Figures 1 and 2 in Section V show that all of the simulated House plans fewer number of counties with more than two districts and fewer number of districts with more than two counties than the enacted House plan. Finally, I note that the simulated House plans have fewer total number of county splits on average than the enacted House plan as shown in Figure 9.

C. Implementation Details for the Congressional Simulation

12. In my Congressional simulation analysis, I used the SMC algorithm for a couple of reasons. First, unlike the MCMC algorithms, the SMC algorithm generates nearly independent

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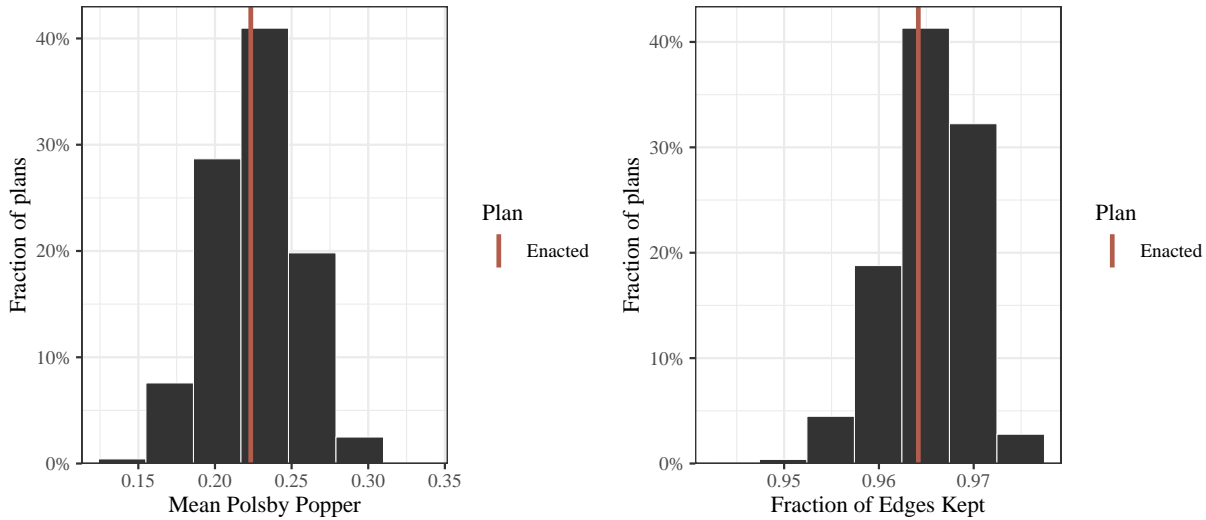


Figure 10: Polsby–Popper (left) and fraction of edges kept (right) compactness scores for the simulated Congressional plans. Overlaid is the corresponding score for the enacted Congressional plan, shown as a red vertical line. For both measures, larger values indicate more compact districts.

samples, leading to a diverse set of redistricting plans that satisfy the specified constraints. Second, the SMC algorithm automatically generates simulated plans that have fewer county splits than the total number of districts.

13. The SMC algorithm I used is designed to generate a total of 6 contiguous and relatively compact districts. Figure 10 shows that most of the simulated Congressional plans are as compact as the enacted plan, on average, according to the Polsby-Popper measure (left; Polsby and Popper 1991) and the fraction of edges removed (right), which are two common metrics of compactness used in the academic literature.

14. I selected the population deviation threshold of $\pm 0.1\%$ given the fact that our primary unit of analysis is voting districts (VTD), the smallest geographical unit for which the election results are available. Although this means that the total population is not exactly equalized across the Congressional districts in my simulated plans, this level of population deviation (i.e., less than 800 people whereas the target population is more than 750,000) is too small to qualitatively change the conclusions of my analyses.

15. In addition, the SMC algorithm has an ability to use county boundaries as district

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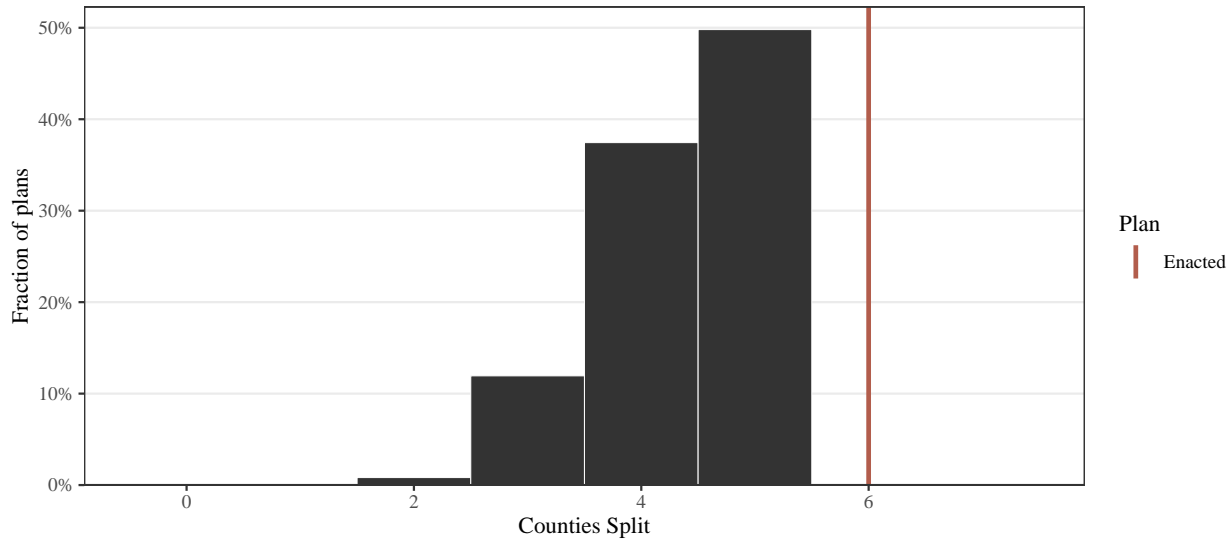


Figure 11: Number of counties containing more than one congressional district. Of the 10,000 simulated plans, none of them split counties more than once. The number of counties containing more than one district in the enacted congressional plan is shown as a red vertical line.

boundaries where feasible, which mechanically limits the maximum number of possible county splits. This means that the total number of county splits under each of my 10,000 simulated Congressional plans is less than the total number of Congressional districts as shown in Figure 11. This guarantees that all of the simulated Congressional plans have fewer county splits than the enacted Congressional plan (red vertical line) as shown in the figure. Finally, we set the county multi-split constraint to 2.5 so that, like the enacted Congressional plan, each of the 10,000 simulated Congressional plans does not split a county multiple times.

D. Data Sources

16. The data is sourced from the Voting and Election Science Team (VEST) dataverse (<https://dataverse.harvard.edu/dataverse/electionscience>) and estimated down to 2010 Census blocks. It is then re-tallied to 2020 Census blocks using VEST’s crosswalk before aggregating up to 2020 VTD boundaries. Our election results are based on two 2016 federal statewide elections (Presidential and US Senate) and six 2019 statewide elections (Governor/Lieutenant Governor, Attorney General, Secretary of State, Auditor, Treasurer, and Agricultural Commissioner). These election data come from the VEST dataverse as well.

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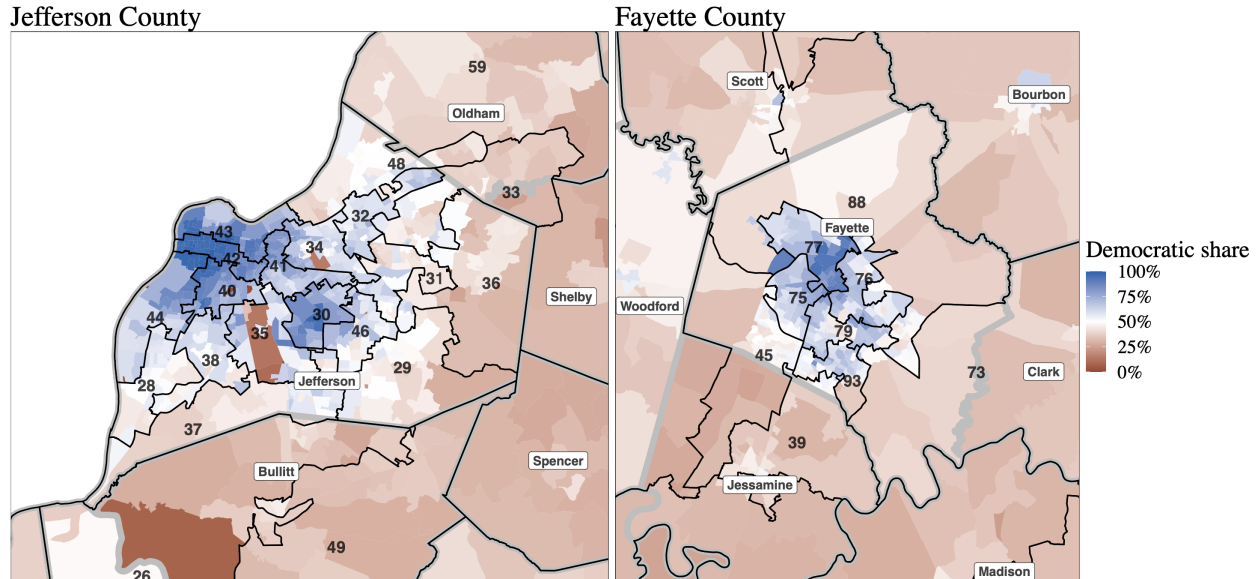


Figure 12: Two-party vote share of all precincts in Jefferson and Fayette Counties. The enacted district boundaries are shown with thick black lines whereas the grey lines indicate county boundaries.

E. Additional Figures

17. This appendix shows two additional figures. Figure 12 shows the precinct-level two-party vote shares in Jefferson and Fayette Counties that are useful for our local analysis of those counties presented in Section V.B.

18. Figure 13 presents the Reock compactness score for the district containing Franklin County across the simulated House plans that do not split Franklin County. The compactness of the district containing Franklin County under the enacted plan is shown as the red vertical line. The Reock compactness score is another popular methodology along with the Polsby-Popper score shown in Figure 6. Under all of the simulated House plans, the district that contains Franklin County is more compact than the corresponding district under the enacted House plan.

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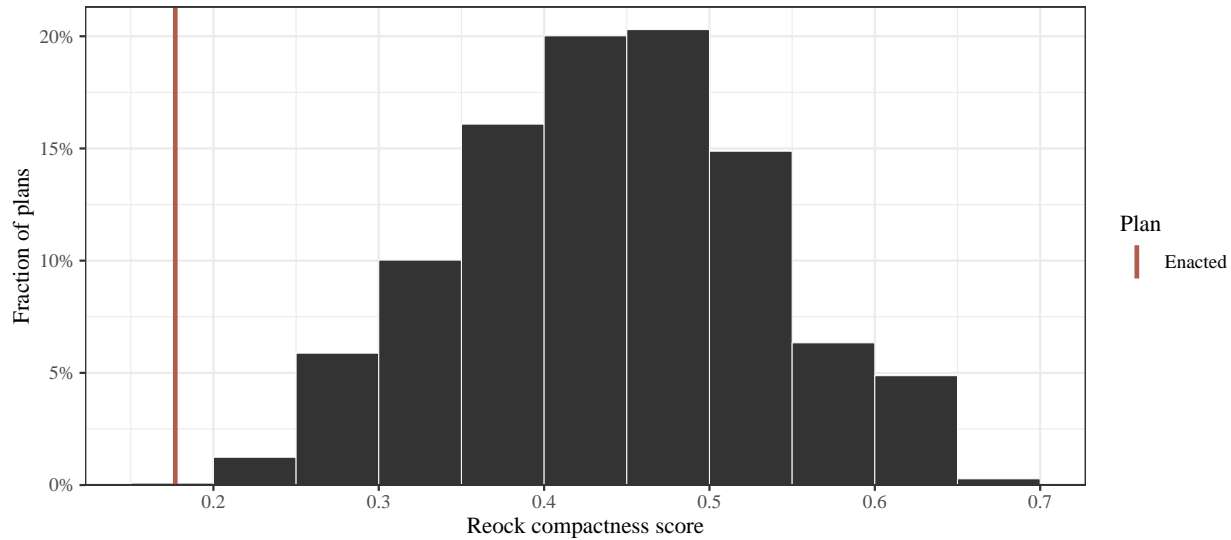


Figure 13: Reock compactness scores for districts containing Franklin County, across the simulated House plans that do not split Franklin County (grey histogram). Larger values indicate more compact districts. The compactness score for the district containing Franklin County under the enacted plan is shown as a red vertical line. Under all simulated plans that do not split Franklin County, Franklin County belongs to a more compact district than under the enacted plan.

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EXHIBIT A
Curriculum Vitae

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Evaluation of Kentucky State House Map Republican Plan (HB 2)

Devin Caughey*

January 28, 2022

APPELLANTS' APPENDIX

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1 Overview

This report uses standard political science evaluates the partisan fairness of the Republican-sponsored Kentucky state house map (HB 2). I find that the map has a large and durable pro-Republican bias—one of the most extreme recorded in any state since the advent of the one-person, one-vote standard for legislative districts.

2 Qualifications

I have a PhD in political science from University of California–Berkeley, where my graduate training including courses in econometrics and statistics. I also earned master’s and bachelor’s degrees in history from Cambridge University and Yale University, respectively. I have been on the faculty of the political science department at the Massachusetts Institute of Technology since 2012, and in 2020 I was promoted to associate professor with tenure.

I have published numerous peer-reviewed articles on the quantitative analysis of political phenomena, including legislative districting. This work has appeared in the top general-interest journals in political science, including the *American Journal of Political Science*, *American Political Science Review*, and *Journal of Politics*, as well as in more specialized journals such as *Election Law Journal* (which focuses on electoral rules and procedures), *Political Analysis* (quantitative methods), and *Public Choice* (political economy). I have also published three books, all of which use statistical methods to analyze American politics. All of my scholarly publications appear in my curriculum vitae, the latest version of which can be downloaded from <https://caughey.mit.edu/curriculum-vitae>.

3 Data and methods used in this report

This report relies on the following sources of data:

- GIS files of the maps in question, provided to me by counsel
- Electoral predictions for and political and demographic information on proposed legislative districts, obtained and downloaded via PlanScore’s “Score a Plan” feature¹
- Estimates of the partisan bias, efficiency gap, mean–median difference, and declination of proposed plans, also obtained via PlanScore’s “Score a Plan” feature and transcribed from the web.

I also performed additional analyses and created maps, plots, and tables using the open-source statistical program R.²

¹<https://planscore.campaignlegal.org/upload.html>.

²R Core Team (2021). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. <https://www.R-project.org/>.

3.1 Background on PlanScore

PlanScore (<https://planscore.campaignlegal.org/>) is a project of the Campaign Legal Center, a nonprofit, nonpartisan organization focused on campaign finance, voting rights, political communications, and government ethics. The website conducts automated analyses of the partisan fairness of districting plans using standard political science methods. Through its “Score a Plan” feature, PlanScore permits users to upload plans to be scored. To score a plan, PlanScore uses Geographic Information System (GIS) data to merge districts with precinct-level electoral and demographic data. Then, using a model that takes into account presidential vote, incumbency status, and state- and election-specific factors, PlanScore simulates the outcome of future congressional and legislative elections in each district. Importantly, these predictions reflect variability stemming from cycle-specific partisan swings as well as the idiosyncratic features of a given race, such as candidate quality.³

4 Measures of partisan fairness

This section provides background on how academic social scientists define and measure partisan fairness in legislative districting. Most mathematical details are relegated to footnotes. Unless otherwise stated, I use the convention that positive numbers indicate a Republican advantage and negative numbers a Democratic one.

First, it is important to note that as defined here, partisan fairness is an attribute of a map itself, regardless of the map-drawers’ intentions. Partisan advantage can be the result of map-drawers’ conscious efforts to maximize one party’s prospects (i.e., partisan gerrymandering), but it is affected by other factors as well, such as the geographic distribution of partisan support. My analysis focuses on the partisan effects of the maps at issue without delving into questions of partisan intent.

Second, there is no single theoretical standard of partisan fairness. Not only are there several alternative metrics, but the value of each metric depends on the precise electoral scenario—for example, whether the national political environment favors one party or the other. Moreover, in most cases the fairness of a map in a given scenario cannot be directly observed, but rather must be estimated based on extrapolations from past electoral results. In short, partisan fairness can reasonably be measured in several ways, each of which is subject to uncertainty. Consequently, unless we have good reason to favor one measure over others, we can be most confident in a map’s fairness when multiple measures coincide.⁴

PlanScore uses election predictions to calculate partisan fairness scores and associated uncertainty for four standard measures:

- partisan symmetry/bias

³For details on PlanScore’s predictive model, see <https://planscore.campaignlegal.org/models/data/2021D/>. The predictions used in this report are based on a scenario in which no incumbents are running for reelection, which eliminates any incumbency advantage from the prediction, and use the 2020 presidential results as a baseline.

⁴For evidence that various fairness metrics usually yield similar results and are highly correlated in competitive states, see Nagle (2015); Stephanopoulos and Warshaw (2020).

- the efficiency gap
- the mean–median difference
- declination.

Because it deems partisan symmetry and mean–median scores reliable only in competitive states, PlanScore does not calculate partisan symmetry or declination scores for states where one party’s predicted votes share exceeds 55%. Below I provide background on all four measures.

4.1 Partisan symmetry

Partisan symmetry is grounded in the idea that under a fair districting plan, the translation of votes into seats is neutral with respect to party.⁵ That is, if one party wins (say) 60% of legislative seats when it earns 55% of votes statewide, then the other party too should receive 60% of seats with 55% of votes.⁶ The relationship between vote share and expected seat share across the entire range of vote share is called the *seats–votes function*.

The *partisan bias* (PB) of a district map indicates how much it deviates from partisan symmetry. More specifically, in a two-party system, the partisan bias is half the difference between the two parties’ seat shares when each receives the same statewide vote share.⁷ Like the seats–votes function, partisan bias is not a single number, but rather varies depending on the statewide vote share of the reference party (henceforth, the Republican Party). For example, the partisan bias when Republicans win 60% of the statewide vote—which is defined in terms of a contrast with their seat share with a vote share of 40%—can and usually does differ from the bias when Republicans win 55% of the vote. It is thus often convenient to summarize the partisan bias by evaluating it at 50% (a statewide tie). In this case, both parties receive the same vote share, so the partisan bias is simply half the difference between the Republican and Democratic seat shares.

Symmetry is not the same as *proportionality*, which requires that a party’s expected seat share equal its vote share.⁸ Due to the well-known “winner’s bonus” in majoritarian electoral systems, the majority party in a state usually wins a super-proportional share of seats unless the map is biased strongly against it.⁹ How much seat share changes as a function of a change in vote share—i.e., the steepness of the seats–votes function—is called its *responsiveness*. Empirically, responsiveness in the United States typically ranges between 1 and 3 percentage

⁵Grofman and King (2007); Katz, King, and Rosenblatt (2020). This report follows the notation used in the latter article.

⁶In a two-party system, partisan symmetry can be expressed formally as the condition $S(V) = 1 - S(1 - V)$, where V is party A’s average vote share across districts and $S(V)$ is A’s expected seat share given vote share V . Unless otherwise state, this report maintains the simplifying assumption that vote share is correlated with turnout across districts, in which case the statewide vote share equals the average vote share across districts.

⁷Formally, partisan bias in a two-party system is defined as $\beta(V) = \frac{S(V) - [1 - S(1 - V)]}{2}$, where V is the vote share of the reference party. The two terms are divided by 2 to capture their distance from symmetry rather than from each other.

⁸Formally, proportionality means that for all values of a party’s vote share V , $S(V) = V$, where $S(V)$ is the party’s expected seat share at V .

⁹For the classic statement of the winner’s bonus in terms of a “cube law,” see Kendall and Stuart (1950).

points in seat share for each point in vote share.¹⁰ A symmetrical districting scheme need not be proportional as long as seats–votes function is equally disproportionate for all parties, and reasonable arguments can be made for various degrees of responsiveness. However, some states include proportionality as a standard for evaluating districting plans.

4.2 Efficiency gap

An alternative standard to symmetry of the seats–vote curve is equality between each party’s number of “wasted” votes.¹¹ A wasted vote is one cast for a losing candidate or for a winning candidate beyond the 50% + 1 required for victory. A party with many wasted votes is inefficient at translating votes into seats. The *efficiency gap* is thus defined as the difference in the share of wasted votes between the parties. When this gap is positive, Republicans waste fewer votes than Democrats and therefore enjoy an electoral advantage.

The efficiency gap can be calculated from aggregate election results by subtracting twice the Republican statewide vote margin from the Republican seat margin, where margin is defined as two-party share minus 50%.¹² Like partisan bias, the efficiency gap differs depending on the statewide vote breakdown. Standard practice in the literature is to evaluate the efficiency gap at a realistic prediction of the statewide vote share, but also evaluate the metric’s sensitivity to different electoral swings.

Although it uses equality of wasted votes rather than partisan symmetry as its normative standard, the EG is implicitly related to the seats–votes function. For the EG to be 0 for all vote shares, the seats–votes function must not only be symmetric, but also award each party two percentage points in seat share for each additional point in vote share it earns.¹³ In other words, the EG will regard a symmetrical seats–votes function as fair if it has a responsiveness of 2.

4.3 Mean–median difference

The *mean–median difference* (MMD) is the Republican vote share in the median district minus the average Republican share. A large positive value of the MMD indicates that the distribution of Republican vote shares across districts is “left skewed”—that is, it has a long tail of lopsided Democratic districts. In a narrowly balanced state, the concentration of one party’s supporters in a small number of districts will disadvantage that party in the translation of votes to seats. The MMD is thus a good diagnostic of partisan bias when the state as a whole is competitive between the parties.¹⁴

¹⁰Katz, King, and Rosenblatt (2020), 172

¹¹Stephanopoulos and McGhee (2015)

¹²Formally, the efficiency gap is equal to $S(V) - 2V + 0.5$, where V is the statewide Republican vote share and $S(V)$ the Republican seat share.

¹³Due to its implicit 2-to-1 seats–votes slope, the EG is not a useful measure outside the 25%–75% vote-share range, where for the EG to be 0 seat share would need to be greater than 100%.

¹⁴In the case of a statewide tie, the mean–median difference is 0 if and only if there is no partisan bias; Katz, King, and Rosenblatt (2020), 173.

4.4 Declination

The most recently developed of the metrics I consider, the *declination* is designed to identify an “artificial” break in the partisan distribution of districts at a Republican vote share of 50%.¹⁵ If districts are plotted in order of partisanship and lines are drawn from the 50% mark to the middle of each party’s cloud of districts, the difference between the lines’ angles is the declination. Alternatively, and perhaps more intuitively, the declination can be understood as the normalized difference between the lopsidedness of Democratic and Republican districts.¹⁶ When one party’s districts are more lopsided than the other’s, the distribution of district partisanship will be skewed.

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¹⁵Warrington (2018). Formally, let $S(V)$ and $1 - S(V)$ respectively denote Republican and Democratic seat shares, and let R and D respectively denote the average Republican vote share in Republican- and Democratic-won districts. The angle of the line from 50% to the center of mass of the Republican districts is

$$\theta_R = \arctan \left[\frac{2R - 1}{S(V)} \right],$$

and the analogous angle for Democratic districts is

$$\theta_D = \arctan \left[\frac{1 - 2D}{1 - S(V)} \right].$$

The declination is the normalized difference of angles, $\delta = 2(\theta_R - \theta_D)/\pi$.

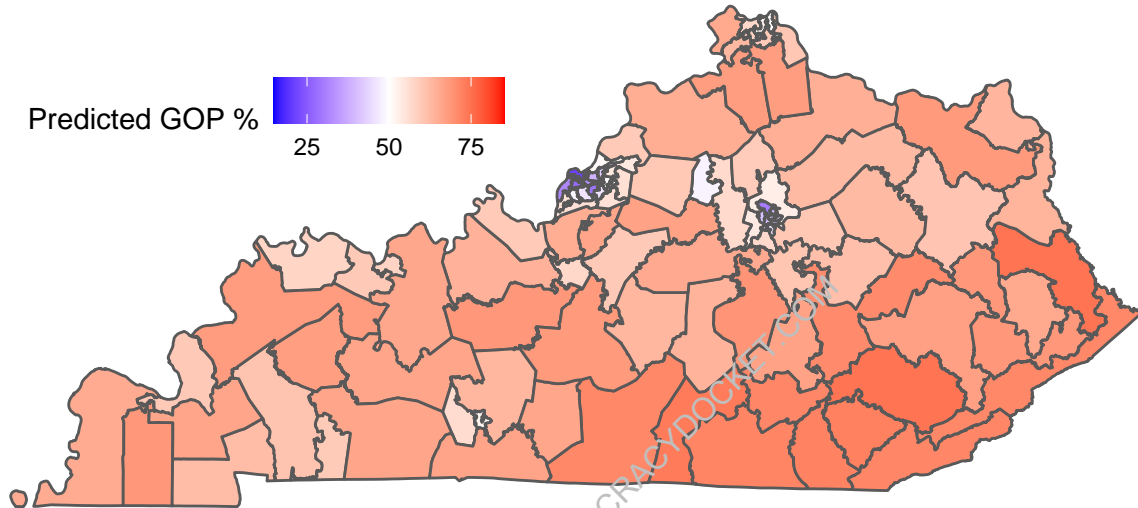
¹⁶Katz, King, and Rosenblatt (2020), 173

5 Analysis of districting plans

5.1 Republican plan (HB 2)

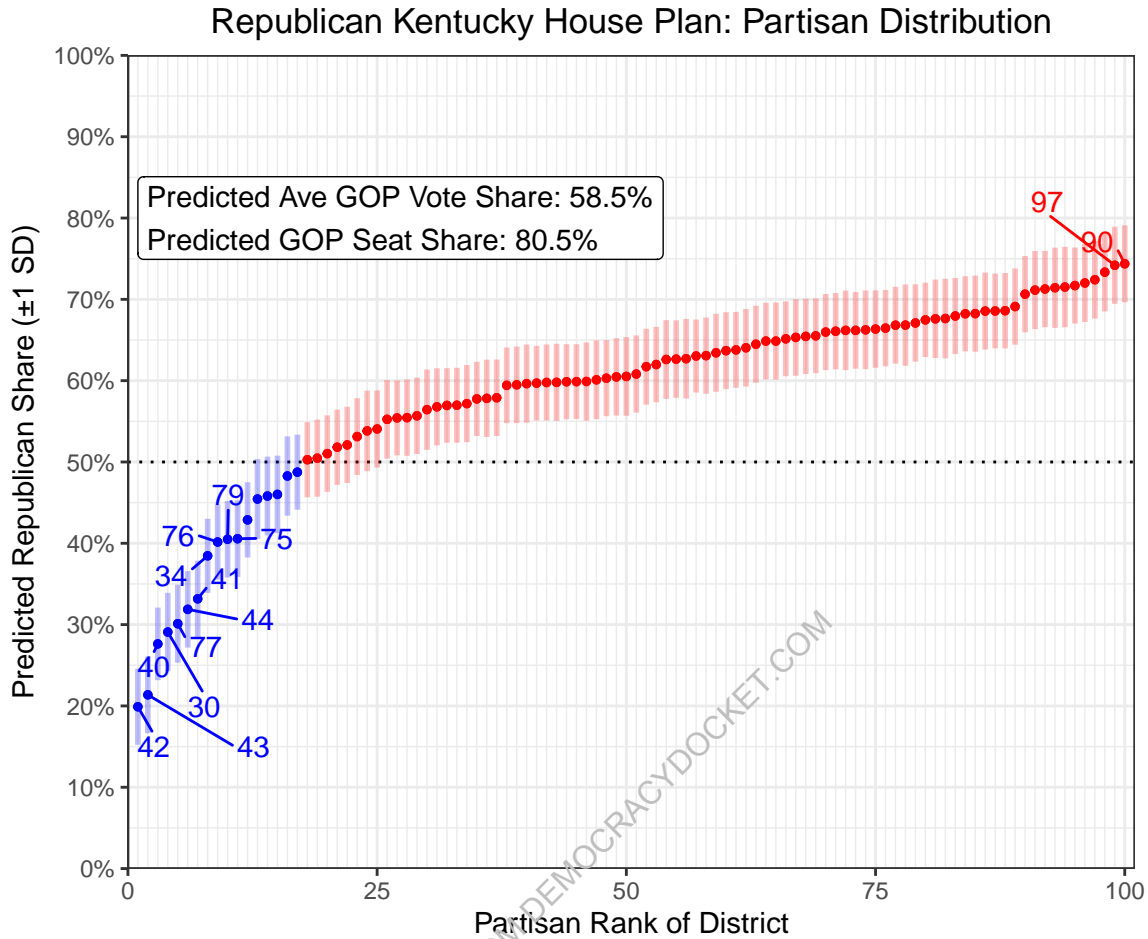
This section uses PlanScore’s predictive model to analyze the partisan fairness of the map proposed by Kentucky Republicans in HB 2.¹⁷ The map below displays the district lines, with the color of each district indicating Republicans’ predicted share of the two-party vote.

Republican Kentucky House Plan: Map



The next figure plots the predicted Republican share of the districts, arranged in order of partisanship, with labels for some of the more extreme districts. The vertical bars around each point indicate ± 1 standard deviation, or a 68% prediction interval.

¹⁷The map’s PlanScore page can be accessed at <https://planscore.campaignlegal.org/plan.html?20220124T192151.715946903Z>.



As the second plot highlights, the distribution of district partisanship is left-skewed (i.e., the Democratic “tail” is longer than the Republican one). In their best district, Democrats are predicted to earn 80% of the vote, but the most Republican district’s predicted Republican share is only 74%. If we define a “competitive” district as one in which both parties have at least a 25% chance of winning, 7 of the map’s 100 districts may be considered competitive.

Averaging over electoral scenarios, Republicans are predicted to win 58.5% of the statewide vote but carry 80.5% of state house seats.¹⁸ Kentucky Republicans’ predicted seat margin (30.5%) is thus 3.6 times larger than their predicted vote margin (8.5%). This ratio of seat share to vote share is substantially larger than the usual winner’s bonus, which in symmetrical districting plans is rarely larger than 3.¹⁹

5.1.1 Formal analysis of partisan fairness

The table below summarizes the partisan fairness of the Republican plan according to the two available metrics: the efficiency gap and declination. It reports each metric’s predicted value in future elections as well as measure of the extremity of this value: the percentage of

¹⁸Note that because the estimated seat share takes into account predictive uncertainty, it will not necessarily match the number of red (Republican) districts in the figure above, which in this case is 83 of 100, or 83%.

¹⁹Katz, King, and Rosenblatt (2020), 172

plans from other states and redistricting cycles that are less biased in favor of either party than this plan is.

Table 1: Partisan fairness of Republican KY House plan

Metric	Pred Value	More Biased Than
Efficiency Gap	13.4%	98%
Declination	0.83	97%

This table shows that the Republican plan offers an extreme advantage to Republican state house candidates. According to the efficiency gap, this map is likely to waste 13.4 percentage points more Democratic votes than Republican votes. Likewise, the declination of 0.83 indicates that Democratic districts are substantially more lopsided. In fact, both the efficiency gap and the declination of the plan are literally off the charts relative to the distribution of these metrics in PlanScore's library—a more extreme advantage to Republicans than more than 99% of historical plans. As the table reports, the pro-Republican bias of this plan is larger than the bias (in favor of either party) of 97–98% of historical plans.

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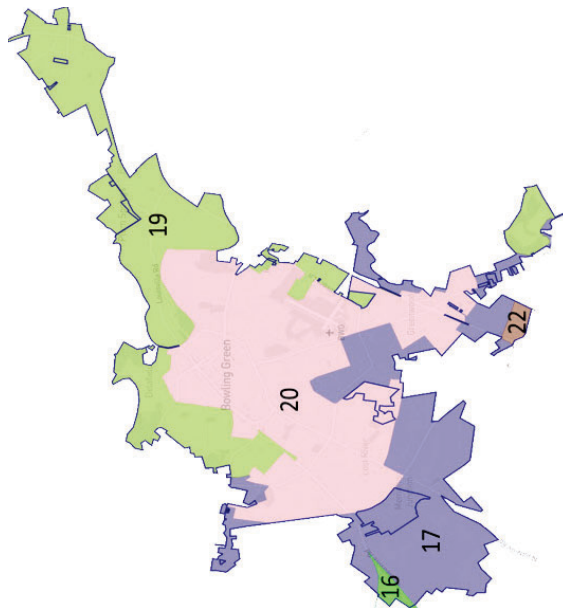
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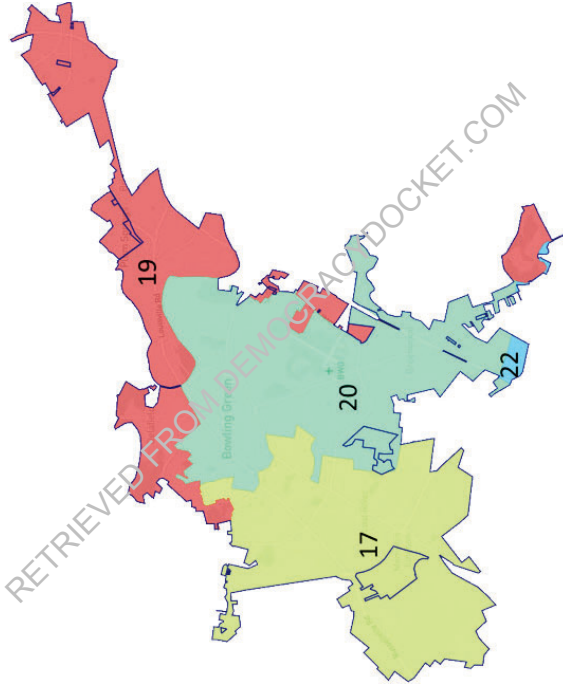
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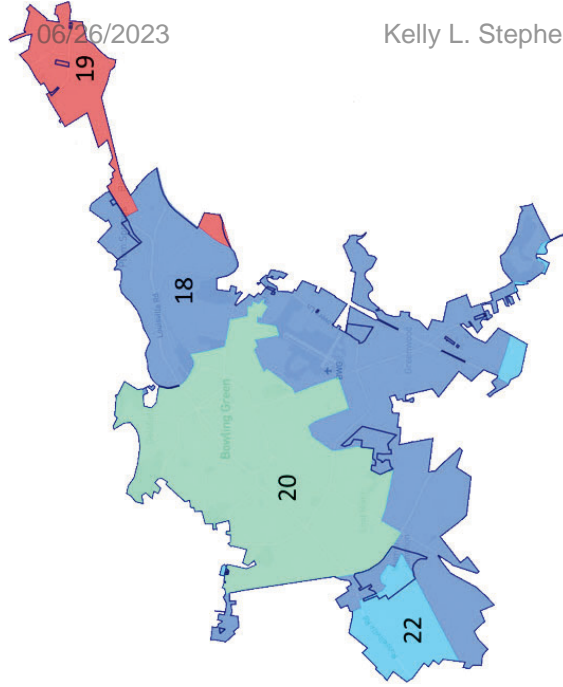
Bowling Green



2013 map

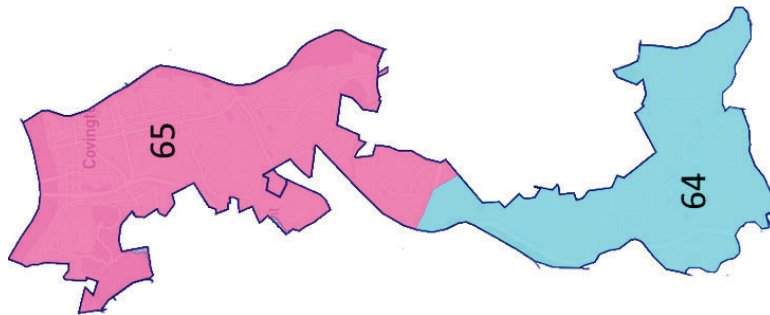


HB2 (Republican Majority)

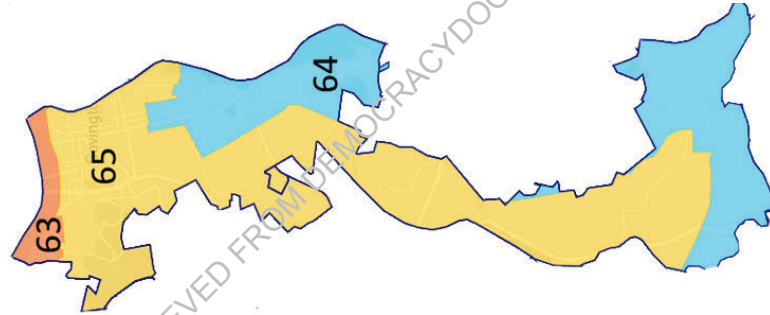


HB191 (Dem proposal)

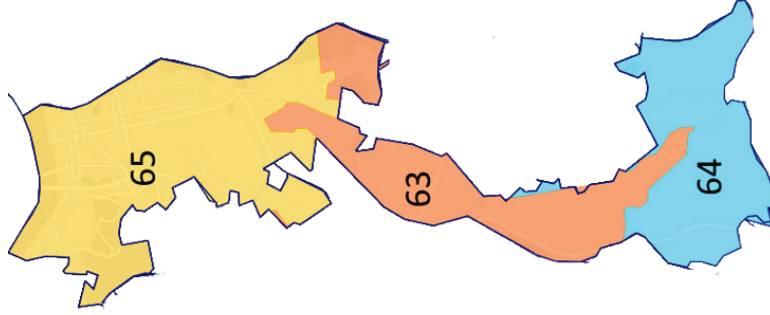
Covington



2013 map



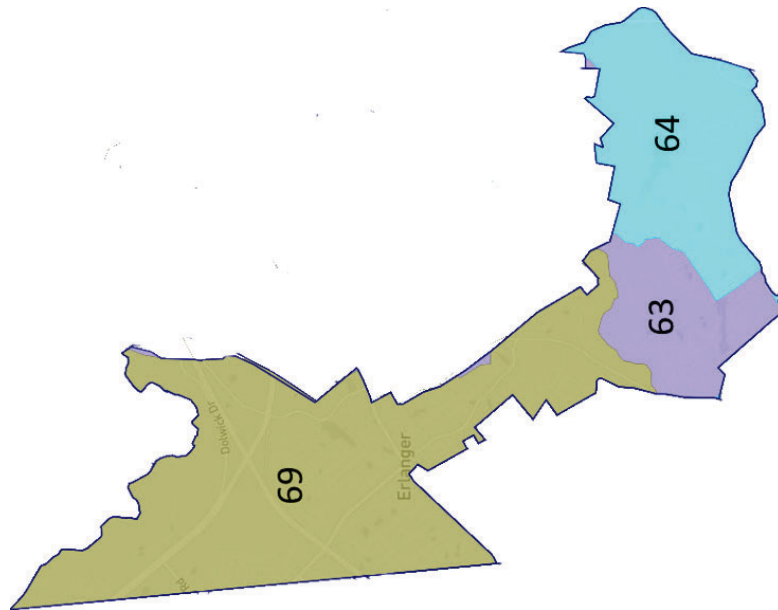
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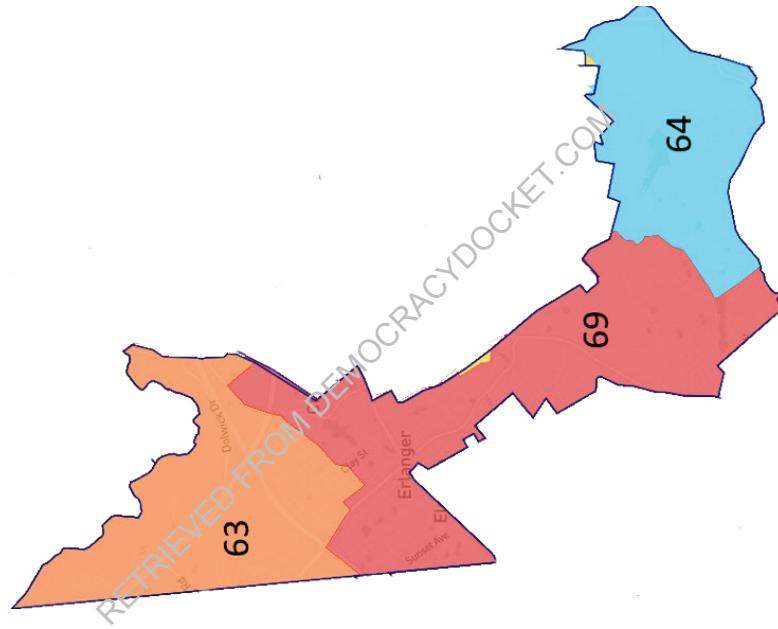
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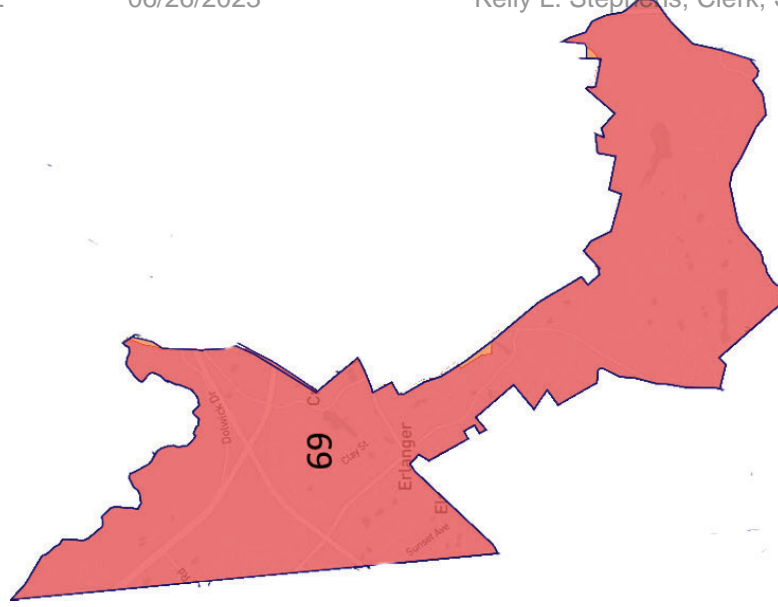
Erlanger



2013 map

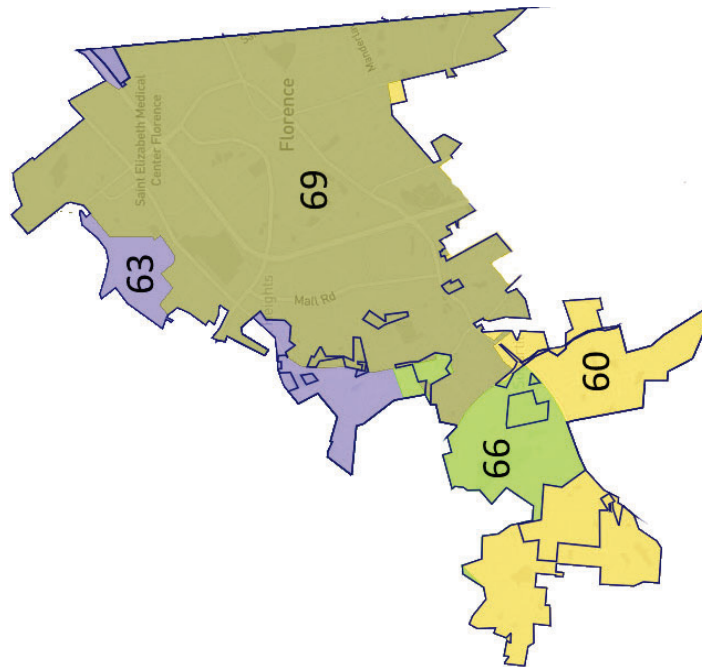


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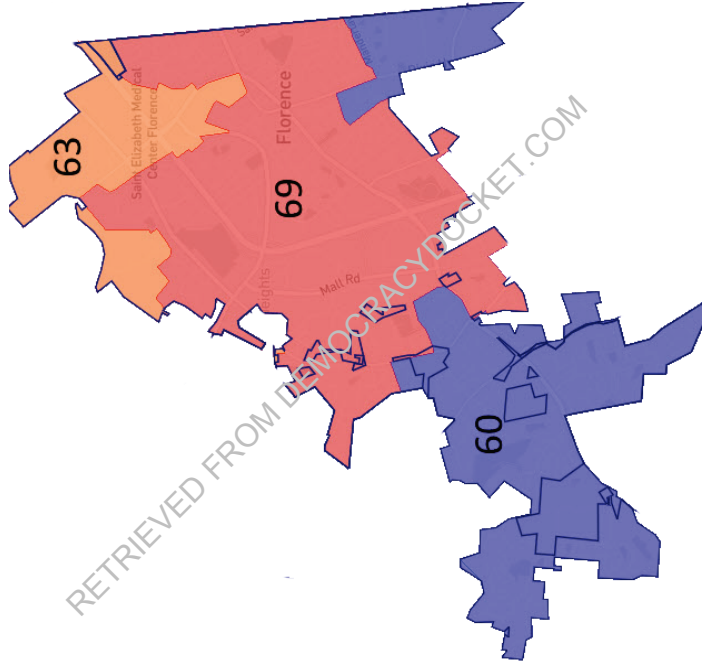


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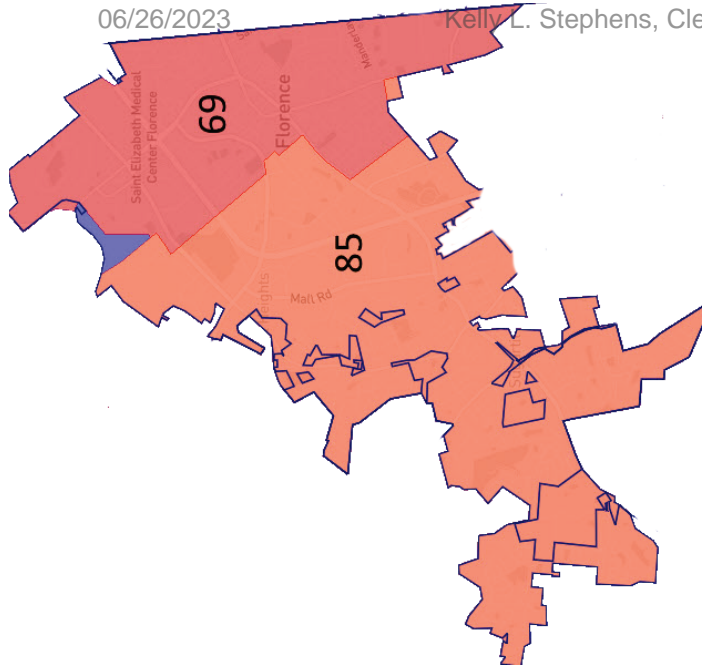
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2013 map

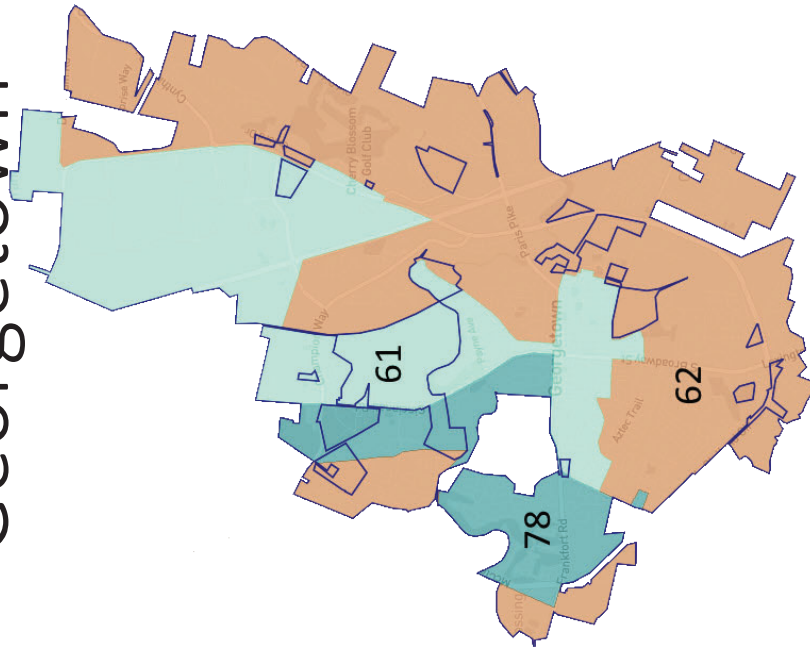


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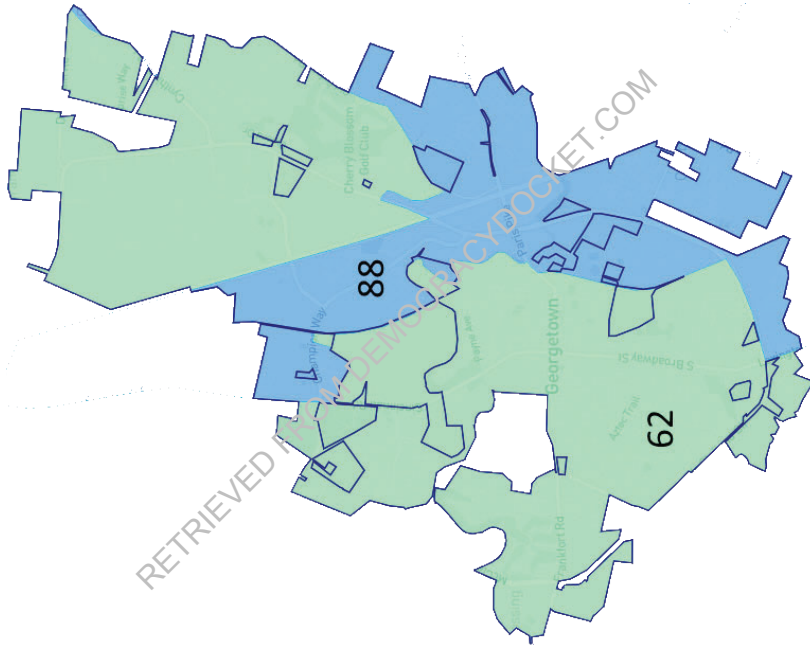


HB191 (Dem proposal)

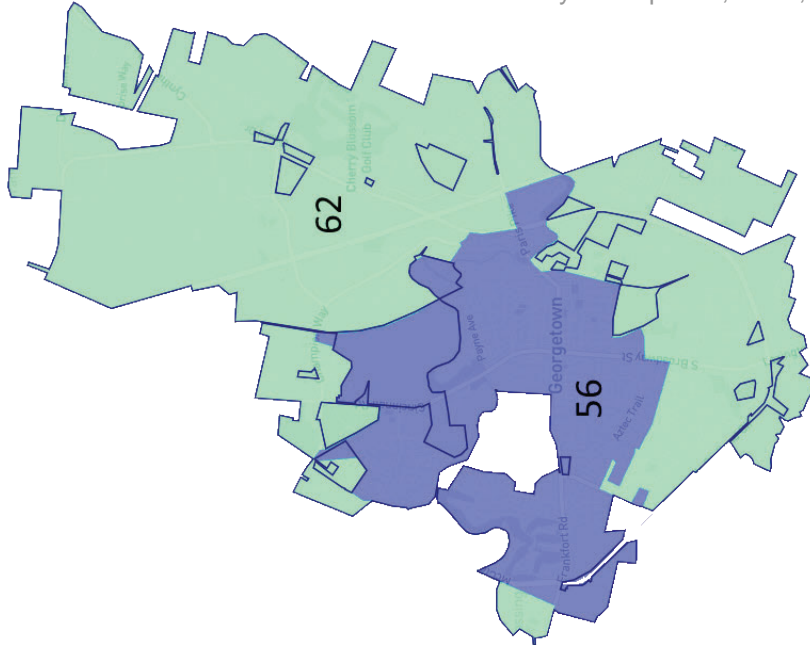
Georgetown



2013 map



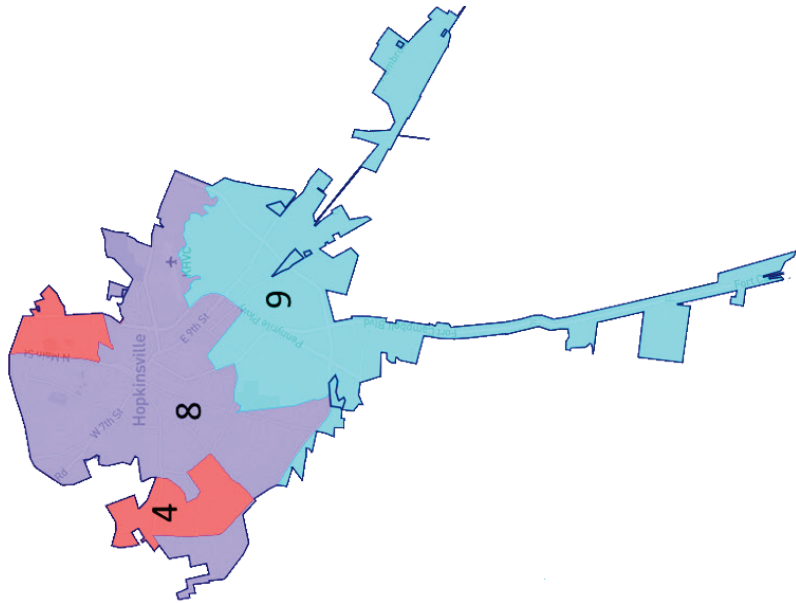
HB2 (Republican Majority)



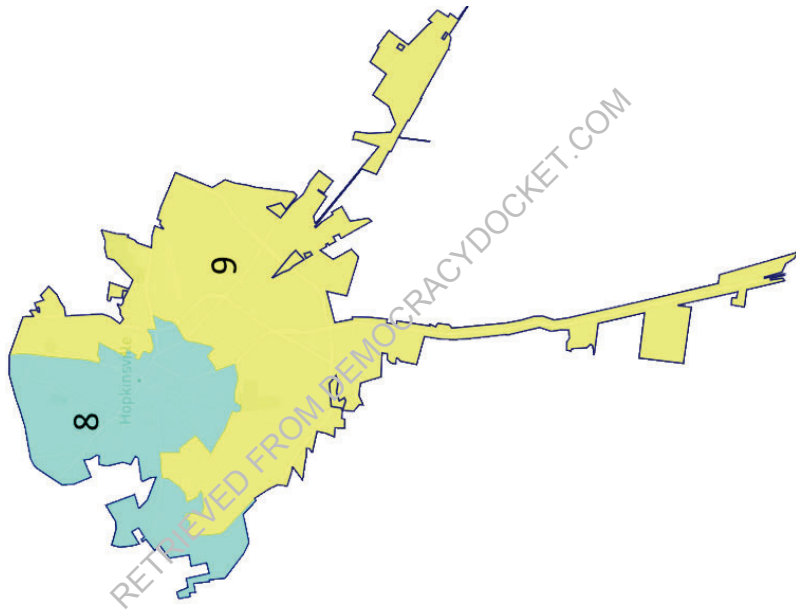
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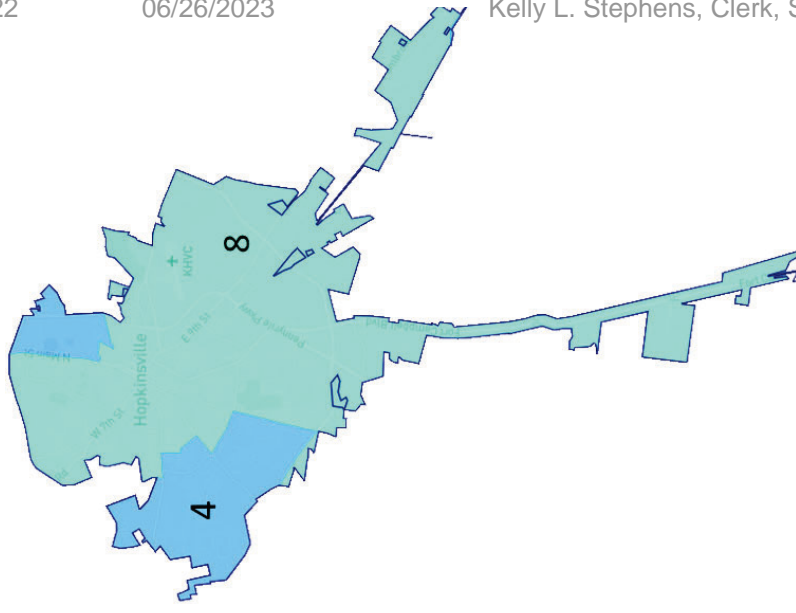
Hopkinsville



2013 map

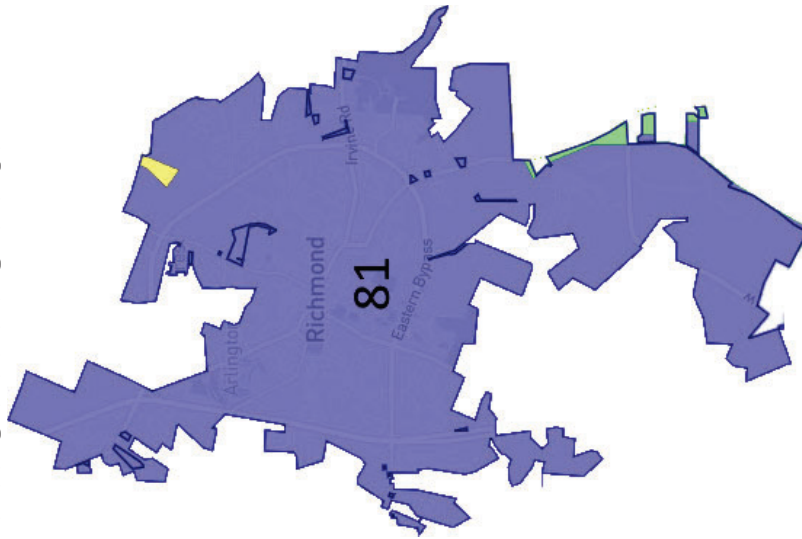


HB2 (Republican Majority)

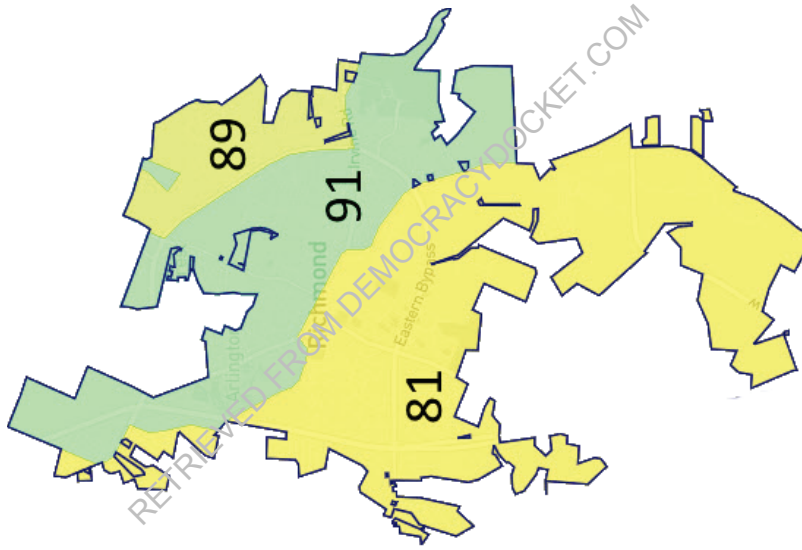


HB191 (Dem proposal)

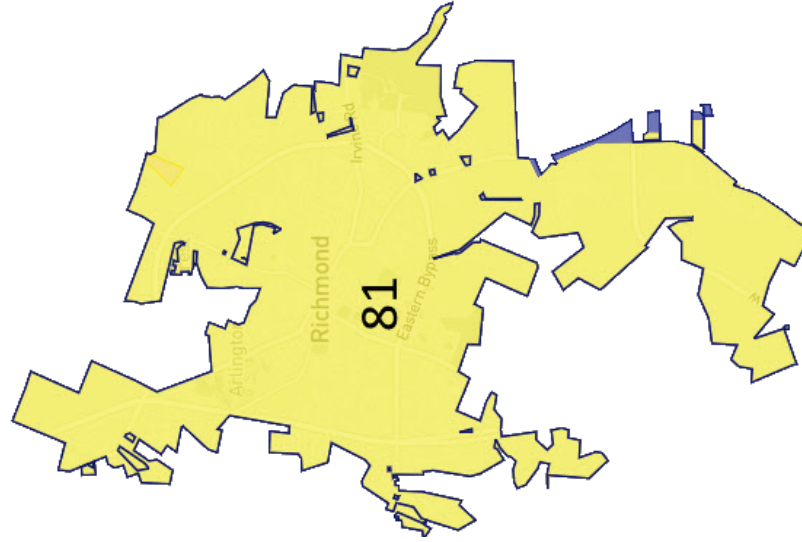
Richmond



2013 map



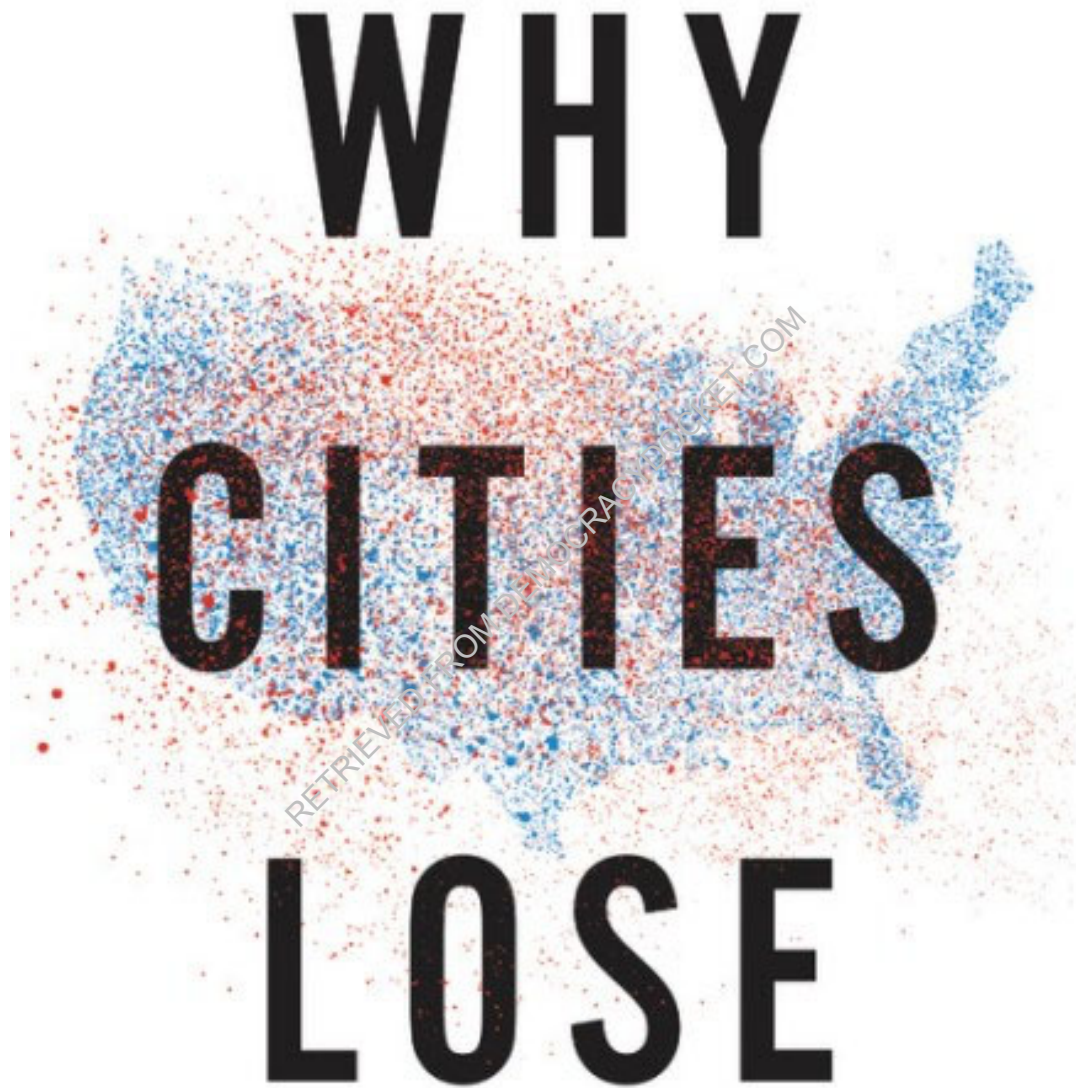
HB2 (Republican Majority)



HB191 (Dem proposal)

THE DEEP ROOTS OF THE
URBAN-RURAL POLITICAL DIVIDE

**WHY
CITIES
LOSE**



JONATHAN A. RODDEN

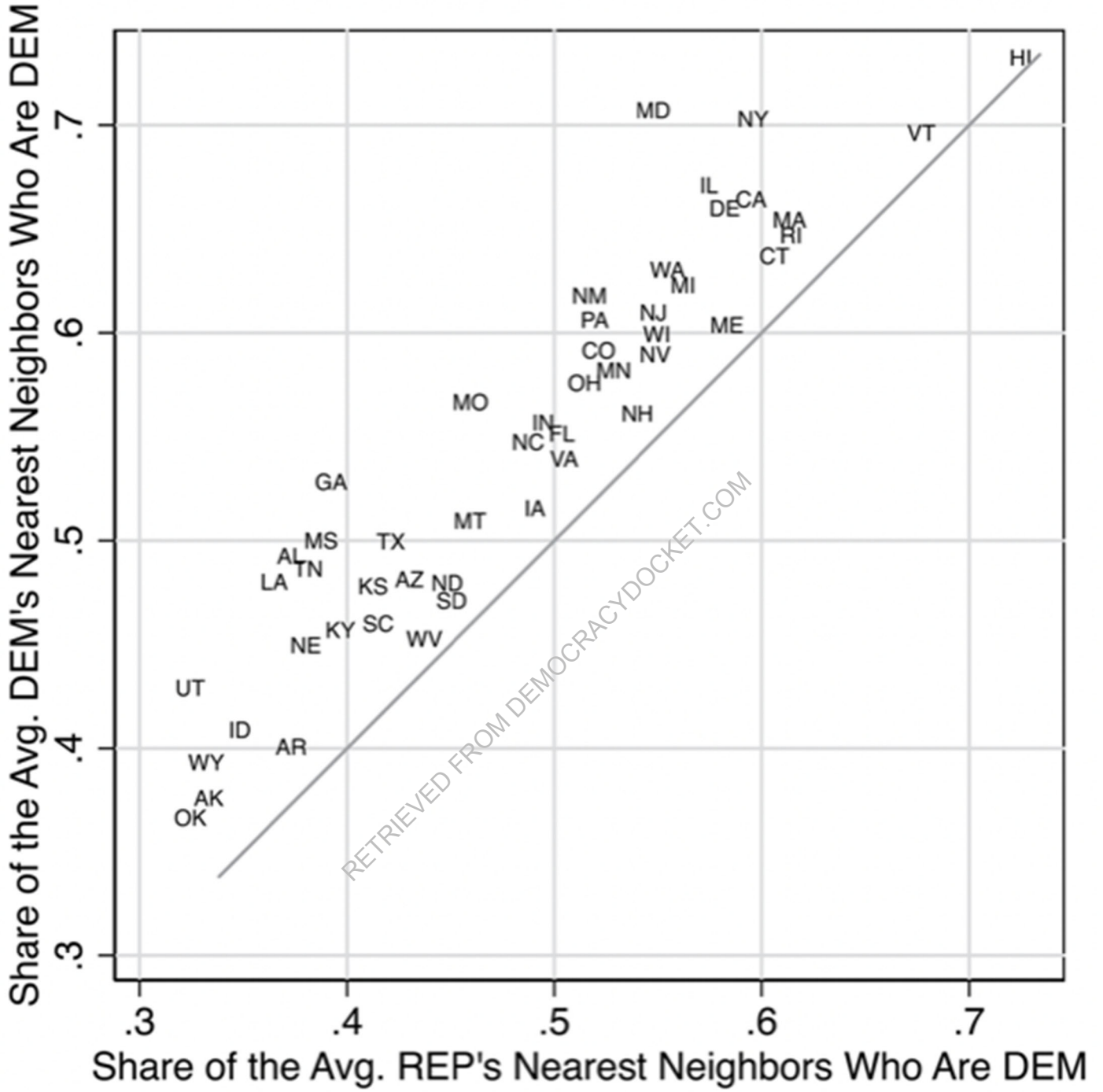


Figure 6.1: The Relative Geographic Concentration of Democrats

Source: p. 168, *Why Cities Lose*