IN THE TWENTY-NINTH JUDICIAL DISTRICT
WYANDOTTE COUNTY DISTRICT COURT
CIVIL DEPARTMENT

FAITH RIVERA, DIOSSELYN TOT-VELASQUEZ, KIMBERLY WEAVER, PARIS RAITE, DONNAVAN DILLON, and LOUD LIGHT,

Plaintiffs,

v.

SCOTT SCHWAB, in his official capacity as Kansas Secretary of State, and MICHAEL ABBOTT, in his official capacity as Election Commissioner of Wyandotte County, Kansas,

Defendants.

Case No. 2022-CV-000089

(Consolidated with 2022-CV-000090 and 2022-CV-000071)

TOM ALONZO, SHARON AL-UQDAH, AMY CARTER, CONNIE BROWN COLLINS, SHEYVETTE DINKENS, MELINDA LAVON, ANA MARCELA MALDONADO MORALES, LIZ MEITL, RICHARD NOBLES, ROSE SCHWAB, and ANNA WHITE,

Plaintiffs,

v.

SCOTT SCHWAB, Kansas Secretary of State and Kansas Chief Election Officer, in his official Capacity, and MICHAEL ABBOTT, Wyandotte County Election Commissioner, in his official capacity,

Defendants.

SUSAN FRICK, LAUREN SULLIVAN, DARRELL LEA, And SUSAN SPRING SCHIFFFELBEIN,

Plaintiffs,

v.

SCOTT SCHWAB, Kansas Secretary of State and Kansas Chief Election Officer, in his official Capacity, and JAMIE SHEW, Douglas County Clerk, in his official capacity,

Defendants.

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DECISION

In three consolidated lawsuits, the plaintiffs, whom are a number of concerned Kansas citizens, asked the court to decide if the Kansas Legislature has exceeded its constitutional authority in redistricting Kansas' four congressional districts by configuring the districts in a manner that results in a partisan (political) and/or racial gerrymander. The defendants retort no impermissible gerrymander has occurred. Moreover, if it has, the Legislature can redistrict in any manner it sees fit and the courts are powerless to stop its actions.

Perhaps it is first important to discover why the Kansas Courts are asked to enter this arena. We live in a time where advancing one point of view is more important than creating a functioning government that serves all its citizens. Truth has become amorphous to be shaped according to the speaker's perspective. Science has become more dependent upon who is supporting the research than on scientific method.

Eighteenth century French philosopher Montesquieu wrote: When a people have good morals the laws become simple.[1]

The song "Every Step of the Way," written by Michael Shrieve and sung by Steve Walsh, begins with:

> Well they called the flat plains Kansas a long, long time ago.
> When they'd seen the gates of glory and the fire down below
> The many great decisions of the people in this place
> You could tell the strength within them, you could see it in their face.

How strong are Kansans? Strong enough to expect nothing more than a level playing field devoid of partisan advantage for one group of Kansans. Strong enough for the merits of the issue

[1] Montesquieu: Book XIX. Of Laws in Relation to the Principles Which Form the General Spirit, Morals, and Customs of a Nation

to be the deciding factor. Strong enough to make their political decisions based upon the content of a candidate's character rather than the color of their political party.

This court suggests most Kansans would be appalled to know how the contest has been artificially engineered to give one segment of the political apparatus an unfair and unearned advantage.

What type of democracy do Kansans wish to live in? Let's first define democracy:

1) Government by the people, exercised either privately or through elected representatives.
2) A social condition of equality and respect for the individual within the community (the American Heritage Dictionary of the English Language)

Or perhaps as defined by President Lincoln in his ineffable Gettysburg address: "A government of the people, by the people and for the people…"

Kansans can choose a democracy that is:

Inclusive vs. Exclusive,

Listening vs. Silencing,

Deliberative vs. Dogmatic

What will they choose?

Riding along the Kansas highways with my family as a child, my father would often stop to help a stranded motorist. He did not pick and choose who merited assistance and if there was ever any hesitancy, one look from my mother removed all doubt. One day he even stopped on the way to my uncle's (his brother's) funeral. Not on this occasion, nor on any other, did he ever inquire about age, race, ethnicity, gender, or political affiliation. He simply listened attentively to the misfortunate driver and did his best to help them find a solution.

Is tolerance a weakness or strength? Are Kansans strong enough in their beliefs to be able to consider other points of view? To listen is not to agree. To acknowledge is not to adopt. To discuss does not require changing one's view. The exchange of perspectives may bring new or unknown evidence that leads to change, or it may simply lead to respectful discourse and disagreement. Do Kansans seek a homogeneous or a diverse state? Which makes Kansas stronger?

Can we teach our children the values we cherish and yet allow them to gain knowledge of other ways of thinking without worrying their choices may not align with ours? Can we teach our children how to reason and think, not what to think? If not, what is our concern, the weakness in our values or the strength of others' beliefs? Our children must be free to discuss any issues with us without fear of rejection, judgment or condemnation. If they are not, where will they go to look for answers to their questions? Should they choose a way different from our own, have we still not accomplished the most important of responsibilities by nurturing strong, independent, open-minded and thoughtful Kansans?

When our grandchildren rise to positions of power and reflect upon what we have done, let it be with pride and not embarrassment. May they never question "Of what were they so afraid?"

At my uncle's funeral, others may have wondered why my father's tie was askew, his shirt a little wrinkled, his hands scraped and soiled, yet I was never prouder to stand by him with his scraped hand around mine. Judgment without knowledge can be the most insidious and unconscionable form of discrimination. A little knowledge, compassion, and understanding can be powerful things.

The Buddha says the only consistent thing in the universe is change. One does not have to be a Buddhist to realize change is always taking place. There is certainly opportunity to disagree about change, as in its speed, its direction, and its impact. We must not be naïve enough to believe

change can be prevented by suppressing its voice. Is it better to consider change through the calm (sometimes), deliberative legislative debate our constitution requires or shall we wait for those whose voice has been suppressed to burst forth in frustration?

Courts in all cases are tasked in doing what is right. This case is not different. Alas, the rub becomes what is right. Let's define right as just. Once again trusting The American Heritage Dictionary:

2) Consistent with moral right, fair, equitable

3) Properly due or merited

4) Valid within the law legitimate

6) Sound, well founded

How does a court determine what is right? The foundation is built upon the constitutions of the United States and Kansas, statutes (as enacted by the legislature) and precedent (prior decided cases). Always the most important consideration, however, are all the unique facts of each case. Because facts change, the law must be flexible enough to be applied rationally to the case under consideration.

Courts do not always get it right. This court's decision will be reviewed by the Kansas Supreme Court and although this court strives to make the correct decision, the Kansas Supreme Court will have the final say. This court is less concerned with agreement (some will, some will not) and would rather inform Kansans how the decision was made.

The courts of Kansas are made of men and women who are to fairly and impartially apply the law to the facts and reach a just result. They are not or should not be Democrats or Republicans. They should be independent jurists, which most are. How fair and impartial often depends upon which side of the issue a person believes in. Some cases are easy in that most agree with the

outcome. Some are difficult in that many do not agree. Decisions are not right or wrong based upon public opinion but based upon applying the current law to the facts proven in court, and a thoughtful and intelligent analysis of these issues fairly and without bias. When this occurs a judge has done their job well no matter what the decision.

Additionally, do not confuse the attorneys with the issues. Attorneys are paid advocates who present their clients' points of view. They may be wholeheartedly in agreement with their clients' positions, but it is not a necessary requirement. Don't dislike the lawyers; dislike the issues. The court commends the attorneys on both sides of this case for their professionalism, cooperation and outstanding legal skills under extremely difficult circumstances.

Defendants named in this case are here because of their governmental positions. None were directly involved in the legislative redistricting process. They are not to be blamed or congratulated.

The Kansas Legislature is tasked constitutionally and is responsible for the redistricting process here at issue. The legislature is made up of hard working, decent Kansas men and women representing the citizens of Kansas and their political party and under ideal conditions, both.

Cases may be decided upon procedural issues. In this case, did the court have the inherent power to consider the issues and did plaintiffs properly plead or bring the issues to the court's attention? Here the district court has decided both of these requirements were met by all plaintiffs. It would be disingenuous not to note substantial disagreements exist in the legal community regarding justiciability of these types of cases. As noted, the Kansas Supreme Court will ultimately resolve these issues.

Cases meeting all procedural requirements will then be adjudicated upon the merits or the substance of the lawsuit. Which answers the question, are the plaintiffs entitled to the relief they have requested? Did they prove their case and does the court have the ability to do what they ask?

What follows is the court's decision regarding legislative redistricting (SB 355, Ad Astra 2). Whether it was performed in conformity with the Kansas Constitution or does it run afoul of those requirements by being an improper and unallowable partisan (political) or racial gerrymander?

Defendants asked the Court to ignore 40 years of precedent and somewhat disingenuously claim the guidelines the legislature appeared to use were not binding in any sense and so may be ignored.

In *O'Sullivan* (infra) the federal court in its sitting as a three judge panel (Logan Tenth Circuit Judge, Rogers and Kelly District Judges) applying guidelines similar to the current ones established the following considerations in redistricting:

1) Preserve county and municipal boundaries
2) Do not split the large minority population in Wyandotte County
3) Compact and continuous districts
4) The loadstar keeping communities of major common economic, social and cultural interests together. That required keeping Wyandotte and Johnson County together as a major socio-economic unit of the greater Kansas City area with the ties that bind them together economically, politically and culturally significantly greater than those that divide them.

Thirty years later in *Essex* (infra) again a federal court three judge panel (Briscoe Chief Judge Tenth Circuit, Vratil, Chief District Judge and Lungstrum, District Judge) again held:

1) Do not split Wyandotte County and divide its large minority population
2) Keep the major socio-economic unit of Wyandotte and Johnson County together
3) Keep Lawrence and Douglas County together.

For defendants to overcome the court's reasoning in both *O'Sullivan* and *Essex* they must show that reasoning was flawed, or conditions have changed to an extent the rationale no longer applies. Defendants have done neither. All they have shown is Wyandotte County and all of Johnson County cannot remain together, but they have not proven any change of socio-economic interest between Wyandotte County, Johnson County, and the surrounding metropolitan area. No proof of why Wyandotte County's large minority population should now be broken up nor any reason to separate Lawrence from Douglas County.

Defendants' rightfully question what is the applicable burden of proof that applies and what elements must be proven to appropriately adjudicate this case.

The court views the plaintiffs' claims as constitutional equal protection actions and finds guidance in *Farley v. Engelken,* 241 Kan. 663, 740 P.2d 1058 (Kan. 1987) pages 669-670, where three levels of scrutiny are established increasing with the importance of the right or interest involved and the sensitivity of the classification.

In level of scrutiny from least to most: 1) rational or reasonable basis test – act presumed constitutional plaintiffs' burden to show – classification is "irrelevant" to achievement of the state's goal, 2) heighten scrutiny – which requires the legislation to "substantially" foster a legitimate state purpose. There must be a greater justification and a direct relationship between the classification and the state's goal, 3) strict scrutiny – applicable in cases of suspect classification including voting (*Hill v. Stone,* 421 US 289, 44 L 2d 172, 95 S. Ct. 1637 reh. denied 422 US 1029

(1975). No presumption of validity burden of proof shifted to defendant. Classification must be "necessary to serve a compelling state interest" or it is unconstitutional. See also *Crowe by and thru Crowe v. Wigglesworth,* 623 F.Supp. 699 (D Kan. 1985) 702-703. 1) rational basis or reasonable relationship test, 2) substantial relationship or means – scrutiny test, and 3) strict scrutiny – same standards.

Plaintiffs argue strict scrutiny must apply here and the court acknowledges it is the proper standard to apply but notes the plaintiffs' evidence is so compelling applying any of the three above mentioned tests that plaintiffs would prevail whether the burden was plaintiffs or had shifted to the defendants. Justice Fatzer opinion in *Harris v. Shanahan,* 192 Kan. 183, 387 P.2d 771 (Kan. 1963) pages 206-207 says it well:

> There should be no misunderstanding as to the function of this court in the case at bar. It is sometimes said that courts assume a power to overrule or control the action of the people's elected representative in the legislature. That is a misconception. First, the duty of reapportionment is legislative in nature and is committed by the Constitution to the legislature, and courts cannot make a reapportionment themselves. Second, conforming to concepts inherent in American republican form of government, the Constitution of Kansas distributes the powers of government to three distinct and separate departments, i.e., the Executive, Legislature, and Judicial.
>
> The judiciary interprets, explains and applies the law to controversies concerning rights, wrongs, duties and obligations arising under the law and has imposed upon it the obligation of interpreting the Constitution and of safeguarding the basic rights reserved thereby to the people. In this sphere of responsibility courts have no power to overturn a law enacted by the legislature within constitutional limitations, even though the law may be unwise, impolitic or unjust. The remedy in such a case [192 Kan. 207] lies with the people. But when legislative action exceeds the boundaries of authority limited by our Constitution, and transgressed a sacred right guaranteed or reserved to a citizen, final decision as to invalidity of such action must rest exclusively with the courts. In the final analysis, this court is the sole arbiter of the question whether an act of the legislature is invalid under the Constitution of Kansas. (Quality Oil Co. v. E. I. Du Pont De Nemours & Co., 182 Kan. 488, 493, 322 P.2d 731) However delicate that duty may be, we are not at liberty to surrender, or to ignore, or to waive it.

As this is legislation regulating a fundamental right (voting), the burden of proof is defendants to show the legislative redistricting passes strict scrutiny. The elements are therefore self-evident, does Ad Astra2 present a compelling state interest justifying the redistricting as drawn.

Regarding the applicability of the guidelines, if the legislature wished to redistrict Kansas without guidelines although unadvisable and extremely unusual the court can find no authority they were required to have guidelines. What the legislature cannot do is announce they have guidelines, pretend to follow those guidelines and then proclaim they are not bound by them after the citizens of Kansas have relied upon the legislature's representations that these are the rules. Holding otherwise would make the whole process a meaningless ruse and destroy the citizens faith in their legislature.

FINDINGS OF FACT IN FRICK

A. Plaintiff Susan Frick is a resident of Douglas County and the City of Lawrence and is a registered Democratic voter. She intends to remain a resident of Douglas County and a Democratic voter for the foreseeable future, including the scheduled primary and general elections in 2002. She believes that her vote is diluted by Ad Astra 2. Declaration of Susan Frick, PX 192.

B. Plaintiff Lauren Sullivan is a resident of Douglas County and the City of Lawrence and is a registered Democratic voter. She intends to remain a resident of Douglas County and a Democratic voter for the foreseeable future, including the scheduled primary and general elections in 2002. She believes that her vote is diluted by Ad Astra 2. Testimony of Lauren Sullivan, April 6, 2022, vol. 1, p. 49 l. 2 – p. 51 l. 7 (hereinafter references to Ms. Sullivan's testimony will include page and line citations).

C. Plaintiff Susan Spring Schiffelbein is a resident of Douglas County and is a registered Democratic voter. She intends to remain a resident of Douglas County and a Democratic voter for the foreseeable future, including the scheduled primary and general elections in 2002. She believes that her vote is diluted by Ad Astra 2. Declaration of Susan Spring Schiffelbein, PX 193.

D. Plaintiff Darrell Lea is a resident of Douglas County and the City of Lawrence and is a registered Democratic voter. He intends to remain a resident of Douglas County and a Democratic voter for the foreseeable future, including the scheduled primary and general elections in 2002. He believes that his vote is diluted in by Ad Astra 2. Declaration of Darrell Lea, PX 759.

E. Defendant Jamie Shew is the County Clerk for Douglas County. In that capacity, he is the official primarily responsible for administering elections in Douglas County. Frick Petition, paragraph 19, and Defendant Shew's Answer, paragraph 19.

F. The Senate Redistricting Committee was chaired by Senator Rick Wilborn. The vice-chair of the Committee was Senate President Ty Masterson. The ranking member, representing the Democratic Party, was Senator Dinah Sykes. Senator Ethan Corson was the other Democratic member of the Committee. PX 194, page 3.

G. At no stop during the listening tours was there any testimony, for or against, the possibility of moving the City of Lawrence from the Second Congressional District to the First Congressional District. At no time during the Senate Redistricting Committee's discussions concerning redistricting was the possibility of moving the City of Lawrence from the Second District to the First District ever raised by any member. Testimony of Ethan Corson, p. 229 l. 21 – p. 231 l. 7.

H. The Legislature's Redistricting Committees adopted redistricting guidelines for the redistricting process in December, 2021. Legislative leadership expressed the intent that the Guidelines were intended to be followed and applied in the redistricting process. Petition, paragraph 24, and Answer, paragraph 24; PX 137; Testimony of Ethan Corson, p. 213 ll. 3-23.

I. At the Lawrence stop on the listening tour, Senator Marci Francisco, who as the Senator for District 2 represents much of Lawrence, came prepared to testify but the Republicans on the Redistricting Committees refused to allow her to testify. They told her that she would be able to testify before the Senate Redistricting Committee at its hearings later in the process. But when those hearings occurred much later in the process, she was not permitted to testify. Testimony of Ethan Corson, p. 216 l. 6 – 217 l. 11.

J. When asked by Senator Corson whether he had applied the Guidelines in drafting the Ad Astra map, Senator President Ty Masterson, who was also co-chair of the Senate Redistricting Committee, stated that he had applied the Guidelines as he "perceived them." The Court credits Senator Corson's testimony concerning the conversation, as Senator Masterson did not testify. Testimony of Ethan Corson, p. 257 l. 23 – p. 258 l. 9.

K. The results of the census showed that the Congressional districts in Kansas had the following populations before redistricting:

a. First District: 700,773

b. Second District: 713,007

c. Third District: 792, 286

d. Fourth District: 731,814

PX 138, Plan Comparison, Racial Composition and Hispanic Population, page 1.

L. As each of the Congressional Districts were required to have a population of 734,470, the population in each district had to be changed as follows:

a. First District: increase by 33,855

b. Second District: increase by 21,803

c. Third District: decrease by 58,334

d. Fourth District: increase by 2,676

Declaration of Michael Smith, PX 135, page 11.

M. Thus, a net total of 116,668 people, or 3.9% of the population of Kansas had to be moved to meet the population requirements. To meet that requirement, the Ad Astra 2 map moves 394,325 people, or 13.4% of the state population. In other words, Ad Astra 2 moves 337% more Kansans to different congressional districts than necessary to meet district population requirements. The number of counties and people moved to new congressional districts is credibly set forth in PX 139, a summary demonstrative exhibit offered by Plaintiffs. PX 139.

N. Finally, the Court finds as a matter of fact that the Legislature's adoption of the Ad Astra 2 map has a direct and substantial *effect* on voters in the City of Lawrence.

FINDINGS OF FACT RIVERA AND ALONZO

I. Ad Astra 2 was created in secret and pushed through the Legislature on party-line votes following departures from regular legislative processes.

1. Republicans won supermajorities in both chambers of the Kansas Legislature in the 2020 election, securing unilateral control over the decennial congressional redistricting process. They used this power to rush a congressional redistricting plan through the Legislature in an unprecedented departure from ordinary legislative process.

A. The "listening sessions" conducted by the House and Senate Redistricting Committees in 2021 were inconvenient, brief, and unheeded.

2. In August 2021, the House and Senate Redistricting Committees—both controlled by Republican majorities—conducted a "listening tour," purportedly to collect public input on the redistricting process. The evidence demonstrates, however, that this tour was neither intended nor designed to obtain public input.

3. The first issue is one of timing: The Committees announced the dates for the tour only a week in advance of its start and without consulting the Committees' Democratic members. Hr'g Tr. Day 1 Vol. 2 at 205:21-23, 206:21-207:18 (Corson); PX 194 at 4-6 (listing sessions); Hr'g Tr. Day 2 Vol. 1 at 8:14-19, 9:8-10 (Burroughs). Indeed, Senator Ethan Corson learned of the sessions only when they were announced to the public. Hr'g Tr. Day 1 Vol. 2 at 207:8-12 (Corson). Senator Corson testified that the Committees' short notice made it challenging for members of the public who wanted to attend the sessions to obtain time off work, secure childcare, and get up to speed on redistricting. Hr'g Tr. Day 1 Vol. 2 at 208:3-9, 209:4-8 (Corson); *see also* Hr'g Tr. Day 3 Vol. 1 at 56:18-20 (Sullivan). As Senator Corson explained, this late scheduling suggests that Republican Committee members did not intend the tour to be a meaningful exercise. Hr'g Tr. Day 1 Vol. 2 at 208:11-17 (Corson).

4. Issues of notice were compounded by the tour's schedule. Hr'g Tr. Day 1 Vol. 2 at 209:1-4, 209:11-19 (Corson). The 2012 tour took place over a period of four months; the 2022 tour made fourteen stops in just five days. Hr'g Tr. Day 1 Vol. 2 at 209:1-4 (Corson). And while sessions in 2012 were each two-and-a-half hours long, the August 2012 sessions each lasted only 75 minutes, and in densely populated areas like Johnson County individuals were only given two minutes to testify. Hr'g Tr. Day 1 Vol. 2 at 209:11-210:13 (Corson). As Senator Corson explained, two minutes is "not nearly enough time" for a member of the public "to adequately explain" their

views and is "at the far, far short end" of time allotments for witnesses at legislative hearings. Hr'g Tr. Day 1 Vol. 2 at 209:25-210:13, 267:3-14 (Corson).

5. In addition, the sessions were also scheduled largely at inconvenient times, with ten of the fourteen sessions taking place during working hours. Hr'g Tr. Day 1 Vol. 2 at 209:8-10 (Corson); PX 194 at 4-6 (listing sessions' dates and times). Community members were unable to attend the sessions for these reasons. Hr'g Tr. Day 3 Vol. 1 at 56:21-57:2 (Sullivan); Hr'g Tr. Day 1 Vol. 2 at 266:5-18 (Corson); PX 194 at 5 (showing Overland Park session scheduled for 1:45-3 PM on Thursday, August 12, when school was letting out).

6. Moreover, the tour was scheduled, and most tour stops were completed, *before* the census data governing the 2020 redistricting process became available. Hr'g Tr. Day 1 Vol. 2 at 210:22-24 (Corson); Hr'g Tr. Day 2 Vol. 1 at 9:14-15 (Burroughs). This was a serious obstacle to meaningful public input in the state's redistricting process. *E.g.*, Hr'g Tr. Day 1 Vol. 2 at 210:22-211:11 (Corson). By contrast, during the 2012 redistricting cycle, the Legislature conducted listening sessions *after* the release of census data. Hr'g Tr. Day 1 Vol. 2 at 210:18-21 (Corson). Senator Corson testified that without the census data it was impossible for the public provide relevant comments on the decisions the Committees would be called upon to make or to address the data points Republican legislators would later cite as justifications for those decisions once the data was released. Hr'g Tr. Day 1 Vol. 2 at 210:22-211:11 (Corson). As just one example, before the census data was released, the public could not have known that the combined populations of Johnson and Wyandotte Counties would be too large to fit in one congressional district. Hr'g Tr. Day 2 Vol. 1 at 9:20-23 (Burroughs). The choice not to wait a few weeks for the data to become available this cycle was never explained. Hr'g Tr. Day 1 Vol. 2 at 211:11-14, 214:7-12 (Corson).

7. Unlike the 2012 tour, the 2021 tour also took place before the Committees adopted any guidelines for the redistricting process, which also limited the public's ability to provide testimony on the topics that would be most helpful to the Committees. Hr'g Tr. Day 1 Vol. 2 at 212:21-213:23 (Corson). This choice has likewise never been explained. Hr'g Tr. Day 1 Vol. 2 at 214:7-12 (Corson).

8. Even when a member of public was able to overcome these hurdles, the Committees were indifferent to the testimony they heard. Representative Tom Burroughs and Senator Corson both indicated that the public testimony offered at the August hearings favored keeping the Kansas City metro area whole within a single congressional district. Representative Burroughs testified that a "large majority of the testimony" argued in favor of keeping "the Johnson County and Wyandotte County metropolitan area collectively together." Hr'g Tr. Day 2 Vol. 1 at 10:7-11 (Burroughs). Senator Corson agreed that the testimony in favor of "keeping the . . . urban suburban part of Wyandotte County in the same congressional district as the urban suburban part of Johnson County" was "overwhelming." Hr'g Tr. Day 1 Vol. 2 at 224:24-225:8 (Corson).

9. But the Republican legislators at the listening sessions were not attentive to this public feedback. Hr'g Tr. Day 1 Vol. 2 at 214:17-22 (Corson). In what Senator Corson described as "one of the more disrespectful acts [he had] ever seen from elected officials toward members of the public," Republican Committee members routinely "play[ed] on their phones right in front of" individuals offering testimony. Hr'g Tr. Day 1 Vol. 2 at 214:22-215:11 (Corson).

10. Senator Corson explained that Plaintiffs' Exhibit 751 shows Senate President Masterson, who ultimately introduced Ad Astra 2, and his Republican colleagues looking at their phones during a listening session in Overland Park, and that Senator Masterson did so "for almost the entire hearing." Hr'g Tr. Day 1 Vol. 2 at 215:12-216:4 (Corson).

11. The Committees' Republican majorities also limited opportunities for input by legislators during the August tour. Hr'g Tr. Day 1 Vol. 2 at 216:5-217:11 (Corson). After allowing a legislator to testify at a sparsely attended initial hearing, Republican Committee leadership chose to prohibit testimony by legislators at subsequent stops. Hr'g Tr. Day 1 Vol. 2 at 216:5-16 (Corson). Leadership justified this decision by indicating that legislators would have ample opportunity to discuss redistricting once the legislative session began in January—but "that opportunity just never materialized." Hr'g Tr. Day 1 Vol. 2 at 216:16-217:11 (Corson); *see also* PX 169 at 26:21-29:20 (discussing decision to limit legislator testimony).

12. After the August tour, the Committees conducted four virtual listening sessions on November 22 and November 30, 2021—shortly before and after the Thanksgiving holiday. PX

195 at 1-2 (listing dates); Hr'g Tr. Day 2 Vol. 1 at 10:12-14 (Burroughs). At the time, the Committees still had not adopted any guidelines governing redistricting. Hr'g Tr. Day 1 Vol. 2 at 213:3-9 (Corson). Representative Burroughs testified that the public testimony offered at these listening sessions did not meaningfully differ from that submitted in August. Hr'g Tr. Day 2 Vol. 1 at 10:20-23 (Burroughs).

13. On the whole, Senator Corson characterized the Committees' listening sessions as a "box-checking exercise," conducted to give the appearance of consistency with past practice after Republican legislators had in fact already decided to enact a gerrymandered congressional map. Hr'g Tr. Day 1 Vol. 2 at 217:24-218:5, 266:15-22 (Corson).[2]

B. The Legislature belatedly implemented guidelines to govern redistricting.

14. At their initial meetings on January 12, 2022, the Senate and House Redistricting Committees received presentations from the Legislature's staff on a set of Guidelines and Criteria for 2022 Congressional and State Legislative Redistricting ("Guidelines") that had been adopted by the bipartisan Legislature's Redistricting Advisory Group. Hr'g Tr. Day 2 Vol. 1 at 11:7-11 (Burroughs); PX 164 at 16:11-18:18 (Jan. 12, 2022 House Redistricting Committee Hearing); PX 165 at 4:23-7:7 (Jan. 12, 2022 Senate Redistricting Committee Hearing).

15. The Guidelines enumerated several traditional redistricting criteria and were substantively very similar to those used in the previous redistricting cycle; Senator Corson described the changes as "small stylistic tweaks." Hr'g Tr. Day 1 Vol. 2 at 249:11-12 (Corson); *see also* Hr'g Tr. Day 2 Vol. 1 at 11:12-17 (Burroughs). Several of Plaintiffs' experts explained

[2] The Court credits the testimony of Senator Corson and Representative Burroughs, both of whom credibly testified about the legislative process.

that the Guidelines were a "very typical list of traditional redistricting criteria." Hr'g Tr. Day 1 Vol. 2 at 17:10-17 (Rodden); *accord* Hr'g Tr. Day 1 Vol. 2 at 120:24-121:1 (Chen).

16. The Guidelines provided that:

> 1. The basis for congressional redistricting is the 2020 U.S. Decennial Census. The "building blocks" to be used for drawing district boundaries shall be Kansas counties and voting districts (VTDs) as described on the official 2020 Redistricting U.S. Census maps.
>
> 2. Districts are to be as nearly equal to 734,470 population as practicable.
>
> 3. Redistricting plans will have neither the purpose nor the effect of diluting minority voting strength.
>
> 4. Subject to guideline No. 2 above:
>
> a. Districts should be as compact as possible and contiguous.
>
> b. There should be recognition of communities of interest. Social, cultural, racial, ethnic, and economic interests common to the population of the area, which are probable subjects of legislation should be considered.
>
> c. The core of existing congressional districts should be preserved when considering the communities of interest to the extent possible.
>
> d. Whole counties should be in the same congressional district to the extent possible while still meeting guideline No. 2 above. County lines are meaningful in Kansas and Kansas counties historically have been significant political units. Many officials are elected on a countywide basis, and political parties have been organized in county units. Election of the Kansas members of Congress is a political process requiring political organizations which in Kansas are developed in county units. To a considerable degree most counties in Kansas are economic, social, and cultural units, or parts of a larger socioeconomic unit. These communities of interest should be considered during the creation of congressional districts.

PX 137 at 2 (Guidelines).

17. Representative Burroughs and Senator Corson testified that members of both the House and Senate treated the Guidelines as authoritative principles governing the redistricting

process. Hr'g Tr. Day 2 Vol. 1 at 11:7-21 (Burroughs); Hr'g Tr. Day 1 Vol. 2 at 256:21-257:6, 257:23-258:9 (Corson).

18. The House Redistricting Committee formally adopted the Guidelines at its January 12 meeting. Hr'g Tr. Day 2 Vol. 1 at 11:7-11 (Burroughs); PX 164 at 23:15-24:2 (Jan. 12, 2022 House Redistricting Committee Hearing). Representative Burroughs testified that he understood that legislators should follow the Guidelines, anticipated that legislators would do so, and never heard legislators from either side of the aisle suggest that the Guidelines could be disregarded. Hr'g Tr. Day 2 Vol. 1 at 11:12-21 (Burroughs). True to Representative Burroughs' understanding, House members from both parties subsequently discussed proposed maps, including Ad Astra 2, in terms of their compliance with the Guidelines. *E.g.*, PX 172 at 59:1-60:10, 97:16-97:10 (statements by Reps. Croft, Miller, and Probst during January 25 House floor debate).

19. Senators also treated the Guidelines as authoritative. Senator Corson testified that members of both parties sought to justify their proposed maps under the Guidelines; Senate President Masterson, for example, had a lengthy debate with Senator Corson in the Senate Redistricting Committee in which he asserted that the original Ad Astra map[3] complied with the Guidelines. Hr'g Tr. Day 1 Vol. 2 at 256:21-257:3, 257:23-258:9 (Corson); *see, e.g.*, PX 168 at 31:24-33:4, 36:21-37:16, 40:18-22 (Jan. 20, 2022 Senate Redistricting Committee Hearing). During floor debate on Ad Astra 2, Senators, including Senator Masterson, continued to discuss whether the plan complied with the Guidelines and sought to justify the map's features by reference to the Guidelines. *E.g.*, PX 169 at 52:10-21 (statement of Sen. Masterson during January

[3] As discussed below, *see infra* FOF § I.C, Ad Astra 2 revised the original Ad Astra map to avoid splitting the Kickapoo Tribe. The revision did not affect the map's treatment of Wyandotte County or Johnson County.

21, 2022 Senate floor debate). Senator Corson testified that no Senator ever suggested it was not necessary to follow the Guidelines. Hr'g Tr. Day 1 Vol. 2 at 257:23-258:9 (Corson).

C. Ad Astra 2 was rushed through the House and Senate on largely party-line votes, with no Democratic support.

20. The plan that became Ad Astra 2—then known simply as Ad Astra—was initially introduced in both the House and Senate Redistricting Committees on Tuesday, January 18. Hr'g Tr. Day 1 Vol. 2 at 220:14-19 (Corson); Tr. Day 2 Vol. 1 at 12:24-13:4 (Burroughs). Both Representative Burroughs and Senator Corson testified that they became aware of the bill on the same day it was introduced to the public. Hr'g Tr. Day 1 Vol. 2 at 220:8-13 (Corson); Hr'g Tr. Day 2 Vol. 1 at 13:2-4 (Burroughs).

21. Ad Astra 2's map-drawers remain a mystery; Republican sponsors of the map never publicly revealed who drew the plan, Hr'g Tr. Day 2 Vol. 1 at 13:5-6 (Burroughs), despite being asked for that information on multiple occasions during Committee proceedings, *see* PX 168 at 34:22-35:7 (transcript of January 20, 2022 Senate Redistricting Committee hearing); PX 171 at 12:23-13:10 (transcript of January 24, 2022 House Redistricting Committee hearing).

22. After its introduction, both the Senate and House Redistricting Committees set Ad Astra 2, alongside a small number of other proposed maps, for simultaneous hearings on Thursday, January 20—just two days after the maps' introduction. Hr'g Tr. Day 1 Vol. 2 at 220:17-221:3 (Corson); Hr'g Tr. Day 2 Vol. 1 at 13:18-25 (Burroughs); PX 166 at 16:1-4 (transcript of January 18, 2022 House Redistricting Committee hearing); PX 167 at 4:18-5:3 (transcript of January 18, 2022 Senate Redistricting Committee hearing).

23. The Senate Redistricting Committee required members of the public who wanted to testify regarding the plan to sign up to testify in person or submit written testimony by 10 a.m. on Wednesday, January 19—the day after the map's introduction and before the map's underlying

data was made publicly available. Hr'g Tr. Day 1 Vol. 2 at 220:19-221:2 (Corson). Moreover, the House and Senate Committees scheduled their respective public testimony periods for the same time, forcing potential witnesses to choose between the two proceedings or "bounc[e] between the two." Hr'g Tr. Day 2 Vol. 1 at 13:18-25 (Burroughs). Several members of the public objected to the rushed nature of the proceedings and difficulty of submitting testimony. *E.g.*, PX 168 at 22:16-23:1, 26:1-21 (transcript of January 20, 2022 Senate Redistricting Committee hearing).

24. Of the members of public who were able to overcome these hurdles to attend one or both hearings, Senator Corson testified that all but one testified in opposition to Ad Astra. Hr'g Tr. Day 1 Vol. 2 at 221:3-6 (Corson). Representative Burroughs agreed, offering that a "large majority" opposed the bill. Hr'g Tr. Day 2 Vol. 1 at 14:17-21 (Burroughs).

25. At the January 20 Senate Redistricting Committee hearing, several Senators, including Senator Corson, expressed deep concerns about the bill, particularly its likely impact on minority communities. Hr'g Tr. Day 1 Vol. 2 at 221:6-8 (Corson); *e.g.*, PX 168 at 31:24-38:18 (transcript of January 20, 2022 Senate Redistricting Committee hearing). Nevertheless, after adopting an amendment to address Ad Astra's splitting the Kickapoo Native American Tribe—and renaming the amended plan Ad Astra 2—the Senate Redistricting Committee voted the bill out of committee. Hr'g Tr. Day 1 Vol. 2 at 221:8-9 (Corson); *see* PX 168 at 99:14-101:10 (introducing and adopting amendment to Ad Astra 2). Senator Corson testified that it "is not common" for a bill to move so quickly out of committee. Hr'g Tr. Day 1 Vol. 2 at 221:8-9 (Corson).

26. The next day, January 21, Republican Senators rejected several proposed amendments to the plan introduced on the Senate floor. DX 1007-14 to -15. A number of Democratic members objected that Ad Astra 2 was a partisan gerrymander, would dilute the power

of minority votes, and had reached the floor through a rushed process. *E.g.*, PX 169 at 7:18-22, 8:5-10, 8:14-22, 8:24-9:1. 10:2-20, 19:21-20:11, 22:4-10, 22:23-25, 23:6-8, 23:16-25, 39:11-25, 46:18-47:3, 53:9-14, 65:5-66:21, 68:21-74:6, 106:21-107:2, 110:2-12 (transcript of January 21, 2022 Senate floor debate).

27. Despite these objections, the full Senate passed Ad Astra 2, after designating the bill an emergency measure, *see* DX 1007-11, on a largely party-line vote on Friday, January 21, Hr'g Tr. Day 1 Vol. 2 at 221:9-11 (Corson); DX 1007-11. Not one Democrat voted for the map. DX 1007-11.

28. A period of roughly 72 hours passed between the introduction of the map and its passage. Hr'g Tr. Day 1 Vol. 2 at 220:14-221:18 (Corson). Senator Corson testified that this timeline was "not at all typical"; the only bill he could recall moving with comparable speed was an emergency measure to help municipalities pay unexpectedly large heating bills during a cold snap in February 2021. Hr'g Tr. Day 1 Vol. 2 at 221:25-222:9 (Corson). Senator Corson further testified that he never received an explanation for why it was necessary to pass the plan so quickly. Hr'g Tr. Day 1 Vol. 2 at 223:1-13 (Corson).

29. The plan moved with similar speed in the House. Representative Burroughs testified that the measure was "greased to go" in committee: it was "quite clear" that "the bill was set to hit the floor in a very short amount of time." Hr'g Tr. Day 2 Vol. 1 at 17:14-24 (Burroughs). The bill passed the House Redistricting Committee on January 24, PX 171 at 48:17-49:3 (transcript of January 24, 2022, House Redistricting Committee hearing), and reached the House floor on January 25, *see generally* PX 172 (transcript of January 25, 2022, House floor debate).

30. The House considered several amendments to Ad Astra 2, including Mushroom Rock 2, a plan that like Ad Astra 2, would have kept Johnson County intact along with the eastern

part of Wyandotte County and most of Kansas City, Kansas. Hr'g Tr. Day 2 Vol. 1 at 18:4-16, 19:2-8. The House, including Republican leadership, rejected these amendments. Hr'g Tr. Day 2 Vol. 1 at 18:11-12, 19:7-10 (Burroughs).

31. During floor debate in both chambers, numerous representatives noted that the process by which Ad Astra 2 came to the floor was highly irregular, rushed, nontransparent, and unfair. *E.g.*, PX 172 at 14:14-15:11, 31:19-21, 54:13-22, 57:3-10, 121:5-13, 121:23-122:5; (House debate); PX 169 at 20:22-21:4, 21:24-23:25; 26:3-18; 27:12-28:22, 36:21-37:14, 128:4-129:9, 145:19-146:3 (Senate debate). Representatives also called attention to the fact that the map split known communities of interest, ignored public input, diluted minority votes, and constituted "textbook gerrymandering." *See, e.g.*, PX 172 at 16:6-9, 18:7-12, 19:10-18, 26:16-21, 27:19-28:11, 29:7-15, 30:8-14, 30:18-22, 32:2-10, 32:19-21, 33:19-19-34:2, 36:1-15, 37:8-18, 37:20-25, 38:4-14, 39:15-21, 45:10-15, 54:22-25, 55:2-10, 56:8-10, 89:14-18, 106:6-13 (House debate); PX 169 at 23:1-25:13, 26:3-18, 27:12-28:22, 46:16-47:6, 68:9-74:13, 75:8-78:9, 128:4-134:7, 141:2-19 (Senate debate).

32. In response to accusations that Ad Astra 2 was a partisan gerrymander and would dilute minority votes, *e.g.*, PX 172 at 27:19-28:24, 30:18-25, 34:12-13, 56:15-16 (transcript of January 25, 2022 House floor debate), Republican Representative Steve Huebert opined that redistricting "is a political process" and that "[g]errymandering" and "partisan politics . . are just things that happen. They always have and they always will." PX 172 at 20:10-21:8 (transcript of January 25, 2022 House floor debate).

33. Ad Astra 2 ultimately passed the House on a largely party-line vote on January 26. Hr'g Tr. Day 2 Vol. 1 at 20:212-17 (Burroughs); DX 1007-5. Not one Democrat voted for the map. DX 1007-5. Representative Burroughs described the schedule on which it passed as "quite . . .

compressed" and not consistent with the House's usual way of passing important legislation. Hr'g Tr. Day 2 Vol. 1 at 20:18-21:4 (Burroughs).

34. Both Representative Burroughs and Senator Corson testified that the enactment of Ad Astra 2 was highly partisan. Representative Burroughs stated that there was no attempt at bipartisanship or collaboration between the parties. Hr'g Tr. Day 2 Vol. 1 at 21:10-13 (Burroughs). Senator Corson similarly indicated that to the best of his knowledge, no Republican member ever reached out to Democratic members to work on congressional redistricting. Hr'g Tr. Day 1 Vol. 2 at 217:13-19 (Corson). No negotiations occurred between the parties; rather, it was "very clear" from the "very, very early days of the redistricting listening tour" that Republicans had already decided to draw a plan with four Republican districts. Hr'g Tr. Day 1 Vol. 2 at 217:20-218:5 (Corson).

35. On February 3, Governor Kelly vetoed Ad Astra 2, explaining:

> Senate Bill 355, known as Ad Astra 2, does not follow [the Legislature's] guidelines and provides no justification for deviation from those guidelines. Wyandotte County is carved into two separate congressional districts. Without explanation, this map shifts 46% of the Black population and 33% of the Hispanic population out of the third congressional district by dividing the Hispanic neighborhoods of Quindaro Bluffs, Bethel-Welborn, Strawberry Hill, Armourdale and others from Argentine, Turner and the rest of Kansas City, Kansas south of I-70. To replace lost population in the third district, this map adds in counties that are more rural to the south and west of the core of the Kansas City metropolitan area.
>
> Ad Astra 2 also separates the city of Lawrence from Douglas County and inserts urban precincts of Lawrence into the largely rural Big First Congressional District, reducing the strength of communities of interest in Western Kansas and unnecessarily dividing communities of interest in Eastern Kansas.
>
> Several alternatives would allow for the same deviation as Ad Astra 2 while protecting the core of the existing congressional districts and without diluting

> minority communities' voting strength. I am ready to work with the Legislature in a bipartisan fashion to pass a new congressional map that addresses the constitutional issues in Senate Bill 355. Together, we can come to a consensus and pass a compromise that empowers all people of Kansas.

Press Release, Office of the Governor, Governor Laura Kelly Vetoes Congressional Redistricting Map, Senate Bill 355 (Feb. 3, 2022), https://governor.kansas.gov/governor-laura-kelly-vetoes-congressional-redistricting-map-senate-bill-355; Hr'g Tr. Day 2 Vol. 1 at 21:5-6 (Burroughs).

D. Republican supermajorities overrode the Governor's veto on largely party-line votes.

36. On February 7, 2022, the Senate convened to seek to override Governor Kelly's veto. *See generally* PX 162 (recordings of February 7-8, 2022, Senate veto override sessions). The affirmative vote of 27 senators is necessary to override a veto. *See* Kan. Const. art. 2, § 14(a).

37. After failing to obtain the required 27 votes on the initial roll call, the Senate's Republican leadership instituted a call of the Senate, confining Senators to their seats for roughly two-and-a-half hours while holding the vote open. *See* PX 162 at 54:00-3:24:55 (recording of February 7, 2022, Senate veto override session). Leadership ultimately closed the vote without obtaining the necessary support, and the override failed by a 24-15 vote. DX 1007-4. No Democrat voted to override the veto. DX 1007-4. At the last moment, Senate President Masterson switched his vote to "no" as a procedural strategy which would allow him to re-open the vote the next day, and the Senate adjourned. PX 162.

38. The next day, on February 8, Senate President Masterson moved to reconsider the prior day's vote, and following that motion, the Senate voted to override the Governor's veto on a largely party-line vote. DX 1007-2, 1007-3. Again, not one Democrat voted to override the veto. DX 1007-2.

39. Senator Corson described the Senate override process as "thuggish." Hr'g Tr. Day 1 Vol. 2 at 231:20-22 (Corson); *see also* Hr'g Tr. Day 1 Vol. 2 at 253:21-25 (Corson) ("[O]bviously, the Republican super majority wanted to ram through this map very quickly."). On the chamber floor, Senator Dinah Sykes characterized the result of the Senate's second override vote as the product of "backroom deals," PX 760 at 7, and Senator David Haley commented that he "hope[d] whomever [sic] got . . . [senators] to change their mind[s] will get what it is they bargained for," PX 760 at 8.

40. The House voted to override the Governor's veto on February 9, also on a largely party-line vote, Hr'g Tr. Day 1 Vol. 2 at 231:20-22 (Burroughs); DX 1007-1, and again after a substantial delay as several Republican Representatives initially voted no before reversing course, *see* PX 174 at 18 (noting vote changes); PX 163 at 43:00-1:45:00 (recording of February 9, 2022 House veto override session) (showing hour-long delay from calling of override vote to conclusion of vote, during which Representatives were confined to their seats). Not one Democrat voted to override the veto. DX 1007-1.

II. Ad Astra 2 was designed intentionally and effectively to maximize Republican advantage in the state's congressional delegation.

41. Using distinct evidence and analyses, Plaintiffs' experts have each concluded that Ad Astra 2 intentionally and successfully gerrymanders Kansas's congressional districts to ensure that Republican candidates will likely win all four of the state's congressional seats. As set forth below, the Court credits and agrees with these conclusions.

A. Evidence presented by Dr. Jowei Chen demonstrates that Ad Astra 2 is an intentional, effective partisan gerrymander.

42. Plaintiffs' expert Dr. Jowei Chen, Ph.D., is a tenured Associate Professor in the Department of Political Science at the University of Michigan, Ann Arbor. PX 31 ¶ 2 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 114:18-21 (Chen).

43. Dr. Chen has extensive experience in redistricting matters. PX 31 ¶¶ 3-4 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 115:3-117:3 (Chen). Dr. Chen has published academic papers on legislative districting and political geography in several peer-reviewed political science journals, including the *American Journal of Political Science*, the *American Political Science Review*, and the *Election Law Journal*. PX 31 ¶¶ 3-4 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 116:16-19 (Chen). His academic areas of expertise include legislative elections, spatial statistics, geographic information systems (GIS) data, redistricting, racial politics, legislatures, and political geography. PX 31 ¶ 3 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 115:3-8 (Chen). He also has expertise in the use of computer simulations in legislative districting and in analyzing political geography, elections, and districting plans. PX 31 ¶ 3 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 115:3-8 (Chen).

44. Dr. Chen has presented expert testimony regarding his simulation methodology in numerous partisan gerrymandering lawsuits, and his analysis has been repeatedly credited and relied upon by the courts in these cases. PX 31 ¶ 4 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 116:20-117:3 (Chen); *see, e.g.*, *Harper v. Hall*, 868 S.E.2d 499, 515-16 (N.C.), *stay denied sub nom. Moore v. Harper*, 142 S. Ct. 1089 (2022); *Adams v. DeWine*, ___ N.E.3d ___, Nos. 2021-1428, 2021-1449, 2022 WL 129092, at *11-13 (Ohio Jan. 14, 2022); *League of Women Voters of Pa. v. Commonwealth*, 645 Pa. 1, 124, 178 A.3d 737 (2018) (finding "Dr. Chen's expert testimony" to be "[p]erhaps the most compelling evidence" in invalidating Pennsylvania's congressional plan as an unconstitutional partisan gerrymander); *Raleigh Wake Citizens Ass'n v. Wake Cnty. Bd. of*

Elections, 827 F.3d 333, 344 (4th Cir. 2016) ("The district court clearly and reversibly erred in rejecting Dr. Chen's expert testimony."); *League of Women Voters of Mich. v. Benson*, 373 F. Supp. 3d 867, 907 (E.D. Mich.) ("[T]he Court has determined that Dr. Chen's data and expert findings are reliable."), *vacated and remanded and other grounds*, 140 S. Ct. 429 (2019); *Common Cause v. Rucho*, 279 F. Supp. 3d 587, 666 (M.D.N.C.) ("Dr. Chen's simulation analyses not only evidence the General Assembly's discriminatory intent, but also provide evidence of the [challenged map's] discriminatory effects."), *vacated and remanded and other grounds*, 138 S. Ct. 2679 (2018); *City of Greensboro v. Guilford Cnty. Bd. of Elections*, 251 F. Supp. 3d 935, 943 (M.D.N.C. 2017) (relying upon the "computer simulations by Dr. Jowei Chen" to find impermissible partisan intent); *Common Cause v. Lewis*, No. 18 CVS 014001, 2019 WL 4569584, at *18 (N.C. Super. Ct. Sept. 3, 2019) ("The Court gives great weight to Dr. Chen's findings and, to the extent set forth below, adopts his conclusions.").

45. The Court accepts Dr. Chen in this case as an expert in redistricting, political geography, and redistricting simulation analysis.

46. Using his computer-simulation methodology, Dr. Chen analyzed whether Ad Astra 2 was a partisan outlier on both statewide and district-by-district bases. PX 31 ¶¶ 6, 51 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 117:17-118:23 (Chen). Dr. Chen also analyzed whether partisan intent predominated in the drawing of Ad Astra 2 and subordinated the traditional redistricting criteria reflected in the Guidelines, such as compactness and avoiding county and voting tabulations district ("VTD") splits. PX 31 ¶¶ 6, 9, 50 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 117:17-118:23 (Chen).

47. In his academic research on legislative districting, partisan and racial gerrymandering, and electoral bias, Dr. Chen has developed computer-simulation programming

techniques that allow him to produce a large number of nonpartisan redistricting plans that adhere to traditional redistricting criteria using U.S. Census geographies as building blocks. PX 31 ¶ 7 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 119:20-120:12 (Chen). Dr. Chen's simulation process ignores all partisan and racial considerations when drawing districts, in favor of various traditional districting goals, such as equalizing population, avoiding county and Voting Tabulation District (VTD) splits, and pursuing geographic compactness. PX 31 ¶ 7 (Chen Rep.). By comparing an enacted redistricting plan to these randomly generated plans that closely adhere to traditional redistricting criteria, Dr. Chen can assess whether partisan goals motivated a map-drawer to deviate from traditional districting criteria, and whether the enacted plan could be the product of something other than partisan considerations. PX 31 ¶ 7 (Chen Rep.).

48. In his simulation set in this case, Dr. Chen programmed the computer algorithm to create 1,000 independent simulated plans adhering to traditional redistricting criteria listed in the Guidelines: (1) population equality, (2) contiguity, (3) minimizing county splits, (4) minimizing VTD splits, and (5) prioritizing compactness where doing so would not violate an earlier criterion. PX 31 ¶¶ 8, 11 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 119:20-120:12, 120:18-121:1 (Chen); *see also* PX 137 at 2 (Guidelines). Dr. Chen also programmed the algorithm to preserve municipal boundaries where possible, because municipalities are considered communities of interest; preserving municipal boundaries is a traditional redistricting criterion followed around the country even where not explicitly considered; and, based on Dr. Chen's inspection of Ad Astra 2, the Legislature appeared to have tried to avoid splitting municipalities. PX 31 ¶¶ 8, 11 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 119:20-120:12, 121:2-21 (Chen). Dr. Chen has applied this same technique "many times" while serving as an expert witness in other cases. Hr'g Tr. Day 1 Vol. 2 at 116:20-23 (Chen).

49. The Court finds that Dr. Chen's computer algorithm properly reflected the Guidelines, as well as traditional redistricting principles. The Court further finds that Dr. Chen's interpretation and application of the Guidelines are fully consistent with the Guidelines' text. The Court further finds that Dr. Chen's application of these criteria is consistent with generally accepted redistricting principles and practice.

50. Based on his analysis, Dr. Chen concluded that partisan intent predominated over the Guidelines and traditional redistricting criteria in the drawing of Ad Astra 2 and is responsible for the Republican advantage in the enacted plan. PX 31 ¶¶ 50-52, 67-70 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 117:24-118:23 (Chen). Dr. Chen also found that the plan's Republican advantage was an extreme partisan statistical outlier on every level—statewide, regionally, and on a district-by-district basis—and by every measure analyzed—overall seat share, partisan vote-share ranges, and a widely-used quantitative measure of partisan bias. PX 31 ¶¶ 51-52, 55-58 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 117:24-118:23 (Chen).

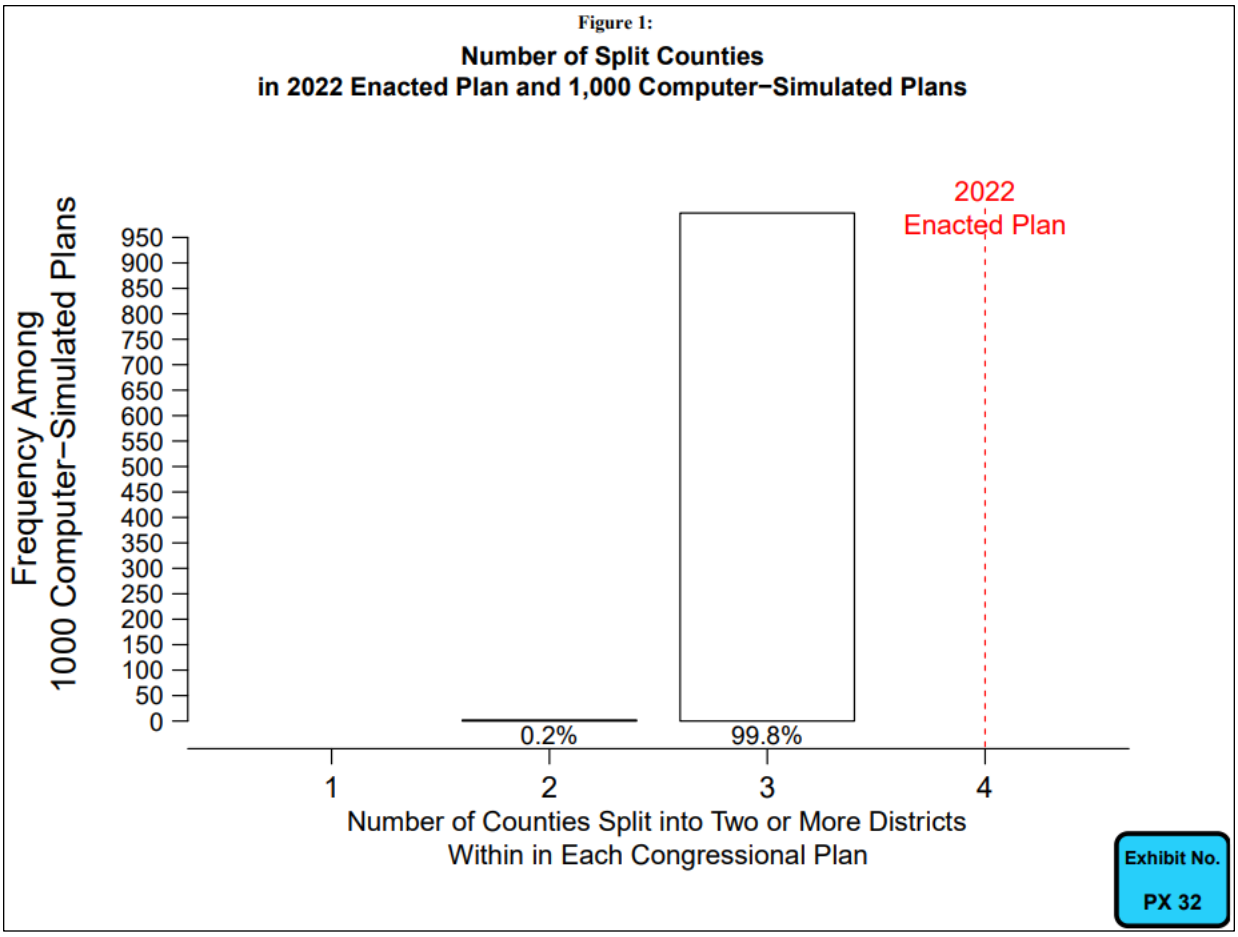
51. The Court credits Dr. Chen's findings, finds his analysis and testimony to be reliable, places great weight on his testimony, and adopts each of his conclusions. During Dr. Chen's live testimony, the Court carefully observed Dr. Chen's demeanor, particularly as he was cross-examined for the first time about his work on this case. He consistently defended his work with careful and deliberate explanations of the bases for his opinions.

Ad Astra 2 does not adhere to the Guidelines or to traditional redistricting principles.

52. Dr. Chen compared Ad Astra 2 to his 1,000 computer-simulated plans along a number of measures. *See* PX 31 ¶¶ 13-27 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 146:14-152:18 (Chen).

53. First, Dr. Chen compared the number of counties split by Ad Astra 2 and the simulated plans. Ad Astra 2 splits four counties, including both Douglas and Wyandotte. PX 31 ¶¶ 15-16 & tbl.1 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 147:7-8 (Chen). In Dr. Chen's simulations, no plan split more than three counties, while remaining compliant with the other traditional redistricting criteria incorporated in the algorithm. PX 31 ¶ 17 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 147:15-17 (Chen). Dr. Chen explained that the difference between three and four split counties is "significant": any congressional plan will necessarily divide only a small number of counties, and the extra county split under Ad Astra 2 means that the plan splits 33% more counties than is necessary. Hr'g Tr. Day 1 Vol. 2 at 147:18-148:10 (Chen). Dr. Chen further explained that even if the Legislature had a valid reason to split a particular county, doing so would not prevent it from drawing a map that splits a total of only three counties. Hr'g Tr. Day 1 Vol. 2 at 196:10-197:7 (Chen).

54. Figure 1 in Dr. Chen's report, also admitted as Plaintiffs' Exhibit 32, depicts how the number of counties split by Ad Astra 2 compares to the number of counties split under Dr. Chen's simulated plans:



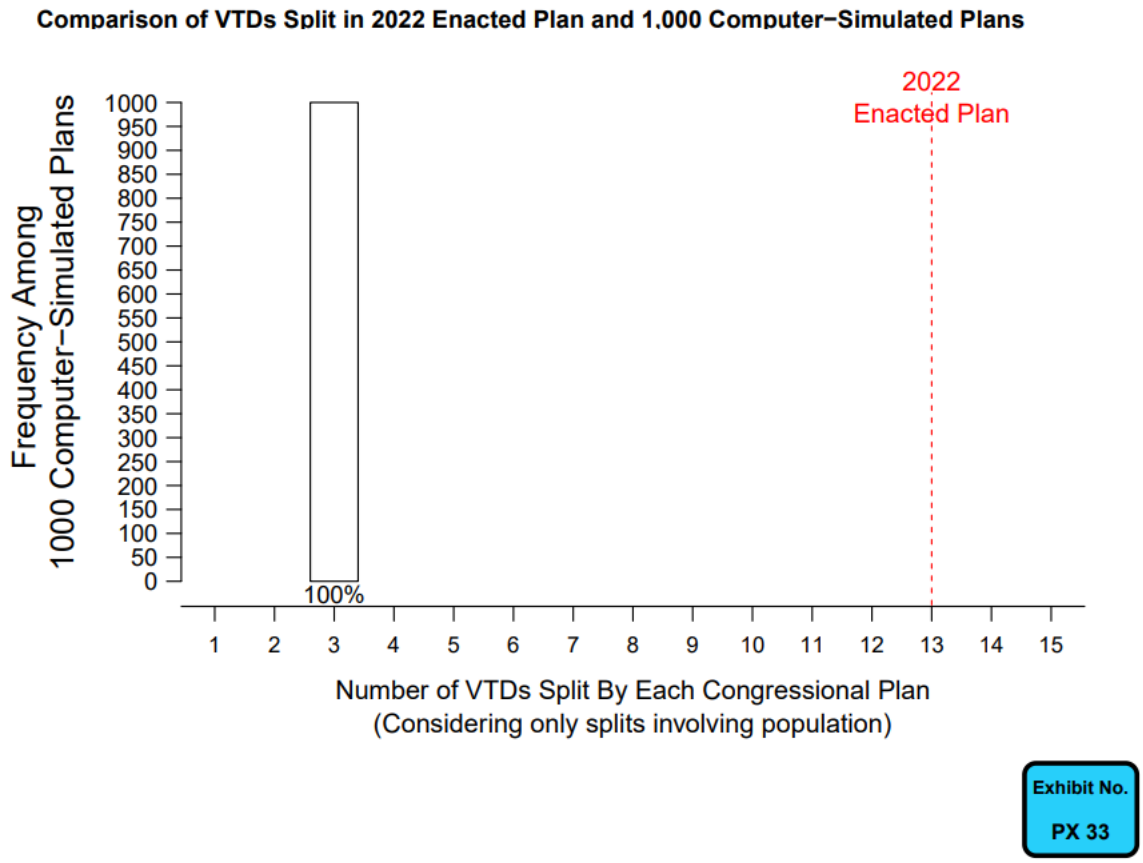
55. From this analysis, Dr. Chen concluded that the enacted congressional plan "clearly contains more county splits than one would expect from a map-drawing process prioritizing county boundaries," as called for by the Guidelines and traditional redistricting principles. PX 31 ¶ 17 (Chen Rep.); *see* Hr'g Tr. Day 1 Vol. 2 at 147:9-14 (Chen).

56. The Court finds that only three counties needed to be split to achieve a perfectly equally populated plan, and Ad Astra 2's four county splits is an outlier compared to simulated plans generated using traditional redistricting criteria. Defendants proffered that the fourth county was split to avoid splitting the Kickapoo Tribe—but did not explain why one of the other split counties was not then made whole. The Court finds that Ad Astra 2 splits more counties than necessary.

57. Second, Dr. Chen compared the number of VTDs split by Ad Astra 2 and the simulated plans. Dr. Chen found that while the simulated congressional plans split no more than three VTDs, Ad Astra 2 contains 19 VTD splits, including 13 VTD splits that divide the populated portions of the VTD into two different districts. PX 31 ¶¶ 18-19 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 148:11-25 (Chen). Seven of these VTD splits involving population occur in either Douglas County or Wyandotte County. PX 31 tbl.2 (Chen Rep.).

58. Figure 2 in Dr. Chen's report, also admitted as Plaintiffs' Exhibit 33, depicts how the number of populated VTDs split by Ad Astra 2 compares to the number of populated VTDs split under Dr. Chen's simulated plans:

Figure 2:



59. From this analysis, Dr. Chen concluded that Ad Astra 2 splits "far more [VTDs] than is necessary to draw equally populated districts and comply with other traditional districting criteria." PX 31 ¶ 20 (Chen Rep.); *see* Hr'g Tr. Day 1 Vol. 2 at 148:21-23 (Chen).

60. The Court finds that Ad Astra 2 fails to follow, and subordinates, the Guidelines' principle of avoiding the unnecessary splitting of VTDs by splitting far more VTDs than necessary.

61. Third, Dr. Chen compared the compactness of the districts in Ad Astra 2 to the compactness of the districts in each of his 1,000 simulated plans. To measure compactness, Dr. Chen analyzed the plans' average Reock and Polsby-Popper scores.[4] PX 31 ¶¶ 22-25 (Chen Rep.); *see* Hr'g Tr. Day 1 Vol. 2 at 149:5-150:2 (Chen). Dr. Chen explained that both measures are commonly used by redistricting practitioners, map-drawers, and scholars to measure compactness. Hr'g Tr. Day 1 Vol. 2 at 149:10-14 (Chen). For both measures, a higher score indicates that a plan's districts are more compact. PX 31 ¶¶ 24-25 (Chen Rep.).

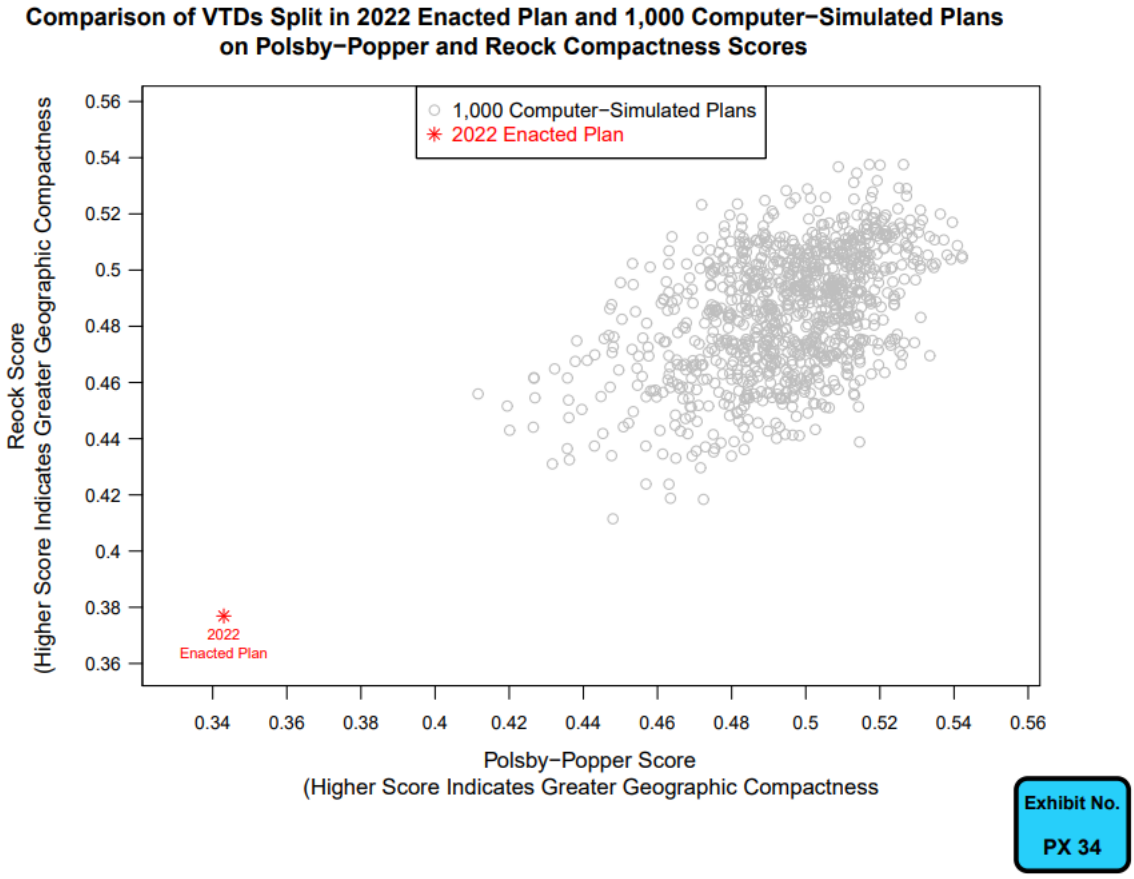
62. Dr. Chen found that using either metric, Ad Astra 2's districts are far less compact than the districts in all 1,000 simulated plans. Ad Astra 2 has an average Polsby-Popper score of 0.343; every simulated plan had a significantly higher average Polsby-Popper score, with a middle 50% range of 0.483 to 0.510 and a maximum score of 0.542. PX 31 ¶ 24 (Chen Rep.); *see* Hr'g Tr. Day 1 Vol. 2 at 149:14-23 (Chen). Similarly, Ad Astra 2 has an average Reock score of 0.377; every simulated plan had a significantly higher average Reock score, with a middle 50% range of

[4] Dr. Chen's report explained that the "Polsby-Popper score for each individual district is calculated as the ratio of the district's area to the area of a hypothetical circle whose circumference is identical to the length of the district's perimeter." PX 31 ¶ 24 (Chen Rep.). The "Reock score for each individual district is calculated as the ratio of the district's area to the area of the smallest bounding circle that can be drawn to completely contain the district." PX 31 ¶ 25 (Chen Rep.).

0.469 to 0.502 and a maximum score of 0.538. PX 31 ¶ 25 (Chen Rep.); *see* Hr'g Tr. Day 1 Vol. 2 at 149:14-23 (Chen).

63. Figure 3 in Dr. Chen's report, also admitted as Plaintiffs' Exhibit 34, depicts how Ad Astra 2's average Polsby-Popper and Reock scores compare to the average Polsby-Popper and Reock scores of each of the 1,000 simulated plans[5]:

Figure 3:



64. Dr. Chen testified that Ad Astra 2's average compactness scores are "just not even close to what's reasonably possible." Hr'g Tr. Day 1 Vol. 2 at 150:10-151:5 (Chen).

[5] Dr. Chen explained in his testimony that the title of Figure 3 contains a typo; it should refer to geographic compactness rather than to VTD splits. Hr'g Tr. Day 1 Vol. 2 at 150:3-9 (Chen).

65. From this analysis, Dr. Chen concluded that Ad Astra 2 "is significantly less compact . . . than what could reasonably have been expected from a districting process adhering to the compactness requirement in the . . . Guidelines." PX 31 ¶¶ 24-25 (Chen Rep.); *see* Hr'g Tr. Day 1 Vol. 2 at 149:14-150:2 (Chen).

66. The Court finds that Ad Astra 2 fails to follow, and subordinates, the Guidelines' principle of drawing compact districts. Ad Astra 2's districts are less compact than they would be under a map-drawing process that adhered to the Guidelines and prioritized the traditional districting criterion of compactness.

67. Finally, although Dr. Chen did not program the algorithm to consider core retention in drawing simulated plans, he determined that the simulated plans outperform Ad Astra 2 in retaining the cores of congressional districts from the 2012 plan. Hr'g Tr. Day 1 Vol. 2 at 194:8-196:4 (Chen); *see also* PX 137 at 2 (listing core retention as a consideration under the Guidelines). For example, 61% of the simulated plans did a better job of preserving the core of the Third District than did Ad Astra 2, as measured by the share of the population of the old district that remains together in a district under the new plan. Hr'g Tr. Day 1 Vol. 2 at 194:13-195:5, 198:22-199:10 (Chen).

68. From this analysis, Dr. Chen concluded that Ad Astra 2's pro-Republican partisan bias cannot be explained by an attempt to preserve the cores of the 2012 districts. Hr'g Tr. Day 1 Vol. 2 at 195:6-196:4 (Chen).

69. The Court finds that Ad Astra 2 fails to follow, and subordinates, the Guidelines' principle of preserving the cores of existing congressional districts. Ad Astra 2 does a worse job of retaining the cores of existing districts than would a plan produced by a map-drawing process

that adhered to the Guidelines and prioritized the traditional districting criterion of preserving the cores of existing districts.

Three of the four districts in Ad Astra 2 are extreme statistical partisan outliers.

70. To compare the partisanship of his simulated plans to the enacted congressional plan, Dr. Chen used census block-level election results from recent statewide elections in Kansas. PX 31 ¶¶ 28-33 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 121:25-123:20 (Chen). For his analysis, Dr. Chen uses every statewide general election for nonjudicial office from 2016 to 2020, which amounted to the following nine contests: 2016 U.S. President, 2016 U.S. Senator, 2018 Governor, 2018 Attorney General, 2018 Insurance Commissioner, 2018 Secretary of State, 2018 Treasurer, 2020 U.S. President, and 2020 U.S. Senator. PX 31 ¶ 31 (Chen Rep.); *see* Hr'g Tr. Day 1 Vol. 2 at 121:25-123:20 (Chen). Dr. Chen aggregated the results of these elections into a single composite, referred to as the "2016-2020 Statewide Election Composite." PX 31 ¶ 31 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 121:25-123:20 (Chen).

71. Dr. Chen explained that using statewide elections in this fashion is the established practice among practitioners, map-drawers, and academics when measuring the partisanship of new districts for several reasons. Hr'g Tr. Day 1 Vol. 2 at 125:3-13 (Chen). First, there are no congressional-level election results available for a new district. Hr'g Tr. Day 1 Vol. 2 at 101:20-102:4 (Chen). Second, past congressional races in old districts may have turned on idiosyncratic factors unique to that race or district that will not affect future races in the new district and that make comparisons across the entirety of a statewide plan difficult. PX 31 ¶ 29 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 125:21-126:19 (Chen). Statewide elections are not affected by unique district-based factors and provide a level statewide basis for comparing new districts' partisanship. PX 31 ¶ 29 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 125:21-126:19 (Chen). Third, statewide results are

"really strongly" correlated with underlying partisanship, including voting patterns in congressional elections. Hr'g Tr. Day 1 Vol. 2 at 125:14-125:21 (Chen); *see* PX 31 ¶ 28 (Chen Rep.). Fourth, Dr. Chen explained that statewide election results are also a more reliable indicator of district partisanship than are partisan voter registration counts, which may lag behind voters' actual preferences. PX 31 ¶¶ 28, 30 (Chen Rep.).

72. By overlaying the 2016-2020 Statewide Election Composite results onto Ad Astra 2, Dr. Chen calculated the Republican share of the votes cast from within each district in Ad Astra 2 and in each simulated plan. PX 31 ¶ 28 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 121:25-123:20 (Chen). Based on these calculations, Dr. Chen directly compared the partisanship of the enacted congressional plan and the simulated plans. PX 31 ¶ 28 (Chen Rep.). Dr. Chen used these comparisons to determine whether the partisanship of individual enacted districts and the partisan distribution of seats in the enacted congressional plan could reasonably have arisen from a nonpartisan redistricting process that adhered to the Guidelines and to traditional redistricting criteria. PX 31 ¶ 30 (Chen Rep.).

73. To measure the partisanship of his simulated districts and the enacted districts, Dr. Chen obtained precinct-level results for the nine elections in the 2016-2020 Statewide Election Composite and aggregated the census block-level results to the district level. PX 31 ¶ 32 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 122:19-123:20 (Chen). Using the census blocks that would comprise a particular district in a given simulation and the actual election results from those census blocks, Dr. Chen calculated the percentage total two-party votes in that simulated district for Republican candidates in the 2016-2020 statewide election contests. PX 31 ¶¶ 32-33 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 122:19-123:20 (Chen).

74. The Court finds that the use of statewide elections by Plaintiffs' experts to measure the partisanship of simulated and enacted districts is a reliable methodology. The Court further credits Dr. Chen's use of the nine elections comprising the 2016-2020 Statewide Election Composite.

75. Figure 5 in Dr. Chen's report, PX 36, compares the partisan distribution of districts in Ad Astra 2 to the partisan distribution of districts in the 1,000 computer-simulated plans:

Figure 5:

Comparisons of 2022 Enacted Plan Districts to 1,000 Computer−Simulated Plans' Districts

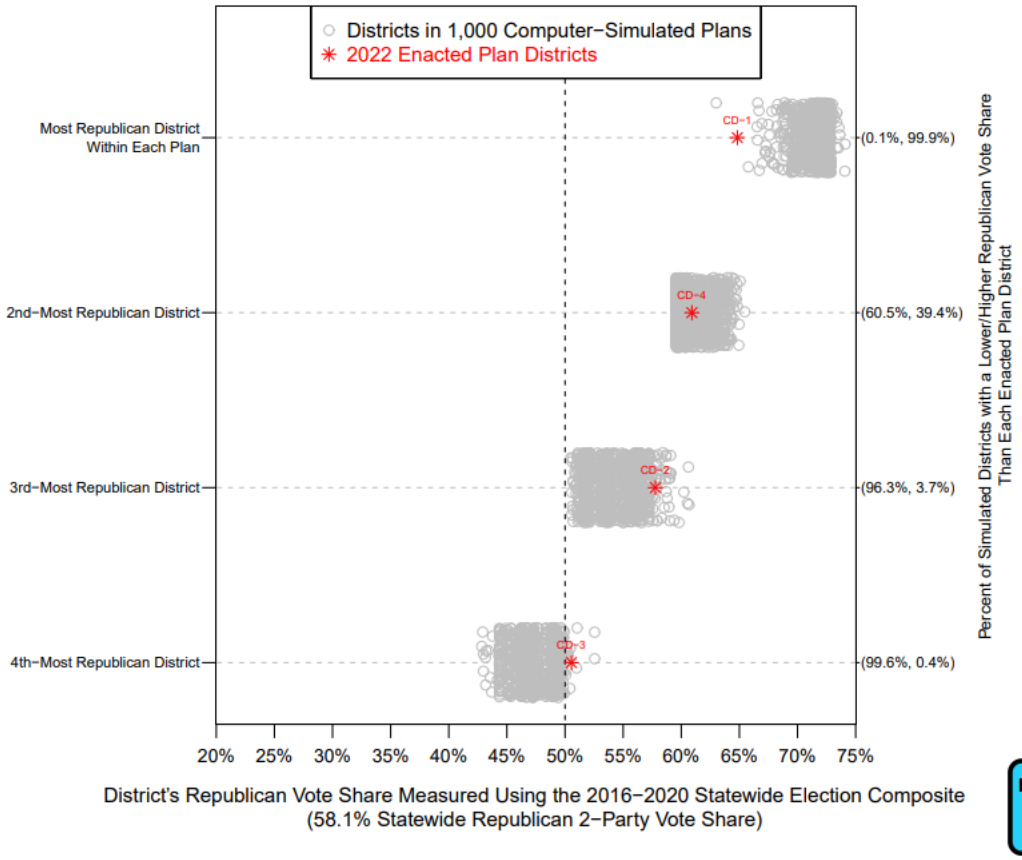


Exhibit No.
PX 36

76. To make this comparison, Dr. Chen first ordered Ad Astra 2's districts from most to least Republican, as measured by Republican vote share using the 2016-2020 Statewide Election Composite, with the most-Republican district in the top row, the second-most-Republican in the second row, and so on. PX 31 ¶ 35 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 127:2-128:10 (Chen).

The red stars mark enacted districts under Ad Astra 2 and are labeled with district numbers. PX 31 ¶ 35 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 127:2-128:10 (Chen). Next, Dr. Chen similarly ordered the districts in each simulated plan from most to least Republican and plotted each simulated district's partisanship in the corresponding row; thus, each gray dot represents a district from one of the 1,000 simulated plans. PX 31 ¶ 35 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 127:2-128:10 (Chen). Each row compares one district from Ad Astra 2 to 1,000 computer-simulated districts based on Republican vote share. PX 31 ¶ 35 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 127:2-128:10 (Chen). The two percentages in parentheses in the right margin of the Figure report the percentage of these 1,000 simulated districts that are less Republican than, and more Republican than, Ad Astra 2's district. PX 31 ¶ 36 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 127:2-128:10 (Chen).

77. As the bottom row of Figure 5 illustrates, the least-Republican (and therefore most-Democratic) district in Ad Astra 2, CD 3, is more heavily Republican than 99.6% of the least-Republican districts (i.e., the most-Democratic districts) in the 1,000 computer-simulated plans. PX 31 ¶ 37 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 128:11-130:4 (Chen). In fact, 98.8% of the simulated plans contained a Democratic-favoring district—that is, a least-Republican district with a Republican vote share of under 50%. PX 31 ¶ 37 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 128:11-130:4 (Chen). Dr. Chen therefore concluded that CD 3 is an extreme partisan outlier. PX 31 ¶ 38 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 129:25-130:4 (Chen).

78. He explained that to achieve this extreme result, Ad Astra 2 cracks Democratic voters to eliminate the Democratic-favoring district that appears in virtually all of the simulated plans. PX 31 ¶ 38 (Chen Rep.). Dr. Chen therefore concluded that CD 3 is an extreme partisan outlier that is more favorable to Republicans than 99.6% of simulated plans, using a standard 95%

threshold for statistical significance. PX 31 ¶ 38 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 129:25-130:4 (Chen).

79. Dr. Chen reached a similar conclusion with respect to the second-most-Democratic district in Ad Astra 2, CD 2, shown in the second-to-last row of Figure 5. PX 31 ¶ 39 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 130:12-131:7 (Chen). Dr. Chen found that CD 2 has a higher Republican vote share (57.8%) than 96.3% of corresponding districts in the 1,000 computer-simulated plans. PX 31 ¶ 39 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 130:12-131:7 (Chen). Thus, almost all such districts in the computer-simulated plans would be less Republican than the enacted plan's CD 2. PX 31 ¶ 39 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 130:12-131:7 (Chen).

80. Based on this analysis, and again using a standard 95% threshold for statistical significance, Dr. Chen concluded that CD 2 is an extreme partisan outlier that is more favorable to Republicans than the corresponding district in 96.3% of the simulated plans. PX 31 ¶ 39 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 131:1-7 (Chen).

81. Dr. Chen explained that since CDs 2 and 3 are more Republican than their simulated counterparts, some other district must be less Republican than its simulated counterparts. PX 31 ¶ 40 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 131:8-15 (Chen). Consistent with this hypothesis, Dr. Chen's analysis—and the top row of Figure 5—showed that CD 1, the most Republican district in Ad Astra 2, exhibits a lower Republican vote share (64.8%) than 99.9% of the most-Republican districts in the simulated plans, which reflected Republican vote shares of 68%-73%. PX 31 ¶ 41 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 131:17-132:6 (Chen). Dr. Chen explained that Ad Astra 2 achieves this result by moving heavily Democratic Lawrence into CD 1, causing CD 1 to have a Republican vote share significantly lower than 99.9% of the most-Republican districts in the simulated plans. PX 31 ¶ 41 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 131:17-132:6 (Chen). Dr. Chen

testified that this move enabled CD 1 to remain safely Republican while simultaneously allowing CDs 2 and 3 to achieve higher Republican vote shares than nearly all of their simulated counterparts. PX 31 ¶ 41 (Chen Rep.). Dr. Chen described this maneuver as "classic . . . cracking." Hr'g Tr. Day 1 Vol. 2 at 132:7-8 (Chen).

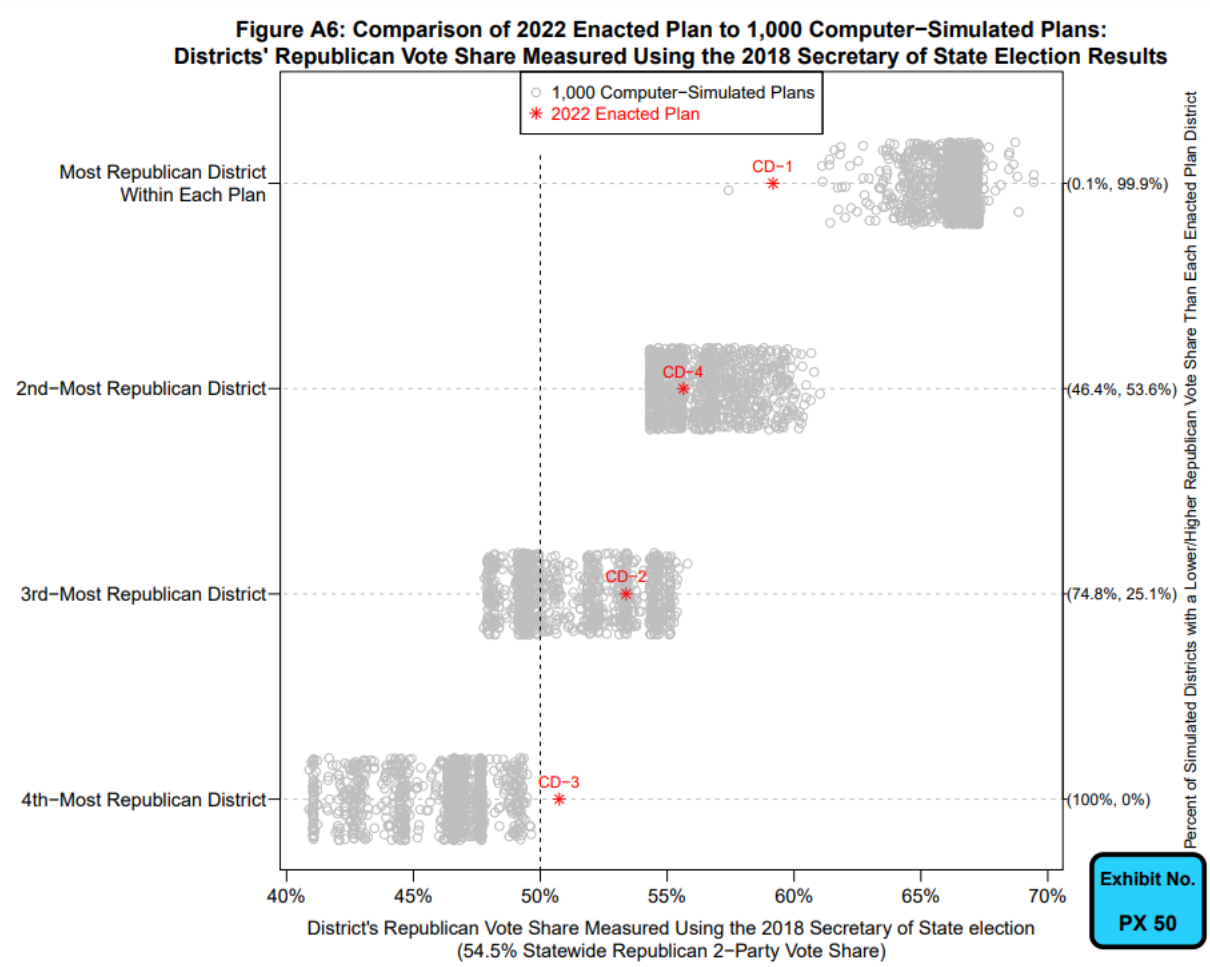
82. Based on this analysis, Dr. Chen concluded that CD 1 is also an extreme partisan outlier, again applying a standard 95% significance threshold. PX 31 ¶ 42 (Chen Rep.).

83. In total, Dr. Chen identified three of the four districts in Ad Astra 2 as extreme partisan outliers: CDs 2 and 3 exhibit higher Republican vote shares than nearly all their simulated counterparts, while CD 1 features a Republican vote share lower than 99.9% of its computer-simulated counterparts—but still sufficiently high to leave the district safely Republican. PX 31 ¶ 42 (Chen Rep.).

84. To examine whether the partisan compositions of Ad Astra 2's districts remain outliers under a variety of electoral conditions, Dr. Chen repeated this analysis nine separate times, using the results of each of the nine elections included in the 2016-2020 Statewide Election Composite. PX 31 ¶ 43 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 133:22-142:4 (Chen); *see* PX 45-53 (displaying results of separate analyses). Dr. Chen concluded that the same extreme partisan outlier patterns shown in Figure 5 in the 2016-2020 Statewide Election Composite are present when district partisanship is measured using any of the nine individual statewide elections,. PX 31 ¶ 43 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 141:2-142:4 (Chen); *see also* Hr'g Tr. Day 3 Vol. 2 at 65:14-66:1, 66:21-67:1 (Lockerbie) (agreeing that evidence that Ad Astra 2 is a partisan outlier under each individual election would "make [Dr. Chen's] argument stronger" and support Dr. Chen's conclusions).

85. For example, Dr. Chen repeated his analysis using the results of the 2018 Secretary of State election, rather than the 2016-2020 Statewide Election Composite, to measure district partisanship. Hr'g Tr. Day 1 Vol. 2 at 141:2-142:4 (Chen); *see* PX 50 (displaying results). The 2018 Secretary of State election resulted in a statewide Republican vote share of 54.5%, Hr'g Tr. Day 1 Vol. 2 at 134:18-21 (Chen); *see* PX 50, making the results slightly more favorable to the Democratic candidate than the overall composite, which features an average Republican vote share of 58.1%, PX 31 ¶ 44 (Chen Rep.).

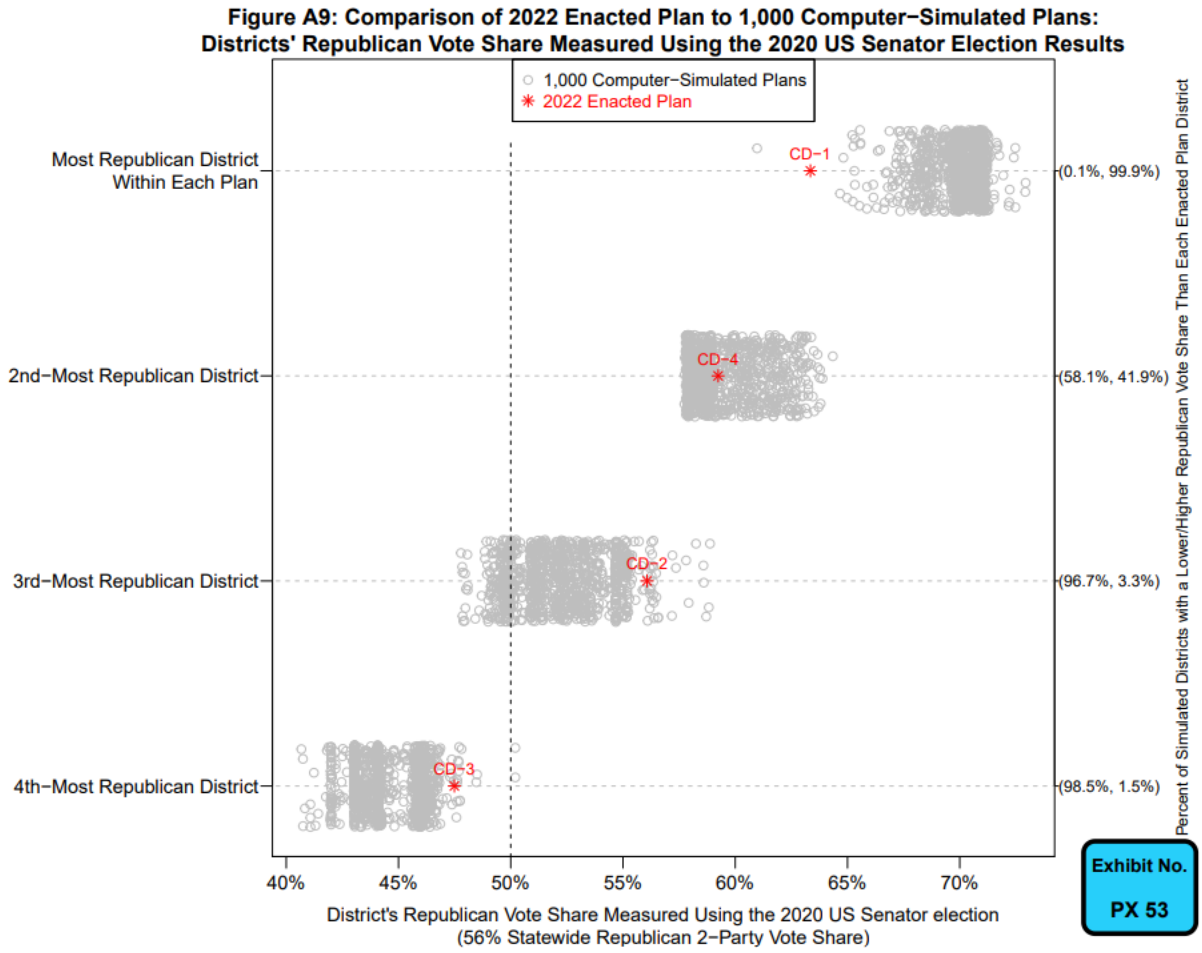
86. Figure A6 in the appendix to Dr. Chen's report, also admitted as Plaintiffs' Exhibit 50, compares the partisan distribution of districts in Ad Astra 2 to the partisan distribution of districts in the 1,000 computer-simulated plans, with partisanship measured using the results of the 2018 Secretary of State election:



87. Even in this relatively Democratic-favoring electoral environment, all four of the enacted congressional districts favor Republicans. Hr'g Tr. Day 1 Vol. 2 at 134:22-135:7 (Chen). Dr. Chen explained that this result indicates that Ad Astra 2 is a durable plan, under which Republicans would be favored to win each district under a range of electoral conditions. Hr'g Tr. Day 1 Vol. 2 at 135:8-13 (Chen). Dr. Chen further explained that comparing the enacted districts' partisan compositions to the partisan compositions of districts in the simulated plans showed that CDs 1, 2, and 3 in the enacted plan remain extreme partisan outliers when partisanship is calculated using the 2018 Secretary of State election rather than the multiyear composite. Hr'g Tr. Day 1 Vol. 2 at 135:14-136:17 (Chen). CD 3, for example, is more Republican-leaning than all of its simulated counterparts. Hr'g Tr. Day 1 Vol. 2 at 135:14-136:17 (Chen).

88. Dr. Chen further explained that the same patterns hold when partisanship is measured using the results of the 2020 U.S. Senate election. Hr'g Tr. Day 1 Vol. 2 at 136:18-140:17 (Chen); *see* PX 53 (displaying results).

89. Figure A9 in the appendix to Dr. Chen's report, also admitted as Plaintiffs' Exhibit 53, compares the partisan distribution of districts in Ad Astra 2 to the partisan distribution of districts in the 1,000 computer-simulated plans, with partisanship measured using the results of the 2020 U.S. Senate election:



90. Although under this relatively more Democratic-leaning electoral environment, in which the Republican won 56% of the vote, rather than 58.1% as under the composite, enacted CD 3 still exhibits a higher Republican vote share than the least-Republican district in 98.5% of

the simulated plans. Hr'g Tr. Day 1 Vol. 2 at 137:1-24 (Chen). Moreover, CDs 1 and 2 display the same partisan-outlier pattern as under the original analysis. Hr'g Tr. Day 1 Vol. 2 at 137:25-138:9, 139:7-140:17 (Chen); PX 53. In particular, CD 2 remains safely Republican despite the fact that the third-least-Republican district is more competitive—or even Democratic-favoring—in 96.7% of the simulated plans. Hr'g Tr. Day 1 Vol. 2 at 138:21-139:6 (Chen); PX 53. As Dr. Chen explained, no redistricting plan can guarantee that a party will win every seat in every electoral environment, but Ad Astra 2 makes each seat as invulnerable as possible for Republicans. Hr'g Tr. Day 1 Vol. 2 at 139:22-140:17 (Chen).

91. After examining Ad Astra 2 using both the 2016-2020 Statewide Election Composite and each of the nine elections contained in the composite individually, Dr. Chen did not find any electoral environment in which CD 3 was not an extreme partisan outlier. Hr'g Tr. Day 4 Vol. 1 at 119:11-15 (Chen).

92. Based on this analysis, Dr. Chen concluded that the same extreme partisan outlier patterns shown in Figure 5 are also present when district partisanship is measured using any of the nine individual statewide elections conducted from 2016 to 2020, rather than the 2016-2020 Statewide Election Composite. PX 31 ¶ 43 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 141:2-142:4 (Chen). Dr. Chen explained that this result shows that Ad Astra 2 is a durable gerrymander, in which CD 3, for example, is relatively more favorable for Republicans than its simulated counterparts would be across a range of electoral environments. Hr'g Tr. Day 1 Vol. 2 at 141:9-142:4 (Chen). In other words, Ad Astra 2 makes CD 3 as invulnerable as possible for Republicans. Hr'g Tr. Day 1 Vol. 2 at 141:9-142:4 (Chen).

93. Dr. Chen also analyzed the number of total Republican-favoring districts in Ad Astra 2, defined as districts having a Republican vote share of over 50%, as measured using the

2016-2020 Statewide Election Composite. PX 31 ¶ 41 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 132:21-133:21 (Chen). Figure 6 in Dr. Chen's report, also admitted as Plaintiffs' Exhibit 37, displays the distribution of Republican-favoring seats under Ad Astra 2 and under the 1,000 computer-simulated plans:

Figure 6:

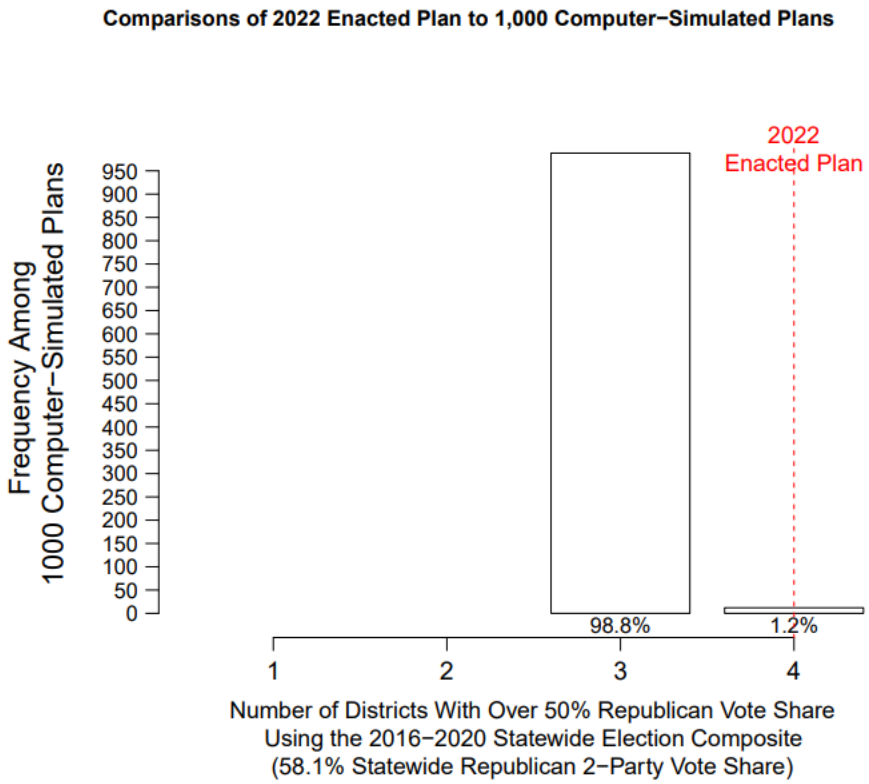


Exhibit No.
PX 37

94. All four districts in Ad Astra 2 favor Republicans, but only 1.2% of the simulated plans feature four Republican-favoring districts; 98.8% include at least one Democratic-favoring district. PX 31 ¶ 41 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 132:21-133:12 (Chen). Based on this analysis, Dr. Chen concluded that compared to the 1,000 simulated plans, Ad Astra 2 is an extreme pro-Republican statistical outlier, using a standard 95% significance threshold. PX 45, ¶ 41 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 133:13-21 (Chen).

95. In sum, the Court credits Dr. Chen's district-level partisanship analysis of Ad Astra 2. The Court finds Dr. Chen's district-level analysis of Ad Astra 2 to be powerful evidence that Ad Astra 2 is an intentional, effective partisan gerrymander. Moreover, Dr. Chen's analysis of Ad Astra 2 under various electoral outcomes is persuasive evidence that the enacted congressional plan was designed specifically to provide Republicans with the most advantageous congressional map possible. The Court further finds that the number of Republican-leaning districts would be lower, and the partisan compositions of CDs 1, 2, and 3 would be different, under a map-drawing process that adhered to the Guidelines and to traditional redistricting principles but did not include partisan considerations. The Court finds this to be persuasive evidence that Ad Astra 2 was intentionally designed to give Republicans a partisan advantage.

Ad Astra 2 is an extreme partisan statistical outlier as measured by the efficiency gap.

96. Dr. Chen next evaluated Ad Astra 2's partisan bias at the statewide level using the efficiency gap. PX 31 ¶¶ 46-49 & fig.7 (Chen Rep.). As Dr. Chen explained—and as another one of Plaintiffs' experts, Dr. Christopher Warshaw, further documented, *see infra* FOF § II.C—the efficiency gap is a well-established measure of a redistricting plan's partisan bias. PX 31 ¶ 46 (Chen Rep.). The efficiency gap measures the degree to which more Democratic or Republican votes are cast inefficiently across an entire redistricting plan. PX 31 ¶¶ 46-47 (Chen Rep.). The efficiency gap is calculated using the total sum of surplus votes in districts a party won and lost votes in districts where that party lost. PX 31 ¶ 46 (Chen Rep.). In a district lost by a given party, all of the party's votes are considered lost votes; in a district won by a party, only the party's votes exceeding the 50% threshold necessary for victory are considered surplus votes. PX 31 ¶ 46 (Chen Rep.). A party's total inefficiently cast votes for an entire districting plan is the sum of its surplus votes in districts won by the party and its lost votes in districts lost by the party. PX 31 ¶ 46 (Chen Rep.). The efficiency gap is then calculated as total inefficiently cast Democratic votes minus total

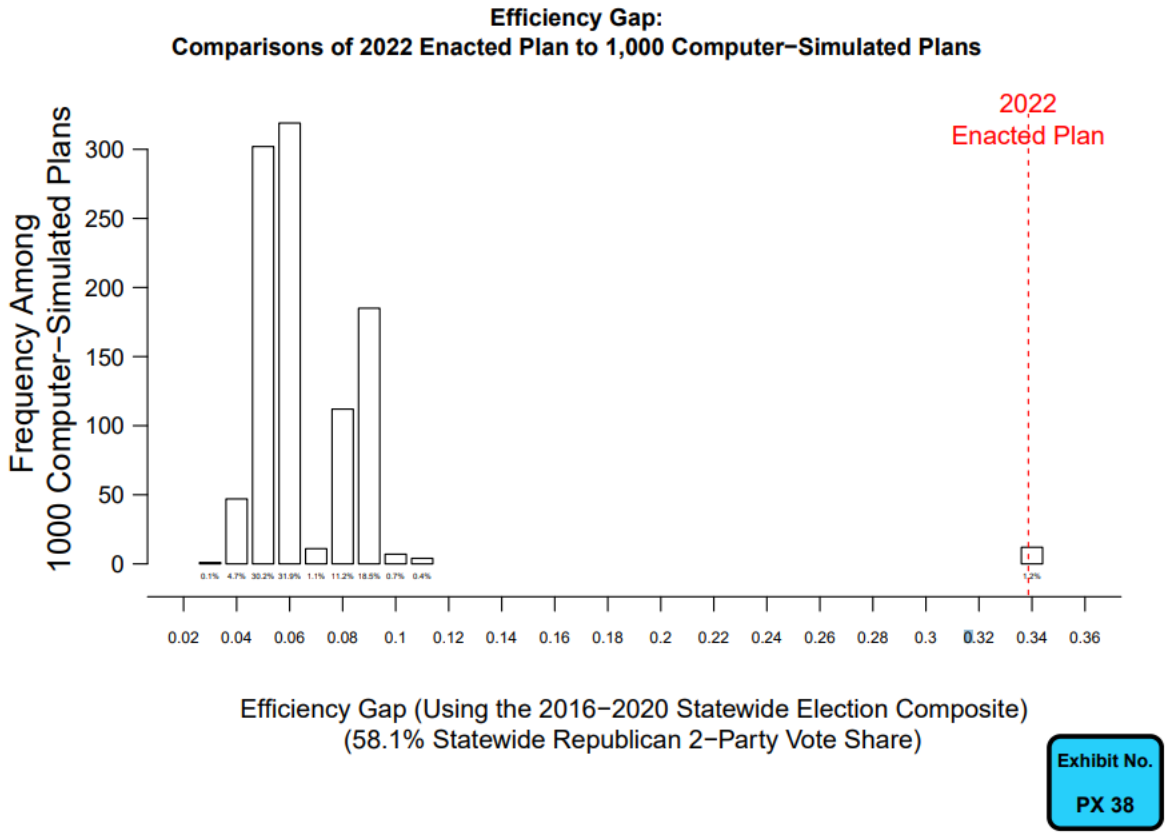
inefficiently cast Republican votes, divided by the total number of two-party votes cast statewide across all four congressional elections. PX 31 ¶ 46 (Chen Rep.). A positive efficiency gap indicates more inefficiently cast Democratic votes, while a negative efficiency gap indicates more inefficiently cast Republican votes.[6] PX 31 ¶ 47 (Chen Rep.).

97. Measuring district partisanship using the 2016-2020 Statewide Election Composite, Dr. Chen found that Ad Astra 2 exhibits an efficiency gap of 33.9%, indicating that the plan results in far more inefficiently cast Democratic votes than inefficiently cast Republican votes. PX 31 ¶ 49 (Chen Rep.). Dr. Chen compared Ad Astra 2's efficiency gap with the efficiency gaps of the computer-simulated plans and found that the enacted congressional plan's efficiency gap is larger than the efficiency gaps exhibited by 98.8% of the computer-simulated plans. PX 31 ¶ 49 (Chen Rep.). From this, Dr. Chen concluded that Ad Astra 2 creates an extreme pro-Republican partisan bias that cannot be explained by Kansas's political geography or by adherence to the Guidelines or traditional redistricting criteria. PX 31 ¶ 49 (Chen Rep.).

98. Figure 7 in Dr. Chen's report, also admitted as Plaintiffs' Exhibit 38, displays the distribution of efficiency gaps across the simulated maps and Ad Astra 2:

[6] The Court notes that another one of Plaintiffs' experts, Dr. Christopher Warshaw, used the opposite sign convention, with positive efficiency gaps indicating more inefficiently cast Republican votes. PX 105 at 5 (Warshaw Rep.). The choice of signs is a matter of convention and does not substantively affect the analysis.

Figure 7:



99. The Court credits Dr. Chen's analysis of Ad Astra 2's statewide partisan bias. The Court finds Dr. Chen's efficiency gap analysis to be persuasive evidence that Ad Astra 2 was designed to give Republicans a partisan advantage, and that the enacted plan exhibits extreme pro-Republican bias that cannot be explained by Kansas's political geography or by adherence to the Guidelines or traditional redistricting criteria. Nevertheless, the Court recognizes that the efficiency gap should be employed with caution in states with four districts. The Court nonetheless concludes that as explained below, *see infra* FOF § II.C, use of a multielection composite (as in Dr. Chen's analysis) allows the reliable use of the efficiency gap to measure partisan bias in Kansas, and further notes that the bulk of Dr. Chen's simulation analysis does not rely on the efficiency gap. The Court agrees with Dr. Chen's testimony, *see* Hr'g Tr. Day 4 Vol. 1 at 95:2-8

(Chen), that the evidence shows Ad Astra 2 is an extreme partisan outlier unexplainable by adherence to the Guidelines or other traditional districting criteria even without considering any evidence regarding the efficiency gap.

Ad Astra 2 is an extreme partisan statistical outlier at the municipal level.

100. In addition to the above district-level and statewide analyses, Dr. Chen also examined the extent to which partisan bias affected the map-drawing process around specific cities. PX 31 ¶¶ 53-58 & fig.8 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 142:5-146:13 (Chen). Dr. Chen found that Ad Astra 2's treatment of several cities exhibits extreme political bias when compared to computer-simulated districts in the same regions. PX 31 ¶¶ 53-58 & fig.8 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 142:5-146:13 (Chen).

101. To analyze Ad Astra 2's treatment of Kansas's ten most populous cities, Dr. Chen first identified the district in Ad Astra 2 that contains most of each city's population and computed that district's partisanship using the 2016-2020 Statewide Election Composite. PX 31 ¶ 54 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 142:5-143:7 (Chen). Dr. Chen then repeated this process for each of the 1,000 computer-simulated redistricting plans, first determining which simulated district within each plan contained the majority of the city's population, then computing that district's partisanship. PX 31 ¶ 54 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 143:8-144:8 (Chen). Dr. Chen then plotted the partisanship of the districts containing the majority of each city's population under Ad Astra 2 and each of the simulated redistricting plans in Figure 8 of his report, also admitted as Plaintiffs' Exhibit 39:

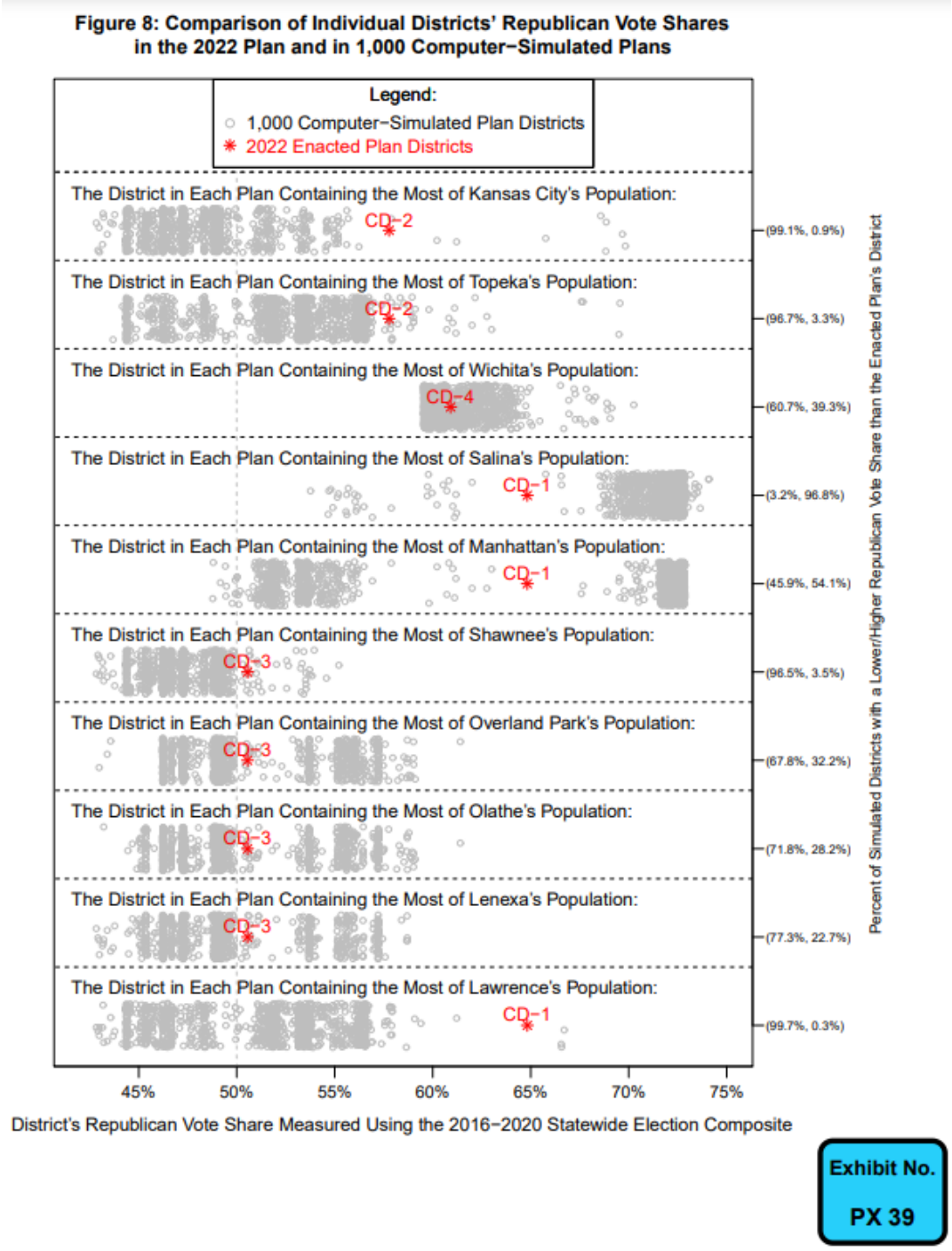


Exhibit No.
PX 39

102. The top row of Figure 8 displays the partisanship of the district in each plan that contains the majority of Kansas City's population. PX 31 ¶ 55 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 142:5-144:8 (Chen). Under Ad Astra 2, the majority of Kansas City's population lives in CD 2, which has a Republican vote share of 57.8%. PX 31 ¶ 55 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at

142:5-144:8 (Chen). This result is anomalous compared to the simulated plans' treatment of Kansas City: 99.1% of the simulated plans place the majority of Kansas City's population in a district with a lower Republican vote share, 97.6% place it into a district with a Republican vote share of under 55%, and 83.7% of simulated plans place the city into a Democratic-favoring district. PX 31 ¶ 55 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 143:17-144:8 (Chen).

103. Based on this analysis, Dr. Chen concluded that Ad Astra 2 is an extreme partisan outlier in its treatment of Kansas City. PX 31 ¶ 55 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 144:1-25 (Chen).

104. The second row of Figure 8 shows a similar pattern in Ad Astra 2's treatment of Topeka. Ad Astra 2 assigns the majority of Topeka's population to CD 2, which has a Republican vote share of 57.8%. PX 31 ¶ 56 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 145:3-14 (Chen). Again, this treatment is anomalous compared to the simulated plans' treatment of Topeka; 96.7% of the simulated maps assign the majority of Topeka's population to a district with a lower Republican vote share than Ad Astra 2's CD 2. PX 31 ¶ 56 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 145:3-14 (Chen).

105. Based on this analysis, Dr. Chen concluded that Ad Astra 2 is statistically anomalous in its treatment of Topeka and that Topeka's placement in a district with a Republican vote share of 57.8% cannot be explained by a map-drawing process that adhered to traditional redistricting criteria. PX 31 ¶ 56 (Chen Rep.).

106. The sixth row of Figure 8 shows the same pattern in Ad Astra 2's treatment of Shawnee. Ad Astra 2 assigns the majority of Shawnee's population to CD 3, a Republican-favoring district with a Republican vote share of 50.6%. PX 31 ¶ 56 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 145:15-19 (Chen). But 96.5% of the simulated plans place the majority of Shawnee's population

in districts with lower Republican vote shares than enacted CD 3, and 96.1% of simulated plans place Shawnee in a Democratic-favoring district. PX 31 ¶ 57 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 145:19-25 (Chen).

107. Based on this analysis, Dr. Chen concluded that Ad Astra 2 is statistically anomalous in its treatment of Shawnee and that Shawnee's placement in a Republican-favoring district cannot be explained by a map-drawing process that adhered to traditional redistricting criteria. PX 31 ¶ 56 (Chen Rep.).

108. Finally, the last row of Figure 8 displays the same pattern in Ad Astra 2's treatment of Lawrence. Ad Astra 2 assigns most of Lawrence to CD 1, which has a Republican vote share of 64.8%. PX 31 ¶ 58 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 146:1-7 (Chen). 99.7% of the simulated plans placed Lawrence in a more competitive district, and 36.2% of simulated plans place Lawrence in a Democratic-favoring district. PX 31 ¶ 57 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 146:7-13 (Chen).

109. Based on this analysis, Dr. Chen concluded that Ad Astra 2 is statistically anomalous in its treatment of Lawrence. PX 31 ¶ 58 (Chen Rep.). At trial, Dr. Chen testified that Ad Astra 2 is "a really, really extreme partisan outlier in how it treats Lawrence." Hr'g Tr. Day 1 Vol. 2 at 146:5-7 (Chen); *see* PX 31 ¶ 57 (Chen Rep.). Dr. Chen further concluded that this anomalous treatment cannot be explained by a map-drawing process that adhered to traditional redistricting criteria. PX 31 ¶ 56 (Chen Rep.).

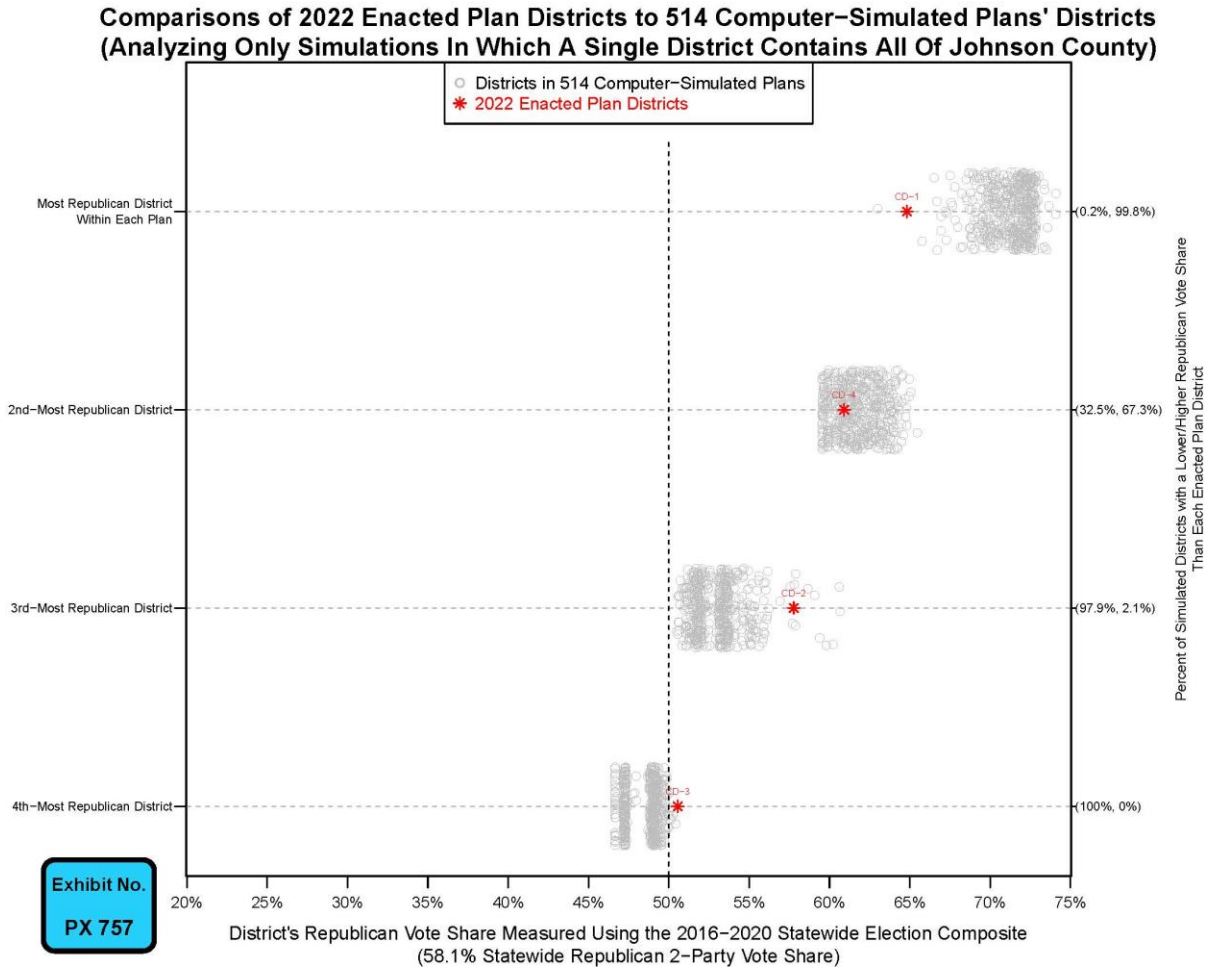
110. The Court credits Dr. Chen's analysis of the partisan bias reflected in Ad Astra 2's treatment of Kansas City, Topeka, Shawnee, and Lawrence. The Court finds that the partisan compositions of the enacted congressional districts containing these cities are extreme pro-Republican partisan outliers compared to the simulated districts produced using the Guidelines

and traditional redistricting principles. The Court further finds that the partisan compositions of the districts containing these cities would be different under a map-drawing process that adhered to the Guidelines and to traditional redistricting principles. The Court finds this to be persuasive evidence that Ad Astra 2 was intentionally designed to give Republicans a partisan advantage.

Ad Astra 2 remains an extreme partisan outlier compared to simulated plans that preserve Johnson County in a single district.

111. Dr. Chen also examined whether Ad Astra 2 is a partisan outlier when compared specifically to the subset of the 1,000 simulated plans that keep Johnson County intact within a single congressional district. Hr'g Tr. Day 4 Vol. 1 at 92:7-22 (Chen). Dr. Chen found that 514 of the 1,000 simulated plans do not divide Johnson County. Hr'g Tr. Day 4 Vol. 1 at 92:9-11 (Chen).

112. Plaintiffs' Exhibit 757 compares the partisan distribution of districts in Ad Astra 2 to the partisan distribution of districts in the 514 computer-simulated plans in which Johnson County falls within a single congressional district:



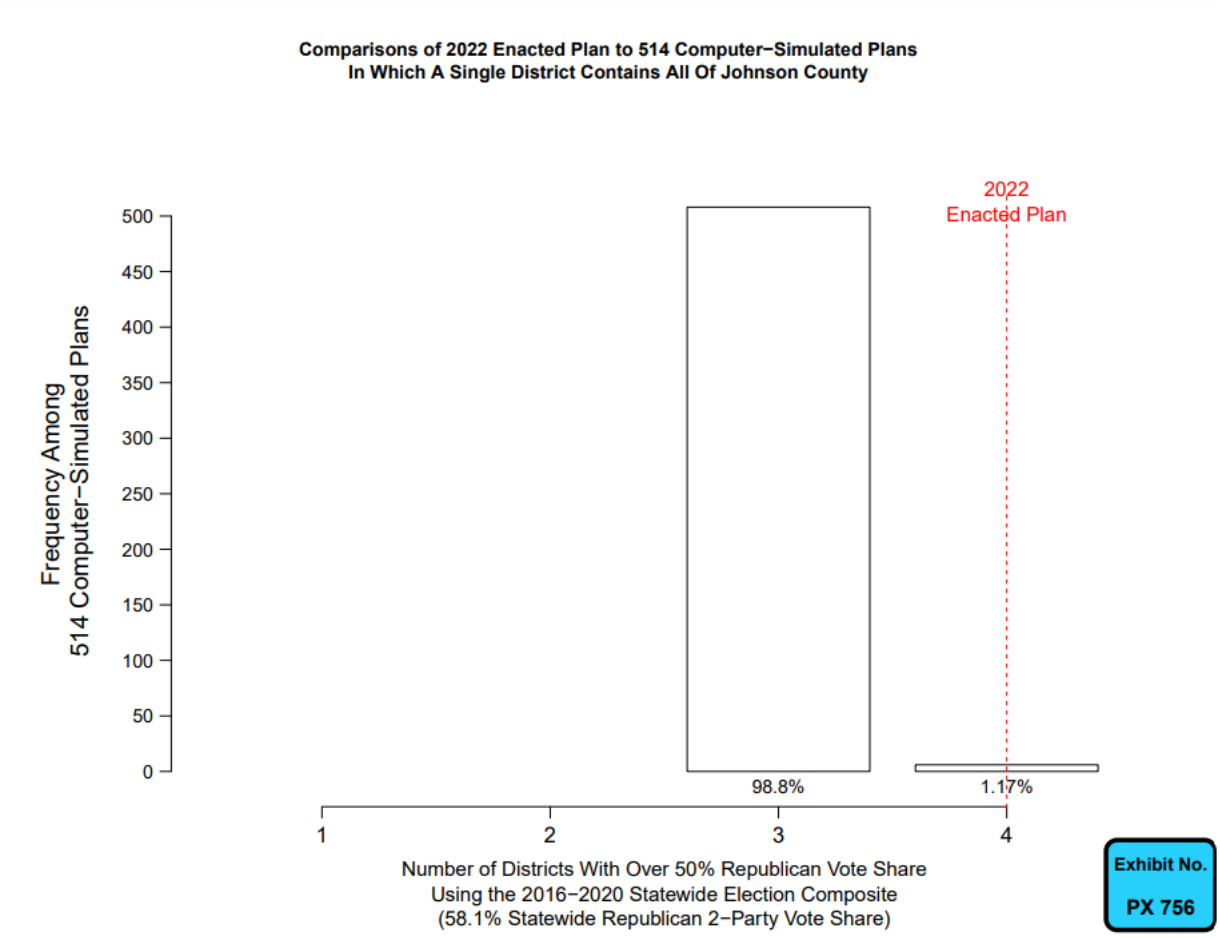
Hr'g Tr. Day 4 Vol. 1 at 92:5-22 (Chen).

113. Dr. Chen concluded that this chart showed the same pattern as his earlier analysis comparing Ad Astra 2 to the full set of 1,000 simulated plans: even compared only to plans that keep Johnson County intact, the enacted plan remains "an extreme partisan outlier." Hr'g Tr. Day 4 Vol. 1 at 99:15-25 (Chen).

114. Dr. Chen explained that CD 3 "is still an extreme partisan outlier" compared to the most Democratic districts in these 514 simulated plans. Hr'g Tr. Day 4 Vol. 1 at 93:17-22 (Chen). The most Democratic districts in the 514 simulated plans are almost all Democratic leaning or safely Democratic, with Republican vote shares primarily between 46% and 49%. Hr'g Tr. Day 4 Vol. 1 at 94:8-14 (Chen). Enacted CD 3, with a Republican vote share of 50.5%, is more favorable to Republicans than *every one* of the 514 simulated plans' most Democratic districts. Hr'g Tr. Day 4 Vol. 1 at 94:16-95:1 (Chen).

115. Dr. Chen further testified that comparing enacted CD 1 to the simulated plans' most-Republican districts also revealed the same patterns observed using the full set of 1,000 simulations: enacted CD 1 has a lower Republican vote share than 99.8% of the most-Republican districts in the 514 simulated plans that kept Johnson County whole. Hr'g Tr. Day 4 Vol. 1 at 95:9-96:8 (Chen). Indeed, the simulated plans' most-Republican districts usually have Republican vote shares of roughly 70%, with some as high as 72% or 73%, while enacted CD 1 has a Republican vote share of only roughly 65%. Hr'g Tr. Day 4 Vol. 1 at 96:23-97:1, 97:15-18 (Chen). Dr. Chen concluded that enacted CD 1 "was intentionally drawn to intentionally remove Republicans," compared to a redistricting process that complied with traditional districting principles while seeking to keep Johnson County whole. Hr'g Tr. Day 4 Vol. 1 at 96:9-14 (Chen). Dr. Chen explained that removing Republican voters from CD 1—a safe Republican district, even after those voters' removal—allowed "those Republican voters [to] . . . be used in other districts to increase the Republican vote share of closer districts" like CDs 2 and 3. Hr'g Tr. Day 4 Vol. 1 at 97:15-98:2 (Chen).

116. Plaintiffs' Exhibit 756 displays the distribution of Republican-favoring seats under Ad Astra 2 and under the 514 computer-simulated plans that keep Johnson County whole within a single district:



Hr'g Tr. Day 4 Vol. 1 at 98:3-22 (Chen).

117. From this analysis, Dr. Chen concluded that Ad Astra 2 remains an extreme partisan outlier at both the district and statewide levels, compared to a redistricting process that follows traditional criteria *and* keeps Johnson County whole. Hr'g Tr. Day 4 Vol. 1 at 99:15-25 (Chen). Dr. Chen concluded that a hypothetical intent by the Legislature to keep Johnson County whole in a single district could not explain the partisan bias in the map. The Court credits Dr. Chen's analysis and conclusion and finds that a desire to keep Johnson County whole cannot explain Ad

Astra 2's partisan bias. The Court finds these facts to be persuasive evidence that even if Republican lawmakers created the map from the starting point of keeping Johnson County whole, Ad Astra 2 was still intentionally designed to give Republicans a partisan advantage, and the desire to keep Johnson County whole does not explain the partisan bias inherent in the map. The Court concludes that the argument that Ad Astra 2 is the product of a desire to keep Johnson County whole is a post hoc rationalization.

Kansas's political geography does not explain Ad Astra 2's partisan bias.

118. Dr. Chen testified that Ad Astra 2's partisan bias cannot be explained by Kansas's political geography. PX 31 ¶ 70 (Chen Rep.); Hr'g Tr. Day 1 Vol. 2 at 118:19-23, 151:18-20 (Chen). Dr. Chen programmed a computer algorithm that drew simulated plans using Kansas's unique political geography. PX 31 ¶ 68 (Chen Rep.) As Dr. Chen, explained "the entire premise of conducting districting simulations is to fully account for Kansas' unique political geography and its political subdivision boundaries and to analyze how the state's political geography affects electoral bias in congressional districting." PX 31 ¶ 68 (Chen Rep.). Thus, the simulation analysis allowed Dr. Chen to identify how much of the electoral bias in the enacted congressional plan is caused by Kansas's political geography and how much is caused by the map-drawer's intentional efforts to favor one political party over the other. PX 31 ¶ 69 (Chen Rep.). Dr. Chen concluded that the enacted congressional plan's partisan bias goes beyond any "natural" level of electoral bias caused by Kansas's political geography or the political composition of the state's voters. PX 31 ¶ 70 (Chen Rep.). The Court credits this analysis and adopts this conclusion. The Court further adopts Dr. Chen's conclusion that this extreme, additional level of partisan bias in the enacted congressional plan can be directly attributed to the map-drawer's intentional efforts to favor the Republican Party. PX 31 ¶ 70 (Chen Rep.).

119. Finally, as discussed in more detail below, *see infra* FOF § IV.A, the Court finds that Defendants offered no meaningful evidence to rebut Dr. Chen's analysis. The Court therefore credits Dr. Chen's analysis in its entirety and finds that it offers persuasive evidence that Ad Astra 2 was designed intentionally and effectively to maximize Republican advantage in Kansas's congressional delegation.

B. Evidence presented by Dr. Jonathan Rodden demonstrates that Ad Astra 2 is an intentional, effective partisan gerrymander.

120. Dr. Jonathan Rodden is a tenured professor of political science at Stanford University and the founder and director of the Stanford Spatial Social Science Lab—a center for research and teaching that focuses on the analysis of geo-spatial data in the social sciences. PX 1 at 3 (Rodden Rep.). His research focuses on political geography and redistricting. Hr'g Tr. Day 1 Vol. 2 at 10:14-18 (Rodden).

121. Dr. Rodden has served as an expert in numerous redistricting matters. PX 1 at 4 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 11:17-12:14 (Rodden). This cycle, the Ohio Supreme Court credited Dr. Rodden's analysis in *League of Women Voters of Ohio v. Ohio Redistricting Comm'n*, ___ N.E.3d ___, Nos. 2021-1193, 2021-1198, & 2021-1210, 2022 WL 110261 (Ohio Jan. 12, 2022), and *Adams v. DeWine*, ___ N.E.3d ___, Nos. 2021-1428 & 2021-1449, 2022 WL 129092 (Ohio Jan. 14, 2022), two redistricting cases challenging state legislative and congressional maps. PX 1 at 4 (Rodden Rep.); *see, e.g.*, *League of Women Voters of Ohio*, 2022 WL 110261, at *23, *26; *Adams*, 2022 WL 129092, at *10, *12-13. Dr. Rodden drew the congressional plan that was chosen by the Pennsylvania Supreme Court for implementation after the political process in that state failed to produce a plan. *Carter v. Chapman*, No. 7 MM 2022, 2022 WL 549106 (Pa. Feb. 23, 2022); Hr'g Tr. Day 1 Vol. 2 at 12:8-14 (Rodden).

122. The Court accepts Dr. Rodden in this case as an expert in redistricting, political and racial geography, applied statistics, and geographic information systems.

123. For his analysis in this case, Dr. Rodden analyzed Kansas's political geography and applied traditional redistricting criteria, including those encompassed in the Guidelines, to examine Ad Astra 2's configuration. To do this, Dr. Rodden drew two illustrative congressional maps that adhered to traditional redistricting criteria and the Guidelines—a "least-change" map that prioritized the Guideline of core retention, PX 1 at 14-15 & fig.8 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 23:3-24:10 (Rodden), and a "communities-of-interest" map that allowed for slightly lower core retention to better serve the Guidelines of compactness and respect for communities of interest, PX 1 at 14-16 & fig.9 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 25:3-23 (Rodden).

124. In analyzing Kansas's political geography and traditional redistricting principles in the context of congressional redistricting, Dr. Rodden explained that it is "rather straightforward to abide by traditional redistricting criteria" and that it "is possible to draw plans that achieve . . . all of the goals that are laid out in [the Guidelines]." Hr'g Tr. Day 1 Vol. 2 at 15:14-16:4 (Rodden). For that reason, he found that the plan enacted by "the legislature seems to abide by a different logic. . . . [I]t's not the kind of map that would emerge from the application of [the Guidelines]." Hr'g Tr. Day 1 Vol. 2 at 15:25-16:4 (Rodden). Specifically, Dr. Rodden explained that the geography of Kansas is such that minimizing splits of political subdivisions like counties is straightforward and there is no tension between various Guidelines. Hr'g Tr. Day 1 Vol. 2 at 19:3-24 (Rodden). For example, he explained that "compactness and the preservation of communities of interest seem to go together . . . very nicely in this instance." Hr'g Tr. Day 1 Vol. 2 at 19:3-24 (Rodden).

125. Dr. Rodden compared Ad Astra 2 with the prior congressional plan and his illustrative plans on various traditional redistricting criteria contained in the Guidelines, including compactness, preservation of political subdivisions, and core retention. PX 1 at 17-26 (Rodden Rep.). Dr. Rodden's analysis and his illustrative plans demonstrate that adherence to the Guidelines or traditional redistricting criteria cannot explain the configuration of Ad Astra 2. PX 1 at 17-26 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 28:23-29:4 (Rodden).

126. Of all of the maps Dr. Rodden analyzed, Ad Astra 2 had the lowest compactness scores using four different measures (Reock, Polsby-Popper, Convex Hull, and Schwartzberg), meaning that the prior plan and both of Dr. Rodden's illustrative plans contained more compact districts than Ad Astra 2. PX 1 at 18 tbl.1 (Rodden Rep.). Therefore, an effort to comply with the Guidelines and create compact districts cannot explain the configuration of Ad Astra 2. PX 1 at 18-19 & tbl.1 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 29:11-30:14 (Rodden).

127. Ad Astra 2 also splits more political subdivisions than any of the comparison plans. It splits one additional county, 14-15 additional voting tabulation districts, and 5 additional cities and towns, including Kansas City and Lawrence. PX 1 at 19 & tbl.2 (Rodden Rep.). Thus, an effort to comply with the Guidelines and preserve political subdivisions cannot explain the configuration of Ad Astra 2. PX 1 at 19 & tbl.2 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 32:8-14 (Rodden).

128. Ad Astra 2 fares no better when it comes to core retention. By population, Ad Astra 2 preserves just 86% of the cores of former districts. PX 1 at 26 & tbl.3 (Rodden Rep.). By way of comparison, Dr. Rodden's least-change plan, which adhered to the Guidelines' requirement of core retention, retained 97% of the cores of former districts. PX 1 at 26 & tbl.3 (Rodden Rep.). Thus, to achieve population equality, it was necessary to move only 3% of Kansans between districts. Hr'g Tr. Day 1 Vol. 2 at 24:17-25:2 (Rodden). Moreover, Ad Astra 2 relocates more Black,

Hispanic, and Native American Kansans than any of the comparator plans, meaning the changes in district boundaries were focused on areas with large minority populations. PX 1 at 26 & tbl.3 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 36:18-37:13 (Rodden). As a result, population equality cannot explain the number of people moved among districts in Ad Astra 2.

129. Ad Astra 2 also splits multiple communities of interest in contravention of the Guidelines. PX 1 at 20 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 32:15-33:18 (Rodden). Most of Lawrence is subsumed in the vast, rural CD 1—the "Big First"—resulting in only a narrow corridor connecting that portion of CD 2 in Ad Astra 2. Hr'g Tr. Day 1 Vol. 2 at 32:15-33:18 (Rodden). The state's geographically proximate Native American communities are split between two congressional districts. Hr'g Tr. Day 1 Vol. 2 at 32:15-33:18 (Rodden); PX 1 at 20 (Rodden Rep.). Fort Riley—the town *and* the military installation—are split and also separated from Junction City. Hr'g Tr. Day 1 Vol. 2 at 32:15-33:18 (Rodden); PX 1 at 20 (Rodden Rep.). And perhaps most glaringly, Kansas City and Wyandotte County are split between districts, contravening multiple of the Guidelines. Hr'g Tr. Day 1 Vol. 2 at 26:12-27:9 (Rodden); PX 1 at 20 (Rodden Rep.).

130. Ad Astra 2 likewise divides geographically compact and proximate minority groups. PX 1 at 20-24 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 33:19-35:9 (Rodden). For example, the split of Wyandotte County divides Black and Hispanic communities in the greater Kansas City metro area between CDs 2 and 3. PX 1 at 20-22 & figs. 11 & 12 (Rodden Rep.). Scooping Lawrence out of CD 2 extracts Black and Hispanic voters and submerges them in the vast, less diverse Big First. PX 1 at 20-22 & figs. 11 & 12 (Rodden Rep.). Native American Kansans are similarly dispersed, and one of the state's reservations is split from the other four, despite their geographic proximity. PX 1 at 23 & fig.13 (Rodden Rep.).

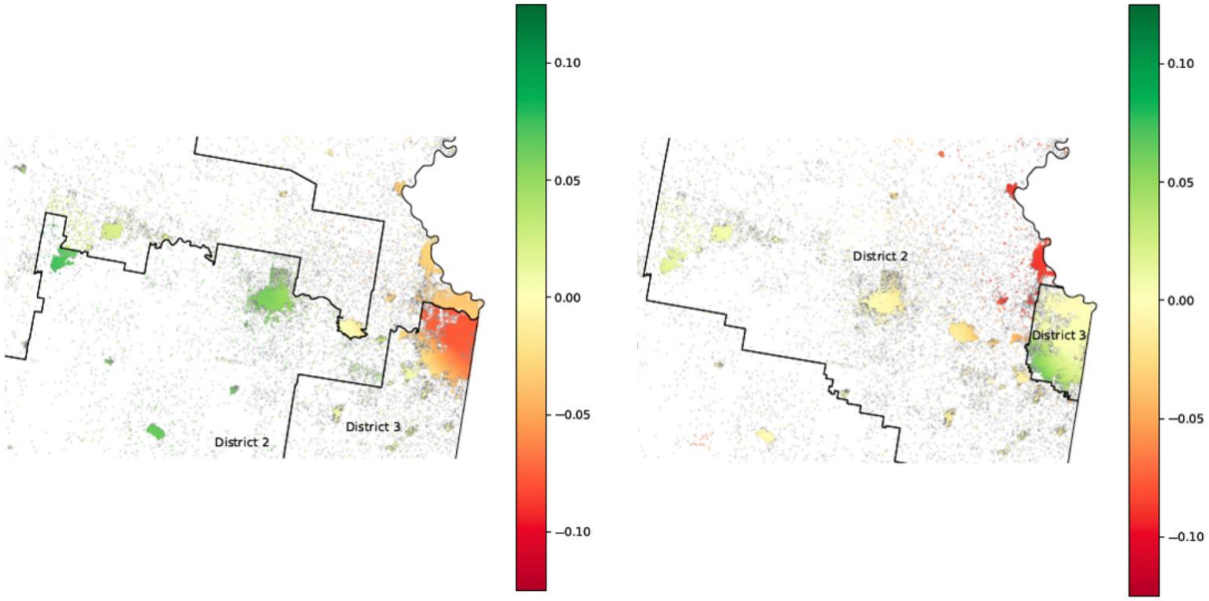
131. Dr. Rodden also conducted racial and partisan dislocation analyses. These analyses illuminate the impact the failure to adhere to traditional redistricting criteria and the Guidelines has in terms of both race and partisanship. Hr'g Tr. Day 1 Vol. 2 at 50:17-51:11 (Rodden).

132. The racial dislocation analysis compares the racial composition of a *hypothetical* district or "neighborhood"—comprised of each individual Kansan and their nearest 734,469 neighbors, thus equaling the population of a Kansas congressional district—with the *actual* district in which each individual resides. PX 1 at 26 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 37:20-39:22 (Rodden). It then asks, for each member of a racial minority group, how many members of that individual's hypothetical neighborhood are also minorities. PX 1 at 26 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 37:20-39:22 (Rodden). This captures the extent to which each individual lives in a neighborhood (at the scale relevant for drawing congressional districts) with other minorities. PX 1 at 26 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 37:20-39:22 (Rodden). Next, for each member of a racial minority, it asks how many members of the district into which they have actually been drawn are also minorities. PX 1 at 26 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 37:20-39:22 (Rodden). Thus, for each Kansan, the racial dislocation analysis measures the disparity between the minority population share of the assigned district and the share of the individual's hypothetical neighborhood—which reveals whether the racial composition of the district matches that of the neighborhood. PX 1 at 26-27 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 37:20-39:22 (Rodden). Gaps between the minority share of a neighborhood and the minority share of a district demonstrate that districts have not been drawn in a way that corresponds to communities of interest and the state's natural racial geography, meaning the district was configured in a way that pairs together people from areas that have different demographic compositions. PX 1 at 26-27 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 37:20-39:22 (Rodden).

133. Ad Astra 2 has high levels of racial dislocation. Specifically, minority voters who live along the border of CDs 2 and 3 in Wyandotte and Johnson Counties experience high levels of racial dislocation. Hr'g Tr. Day 1 Vol. 2 at 40:17-41:13 (Rodden). Because the line drawn through Wyandotte County divides geographically proximate minority groups to the north and south, minority voters on either side of that line live in districts that have lower minority shares than would be expected if the districts were drawn according to the natural demographics of the area. Hr'g Tr. Day 1 Vol. 2 at 40:17-41:13 (Rodden). In fact, some of those voters live in a district that has a minority share that is *seven percentage points lower* than their neighborhood—a substantial disparity in a state that has a Black population of just about 6% and a Hispanic population about twice that. Hr'g Tr. Day 1 Vol. 2 at 41:4-42:1 (Rodden). By contrast, Dr. Rodden's communities-of-interest map, as well as his least-change map and the prior congressional map, exhibit significantly lower levels of racial dislocation. Hr'g Tr. Day 1 Vol. 2 at 42:2-44:4 (Rodden).

134. These results are depicted in the figures below. The figure on the left, Plaintiffs' Exhibit 20 (a zoomed-in version of Figure 16 in Dr. Rodden's report), depicts racial dislocation levels for all minority groups in Ad Astra 2, while the figure on the right, Plaintiffs' Exhibit 24 (a zoomed-in version of Figure 17 in Dr. Rodden's report), shows racial dislocation levels in Dr. Rodden's communities-of-interest map—which preserves Wyandotte County in a single district—for the same groups. Red and orange shading, which features prominently in Ad Astra 2 in Wyandotte and Johnson Counties, indicates high levels of racial dislocation, meaning that minorities in those areas are placed in districts that have much lower proportions of minorities than their neighborhoods. Hr'g Tr. Day 1 Vol. 2 at 40:2-41:13 (Rodden). By comparison, the primarily yellow shading in the communities-of-interest map indicates low levels of racial dislocation,

meaning the demographics of the neighborhood match the demographics of the districts. Hr'g Tr. Day 1 Vol. 2 at 42:7-25 (Rodden). The high levels of racial dislocation in Ad Astra 2 result from cracking minority voters between districts—that is, drawing noncompact districts that divide geographically proximate minority communities. Hr'g Tr. Day 1 Vol. 2 at 44:7-22 (Rodden).

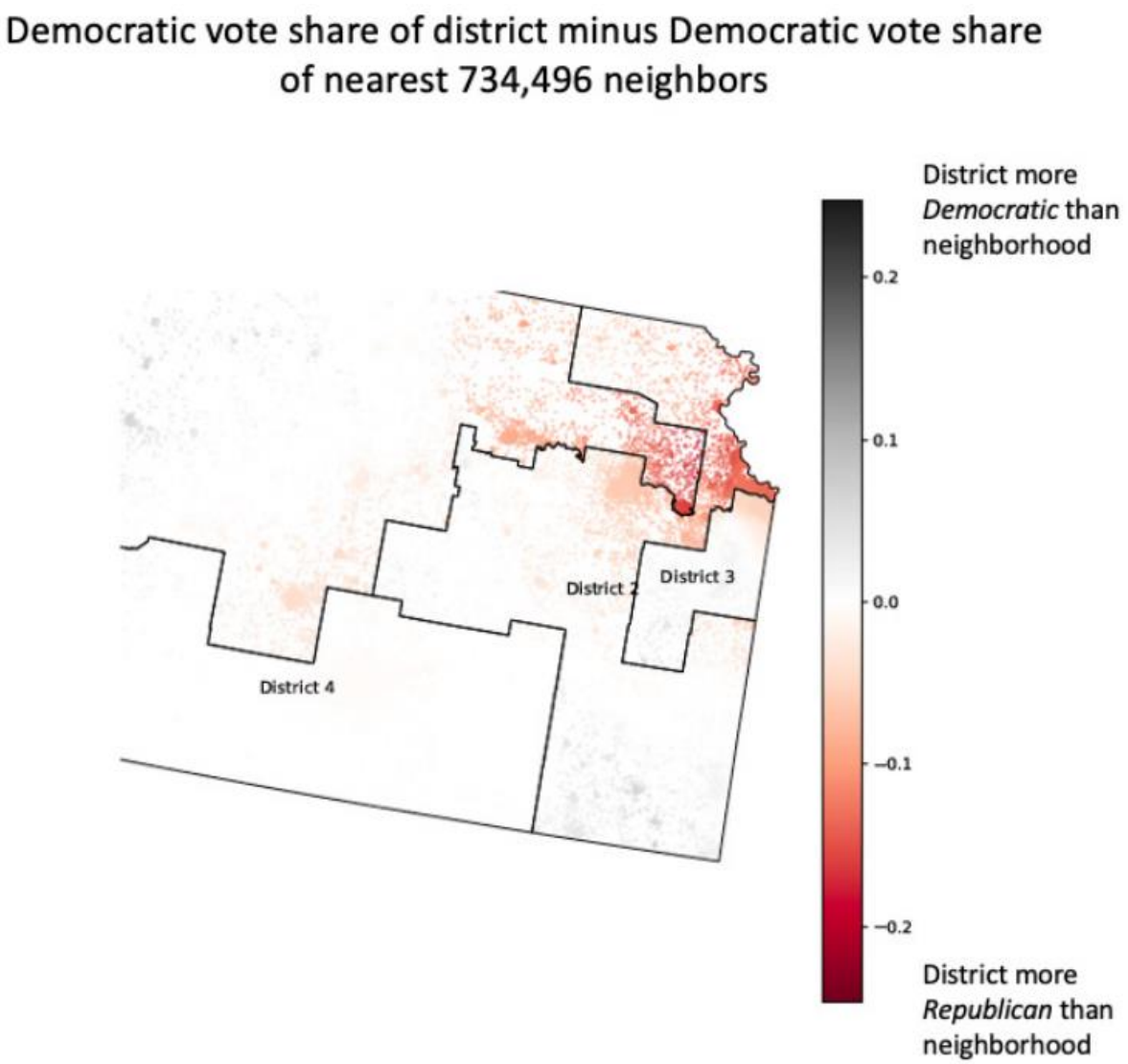


135. All told, Ad Astra 2 has more than double the level of racial dislocation of the previous congressional plan and Dr. Rodden's least-change map, and more than *triple* the level of Dr. Rodden's communities-of-interest map. PX 1 at 30 tbl.4 (Rodden Rep.); Hr'g Tr. Day 1 Vol. 2 at 45:5-46:16 (Rodden). The Third Congressional District, which encompasses half of Wyandotte County, has the highest levels of racial dislocation—nearly *four times higher* than the corresponding district in any of the comparison plans. PX 1 at 30 tbl.4 (Rodden Rep.). This is true for both the Black and Hispanic minority groups in CD 3. PX 1 at 30 tbl.4 (Rodden Rep.).

136. Dr. Rodden's partisan dislocation analysis reveals even starker results. The partisan dislocation analysis proceeds in the same way as the racial dislocation analysis. Using official precinct-level election results, the analysis compares, for each individual Kansan, the partisanship

of their nearest 735,000 neighbors and the partisanship of the district into which they were drawn. Hr'g Tr. Day 1 Vol. 2 at 47:24-48:22 (Rodden). Again, the difference between these two levels of partisanship signifies the degree to which someone has been assigned to a district that differs from their natural neighborhood. Hr'g Tr. Day 1 Vol. 2 at 47:24-48:22 (Rodden). The larger the difference, the greater the disparity between a voter's neighborhood and their district. Hr'g Tr. Day 1 Vol. 2 at 47:24-48:22 (Rodden). The analysis also asks which way this difference trends—more Republican or more Democratic. Hr'g Tr. Day 1 Vol. 2 at 47:24-48:22 (Rodden).

137. The results of this analysis are depicted in the figure below, PX 25 (a zoomed-in version of Figure 18 from Dr. Rodden's report), which focuses on Ad Astra 2 in the eastern part of the state. Red shading indicates that Kansans live in districts that are more Republican than the neighborhoods in which they reside, while gray represents voters who reside in districts that are more Democratic than their neighborhoods. The pattern is clear: Kansans across the northeast part of the state are consistently placed in districts that are far more Republican than their neighborhoods. Hr'g Tr. Day 1 Vol. 2 at 50:10-13 (Rodden).



138. Specifically, light red shading in the southern part of Wyandotte County and the northern part of Johnson County indicates that voters in this region reside in a district that is five to six percentage points (or more) Republican than their neighborhoods. Hr'g Tr. Day 1 Vol. 2 at 49:3-20 (Rodden). Kansans who live on the north side of the line that slices Wyandotte County in two reside in an even more Republican district: one that is 10 to 12 percentage points more Republican than their neighborhoods. Hr'g Tr. Day 1 Vol. 2 at 49:21-50:3 (Rodden). And residents of Lawrence end up in a district that is over *20 percentage points* more Republican than their neighborhoods—exactly the effect that would be expected given that Ad Astra 2 scooped

Democratic Lawrence out of Douglas County and paired it with a district that stretches across western Kansas to the Colorado border. Hr'g Tr. Day 1 Vol. 2 at 50:3-11 (Rodden).

139. Kansans in the northeastern part of the state are thus dispersed across CDs 1, 2, and 3 in a way that places almost all of them in districts that are five to 25 percentage points more Republican than the neighborhoods in which they reside. PX 1 at 32 fig.18 (Rodden Rep.). The unnaturally Republican nature of CDs 2 and 3 results directly from the contravention of traditional redistricting principles and the Guidelines. Hr'g Tr. Day 1 Vol. 2 at 50:17-51:11 (Rodden).

140. Dr. Rodden's analysis shows that the configuration of Ad Astra 2 cannot be explained by Kansas's political geography or compliance with the Guidelines. Ad Astra 2 contains districts that are noncompact and irregularly shaped, includes numerous unnecessary political subdivisions splits, breaks up geographically compact communities of interests, and fails to preserve the cores of former districts. As a result, it yields four Republican districts and places Kansans across northeast Kansas—and especially in Wyandotte County, Johnson County, and Lawrence—in districts that are far more Republican than can be explained by any neutral map-drawing considerations.

141. Specifically, CD 3, which would have been comfortably Democratic in a configuration that adhered to the Guidelines and traditional redistricting principles, becomes a Republican-leaning district in Ad Astra 2. PX 1 at 33 & fig.19 (Rodden Rep.). Likewise, CD 2, which would have been competitive-but-Republican-leaning in a plan that respected the Guidelines and communities of interest, becomes a solidly Republican district under Ad Astra 2. PX 1 at 33 & fig.19 (Rodden Rep.)

142. The Court credits Dr. Rodden's testimony on the partisan consequences of Ad Astra 2 and concludes that it was enacted intentionally and effectively to diminish the electoral influence

of Democratic voters in the state. During Dr. Rodden's live testimony, the Court carefully observed his demeanor, particularly as he was cross-examined for the first time about his work on this case. He consistently defended his work with careful and deliberate explanations of the bases for his opinions.

C. Evidence presented by Dr. Chris Warshaw demonstrates that Ad Astra 2 is an intentional, effective partisan gerrymander.

143. Plaintiffs' expert Dr. Christopher Warshaw, Ph.D., is a tenured Associate Professor of Political Science at George Washington University. PX 105 at 1 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 63:12-16 (Warshaw).

144. Dr. Warshaw's academic research focuses on American politics, with focuses on public opinion, representation, elections, polarization, redistricting, and partisan gerrymandering. PX 105 at 1 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 64:4-9 (Warshaw). Dr. Warshaw has written over twenty peer-reviewed papers on these topics, including multiple papers that focus specifically on elections or redistricting, and has a forthcoming book that includes an extensive analysis on the causes and consequences of partisan gerrymandering in state governments. PX 105 at 1 (Warshaw Rep.). Dr. Warshaw's work has appeared in leading peer-reviewed journals, such as the *American Political Science Review*, *Legislative Studies Quarterly*, and the *Election Law Journal*. PX 105 at 1 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 66:9-67:7, 67:17-68:9 (Warshaw). In particular, Dr. Warshaw has published two peer-reviewed articles on using the efficiency gap to quantify partisan bias in the redistricting process and examining its consequences for the political process. PX 105 at 1 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 67:25-68:9 (Warshaw).

145. Dr. Warshaw has presented expert reports or testimony using the efficiency gap in a number of partisan gerrymandering lawsuits, and his analysis has been consistently credited and relied upon by the courts in these cases. PX 105 at 2-3 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at

70:12-21 (Warshaw); *see, e.g.*, *Adams v. DeWine*, Nos. 2021-1428, 2021-1449, 2022 WL 129092, at *10-11, *14 (Ohio Jan. 14, 2022) (relying in part on Dr. Warshaw's analysis in striking down congressional plan as partisan gerrymander); *League of Women Voters of Pa. v. Commonwealth*, 645 Pa. 1, 127, 178 A.3d 737 (2018) (citing Dr. Warshaw's testimony as evidence of congressional map's unconstitutional partisan gerrymandering); *Ohio A. Philip Randolph Inst. v. Householder*, 373 F. Supp. 3d 978, 1026 (S.D. Ohio) ("The Court qualified Dr. Warshaw as an expert in the fields of elections, partisan gerrymandering, polarization, and representation and found his testimony highly credible"), *vacated and remanded and other grounds*, 140 S. Ct. 101 (2019).

146. The Court accepts Dr. Warshaw in this case as an expert in American politics with specialties in political representation, elections, and polarization. During Dr. Warshaw's live testimony, the Court carefully observed his demeanor, particularly as he was cross-examined for the first time about his work on this case. He consistently defended his work with careful and deliberate explanations of the bases for his opinions.

Dr. Warshaw employed reliable methodologies to analyze partisan bias.

147. To measure the partisanship of districts in Ad Astra 2, as well as the 2012 plan and other plans considered by the Legislature during this redistricting cycle, Dr. Warshaw used a composite of ten recent statewide elections for which precinct-level results were available: 2012 U.S. President, 2016 U.S. President, 2016 U.S. Senator, 2018 Governor, 2018 Attorney General, 2018 Insurance Commissioner, 2018 Secretary of State, 2018 Treasurer, 2020 U.S. President, and 2020 U.S. Senator.[7] PX 105 at 10-11 & n.6 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 91:22-92:10

[7] Dr. Warshaw explained that he did not include any 2014 elections in his composite because precinct-level results were not available for those races. PX 105 at 3 n.2 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 73:10-11 (Warshaw). He further explained that including 2014, a Republican wave year, in his composite would have increased the plan's pro-Republican bias, as measured using the composite. Hr'g Tr. Day 2 Vol. 1 at 153:10-154:13 (Warshaw).

(Warshaw). To measure the partisanship of a district, Dr. Warshaw aggregated the precinct-level votes for each election to determine the vote share for each party within that district under a given election's results, then averaged across the ten elections to determine the district's average partisanship. PX 105 at 10-11 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 92:2-10 (Warshaw).

148. Dr. Warshaw explained that the use of statewide election results is appropriate—and standard practice—for evaluating the partisanship of new congressional districts for several reasons. At the most basic level, there are no congressional-level election results available for a new district. Hr'g Tr. Day 2 Vol. 1 at 93:15-18 (Warshaw). Moreover, precinct-level results are not available for past congressional elections in Kansas, and using statewide elections avoids the need to impute results for uncontested congressional elections and ensures that partisanship estimates are not affected by idiosyncratic district features like incumbency or specific congressional candidates. Hr'g Tr. Day 2 Vol. 1 at 93:12-94:20 (Warshaw). As a result, Dr. Warshaw testified that he is not aware of any political science study that has analyzed a new congressional plan by analyzing past congressional elections. Hr'g Tr. Day 2 Vol. 1 at 93:19-25 (Warshaw); *see also supra* FOF § II.A (describing and approving Dr. Chen's similar use of a statewide composite to evaluate district partisanship). In any event, Dr. Warshaw explained that the statewide composite gives nearly identical results to observed congressional election results in determining the efficiency gap of the 2012 congressional plan, and that his research has shown that there is a strong correlation between efficiency gaps calculated using legislative elections and those calculated using statewide elections. Hr'g Tr. Day 2 Vol. 1 at 89:16-90:1, 155:22-56:9 (Warshaw).

149. The Court reaffirms its earlier finding that the use of statewide elections by Plaintiffs' experts to measure the partisanship of simulated and enacted districts is a reliable

methodology. The Court further credits Dr. Warshaw's use of the ten elections comprising his statewide composite.

150. To evaluate the level of partisan bias exhibited by a given plan, Dr. Warshaw used the efficiency gap, a well-established, generally accepted metric of partisan fairness. PX 105 at 3 (Warshaw Rep.).

151. Dr. Warshaw explained that the efficiency gap measures the efficiency with which political parties are able to translate votes into legislative seats; improving this efficiency is the primary goal of redistricting, from a party's perspective. PX 105 at 4-5 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 64:18-25 (Warshaw). The efficiency gap captures the packing and cracking that underlie partisan gerrymandering. PX 105 at 6 (Warshaw Rep.).

152. The efficiency gap captures this idea by comparing the number of votes that each party casts inefficiently in a given election. PX 105 at 5 (Warshaw Rep.). In a congressional district in which a party's candidate loses, all votes for that party's candidate are inefficiently cast. PX 105 at 5 (Warshaw Rep.). In a district that a party wins, inefficiently cast votes are those beyond the 50% plus one needed to win. PX 105 at 5 (Warshaw Rep.).

153. The basic formula to calculate the efficiency gap is:

$$EG = \frac{W_R}{n} - \frac{W_D}{n}$$

PX 105 at 5 (Warshaw Rep.). In this formula, EG is the efficiency gap, W_R is the number of inefficiently cast Republican votes, W_D is the number of inefficiently cast Democratic votes, and n is the total number of votes cast in the state. PX 105 at 5 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 75:21-76:8 (Warshaw). This measure captures the extent to which one party's voters are packed and cracked to a greater extent than the other party's voters, and, because it is expressed

as a percentage of the total votes cast, is comparable across time and states. PX 105 at 5 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 75:21-76:8 (Warshaw).

154. Table 1 of Dr. Warshaw's report, also admitted as Plaintiffs' Exhibit 117, gives a basic example of how to calculate the efficiency gap:

Table 1: Illustrative Example of Efficiency Gap

District	Democratic Votes	Republican Votes
1	75	25
2	40	60
3	40	60
Total	155 (52%)	145 (48%)
Inefficient	104	43

155. In this example, Democrats won a majority of the statewide vote, but only one of the three seats. PX 105 at 5 (Warshaw Rep.). Democrats won the first district with 75 of the 100 votes cast; this means the party inefficiently cast 24 votes beyond the 51 (50% + 1) needed to win the district. PX 105 at 5 (Warshaw Rep.). Democrats lost the second and third districts, so all 80 votes cast for the party across those two districts were inefficiently cast. PX 105 at 5 (Warshaw Rep.). Democrats thus inefficiently cast a total of 104 votes across the plan. PX 105 at 5 (Warshaw Rep.). Republicans inefficiently cast all their votes in the lost first district, but inefficiently cast only 9 votes in each of the second and third districts (60 votes is 9 more than the 51 necessary to win each district). PX 105 at 5 (Warshaw Rep.). Republicans thus inefficiently cast a total of only 43 votes across the plan. PX 105 at 5 (Warshaw Rep.). Applying the formula given above, the efficiency gap is $\frac{43}{300} - \frac{104}{300} = -20\%$. PX 105 at 5 (Warshaw Rep.).

156. This simple formula for the efficiency gap does not account for the possibility that districts may have unequal populations or turnout levels. PX 105 at 5-6 (Warshaw Rep.). To account for this possibility, Dr. Warshaw used an alternative formula for the efficiency gap:

$$EG = S_D^{margin} - 2 * V_D^{margin}$$

PX 105 at 5-6 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 81:8-82:12 (Warshaw). In this formula, S_D^{margin} is the Democratic Party's seat margin (its seat share minus 0.5) and V_D^{margin} is the Democratic Party's vote margin, calculated by aggregating the raw vote for Democratic candidates across all districts, dividing by the total raw vote cast, and subtracting 0.5. PX 105 at 5-6 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 81:15-82:7 (Warshaw).

157. Dr. Warshaw explained that he used the second version of the formula for his analysis in this case, as he does in all his academic work and expert reports. Hr'g Tr. Day 2 Vol. 1 at 82:13-15 (Warshaw). The second formula was first proposed in a peer-reviewed article by Eric McGhee. PX 105 at 6 (Warshaw Rep.); *see also* Hr'g Tr. Day 2 Vol. 1 at 82:8-15 (Warshaw).

158. Neither method for calculating the efficiency gap in any way implies that proportional representation is required. Hr'g Tr. Day 2 Vol. 1 at 76:9-11, 82:16-18 (Warshaw).

159. Dr. Warshaw explained that the efficiency gap has several theoretical and empirical properties that make it a good measure of partisan bias. At the theoretical level, the efficiency gap mathematically captures the packing and cracking that serve as the basic tools of partisan gerrymandering. PX 105 at 6 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 65:1-12, 82:22-83:5 (Warshaw). Moreover, empirical studies—including research conducted by Dr. Warshaw himself—have validated the efficiency gap's reliability as a measure of partisan bias: First, in states where multiple metrics for partisan bias are potentially available, the efficiency gap correlates strongly with those other metrics. Hr'g Tr. Day 2 Vol. 1 at 65:13-15, 83:6-17, 90:2-5

(Warshaw). Second, Dr. Warshaw's research shows that when party control of the redistricting process changes, the efficiency gap generally shifts in favor of the party taking power—as one would expect. Hr'g Tr. Day 2 Vol. 1 at 65:16-66:4, 83:22-84:1, 90:6-11 (Warshaw). Third, Dr. Warshaw's research has shown that bias in the redistricting process, as measured by the efficiency gap, empirically leads to bias in the composition of the relevant legislative body and affects eventual policy outcomes, again indicating that the measure correctly captures partisan bias. Hr'g Tr. Day 2 Vol. 1 at 89:1-15.

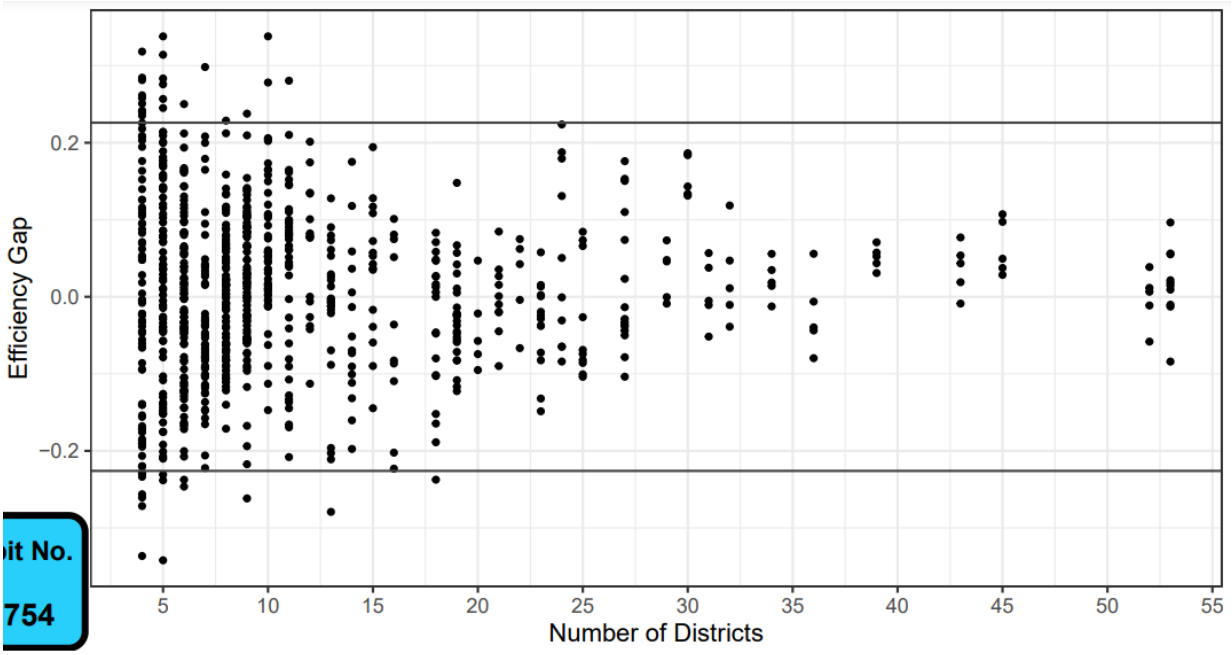
160. Consistent with these advantages, Dr. Warshaw affirmed that the academic literature involving the efficiency gap is "very robust" and that "the consensus of that literature is that . . . the efficiency gap performs very well" as a measure of partisan bias. Hr'g Tr. Day 2 Vol. 1 at 82:19-21, 211:5-14 (Warshaw). Dr. Warshaw also indicated that other social scientists can replicate his methodology and determine whether he made any errors. Hr'g Tr. Day 2 Vol. 1 at 90:21-91:2 (Warshaw).

161. Dr. Warshaw further testified that no court, to his knowledge, had ever ruled that the efficiency gap is not admissible. Hr'g Tr. Day 2 Vol. 1 at 91:3-10 (Warshaw); *see, e.g.*, *Adams*,, 2022 WL 129092, at *10-11, *14 (relying in part on Dr. Warshaw's efficiency-gap analysis in striking down congressional plan as partisan gerrymander).

162. Dr. Warshaw explained that although the efficiency gap can be more volatile in states, like Kansas, with relatively small numbers of congressional seats, he accounted for this concern and checked the robustness of his analysis in several ways. PX 105 at 6 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 92:20-93:11, 108:10-13, 168:22-169:11 (Warshaw). First, to smooth out any volatility in his efficiency-gap calculations, in calculating the efficiency gap for Ad Astra 2 and other proposed or historical Kansas plans, Dr. Warshaw averaged the results of the ten

elections included in his statewide composite. PX 105 at 6 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 92:20-93:11, 168:22-169:11 (Warshaw). Second, as discussed below, Dr. Warshaw confirmed that his conclusions about the extremity of Ad Astra 2's efficiency gap hold when comparing the plan only to maps from states with four to seven districts.

163. To further demonstrate that the efficiency gap is a reliable measure of partisan bias in Kansas, Dr. Warshaw plotted the historical distribution of efficiency gaps across the country in states with four or more congressional seats, separated by the number of districts per state, in Plaintiffs' Exhibit 754:



Hr'g Tr. Day 2 Vol. 1 at 115:13-116:17 (Warshaw).

164. Dr. Warshaw explained that Exhibit 754 shows that while small states exhibit somewhat more variability in the efficiency gap, the differences between states of different sizes are relatively modest. Hr'g Tr. Day 2 Vol. 1 at 115:22-116:1 (Warshaw). The horizontal lines across the chart mark efficiency gaps of ±22.5%—the level of efficiency gap exhibited by Ad Astra 2. Hr'g Tr. Day 2 Vol. 1 at 116:8-12 (Warshaw). The chart indicates that there are "very,

very few elections" that exhibit an efficiency gap of that magnitude, regardless of state size, such that any concern about the variability of the efficiency gaps in small states "really d[id]n't substantially change [Dr. Warshaw's] conclusions at all." Hr'g Tr. Day 2 Vol. 1 at 116:11-17 (Warshaw).

165. The Court finds that the efficiency gap, as applied by Dr. Warshaw, is a reliable methodology for measuring the partisan bias of Ad Astra 2. The Court therefore credits Dr. Warshaw's analysis and his conclusions based on that methodology. The Court recognizes that the efficiency gap should be employed with caution in states with four districts, and Dr. Warshaw credibly explained how he employed such caution. The Court further notes that the efficiency gap analysis reinforces independent analysis of the partisan bias in the map conducted by other experts, including Dr. Chen's simulation analysis.

Ad Astra 2 exhibits pro-Republican partisan bias at the district level.

166. Dr. Warshaw testified that Ad Astra 2 exhibits signs of partisan bias in its treatment of CD 3 and its construction of district lines in the area around Kansas City and Lawrence.

167. First, Dr. Warshaw measured the partisanship of Ad Astra's CD 3 using his ten-election composite. Dr. Warshaw concluded that the new CD 3 has a Democratic vote share of approximately 47%, compared to a vote share under the 2012 plan of slightly over 50%. PX 105 at 11 (Warshaw Rep.). Dr. Warshaw concluded that as a result, a Democratic candidate would likely win CD 3 only "during a strong Democratic wave year." PX 105 at 11 (Warshaw Rep.).

168. Dr. Warshaw also concluded that none of the other plans the Legislature considered in 2020 cut the Democratic vote share in CD 3 as significantly as the Ad Astra 2 plan. PX 105 at 12-13 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 104:16-105:24 (Warshaw). In fact, while Ad

Astra 2 decreases the Democratic vote share in CD 3 to 46.9%, only one other plan shrank the Democratic vote share to under 50%. PX 105 at 13 (Warshaw Rep.).

169. Figure 7 in Dr. Warshaw's report, also admitted as Plaintiffs' Exhibit 112, compares the Democratic vote share in CD 3 under Ad Astra 2, the 2012 plan, and the other plans considered by the Legislature during the redistricting process:

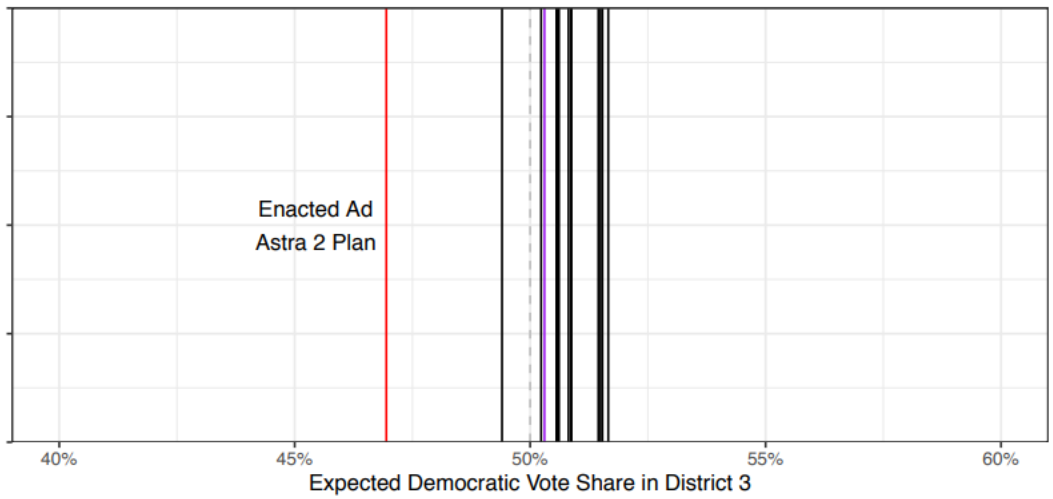


Figure 7: Comparison of Democratic vote share in district 3 in Ad Astra 2 plan (red), 2012-2020 plan (purple), and other potential plans in Kansas (black) based on composite of statewide elections.

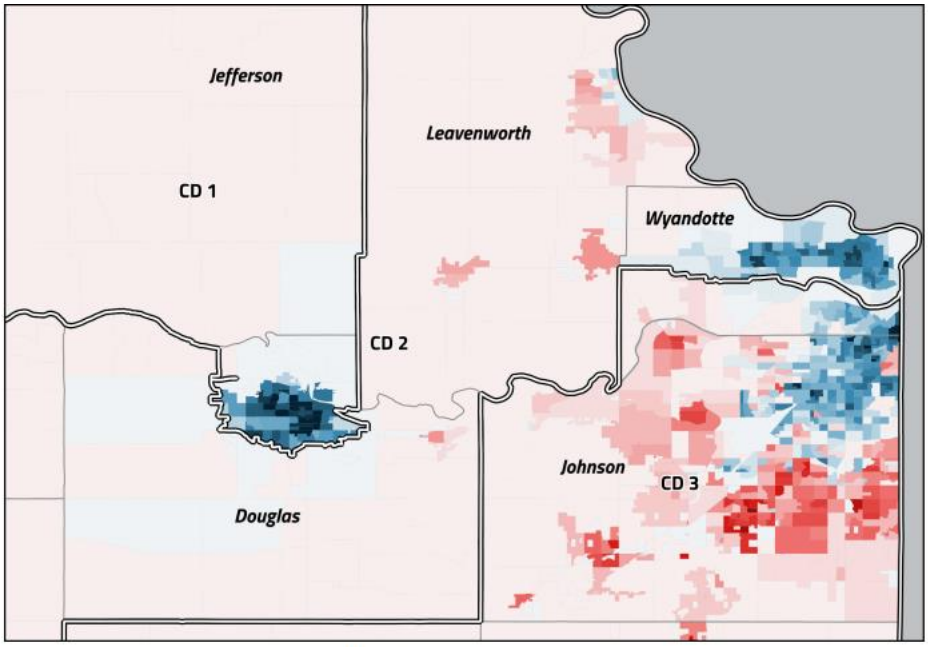
Exhibit No.
PX 112

170. As Dr. Warshaw testified, the Figure shows that the Democratic vote share, based on the ten-election composite, is much lower in CD 3 compared to both the 2012 plan and the other plans considered by the Legislature. Hr'g Tr. Day 2 Vol. 1 at 104:16-105:1 (Warshaw).

171. Dr. Warshaw concluded that this difference in Democratic vote share "provides further evidence that the decrease in Democratic performance in [Ad Astra 2] appears to be intentional" and not a result of Kansas's political geography. PX 105 at 14 (Warshaw Rep.).

172. Dr. Warshaw also analyzed the relationship between the district lines in Ad Astra 2 and the distribution of Democratic and Republican votes across the state. Hr'g Tr. Day 2 Vol. 1 at 103:2-104:12 (Warshaw); *see* PX 105 at 7-10 (Warshaw Rep.).

173. Figure 4(b) in Dr. Warshaw's report, also admitted as part of Plaintiffs' Exhibit 109, displays the distribution of votes in the area around Kansas City and Lawrence and the district lines created by Ad Astra 2:



(b) Kansas City Area

Figure 4: Map of District 3 on the Enacted Ad Astra 2 plan. Blue areas are Democratic and red areas are Republican. The shading reflects the margin of votes per hectare.

Exhibit No.
PX 109

174. The shading in the Figure reflects the vote margin per hectare, computed using Dr. Warshaw's ten-election composite; thus, areas with larger pro-Democratic vote margins appear in darker shades of blue, areas with larger pro-Republican vote margins appear in darker shades of

red, and areas with lower voting populations or closer vote margins are more lightly shaded. PX 105 at 7-9 & fig.4 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 103:2-11 (Warshaw).

175. As Dr. Warshaw explained, this Figure illustrates how Ad Astra 2 cracks Democratic voters between districts. The plan first cracks Democratic voters in northern Wyandotte County (assigned to CD 2) from Democratic voters in Johnson County (assigned to CD 3), such that neither district contains a Democratic majority. Hr'g Tr. Day 2 Vol. 1 at 103:12-23 (Warshaw); *see* PX 105 at 9 (Warshaw Rep.). A more compact district in the Kansas City area would "clearly" have produced a majority-Democratic district. Hr'g Tr. Day 2 Vol. 1 at 103:20-23 (Warshaw).

176. Figure 4(b) also shows how Ad Astra 2 cracks heavily Democratic Lawrence out of CD 2 and into CD 1, which "was necessary in order to . . . ensure that District 2 continued to be a [R]epublican district," since Democratic voters in Lawrence could otherwise have combined with Democratic voters in northern Wyandotte County to produce "a much more closely contested district." Hr'g Tr. Day 2 Vol. 1 at 103:24-104:12 (Warshaw).

177. The Court credits Dr. Warshaw's analysis of the district-level partisan bias of Ad Astra 2. The Court finds that Ad Astra 2 results in a significantly higher Republican vote share in CD 3 than existed under the 2012 plan or would result under other proposed plans. The Court finds that this increase in Republican vote share cannot be explained by Kansas's political geography. The Court finds that the district lines in the areas around Kansas City and Lawrence show clear signs of cracking Democratic voters between districts to prevent them from achieving majority status. The Court finds these facts to be persuasive evidence that Ad Astra 2 is an intentional, effective partisan gerrymander.

Ad Astra 2 is an extreme, intentional pro-Republican outlier at the statewide level.

178. Dr. Warshaw concluded that Ad Astra 2 exhibits "an extreme level of pro-Republican bias." PX 105 at 3 (Warshaw Rep.); *see* Hr'g Tr. Day 2 Vol. 1 at 72:2-13, 116:18-117:6 (Warshaw).

179. Using his ten-election composite, Dr. Warshaw calculated that Ad Astra 2 exhibits an efficiency gap of -22.5%. PX 105 at 12 tbl.2 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 96:20-25 (Warshaw).[8] This efficiency gap is equivalent to a reduction in Democratic representation of approximately one congressional seat per election, and is "much more extreme" than the efficiency gap exhibited by the 2012 plan (-15.6%). Hr'g Tr. Day 2 Vol. 1 at 97:1-16, 105:10-24 (Warshaw).

180. To place Ad Astra 2's partisan bias in context, Dr. Warshaw compared its efficiency gap to historical data on the efficiency gaps of congressional plans with four or more seats since 1972. PX 105 at 12 & tbl.2 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 97:17-98:25 (Warshaw). This historical data set includes efficiency gaps for 25 election cycles across 48 years, including about 10,000 individual elections. Hr'g Tr. Day 2 Vol. 1 at 98:2-4 (Warshaw).

181. Table 2 of Dr. Warshaw's report, also admitted as Plaintiffs' Exhibit 118, displays the result of this historical comparison:

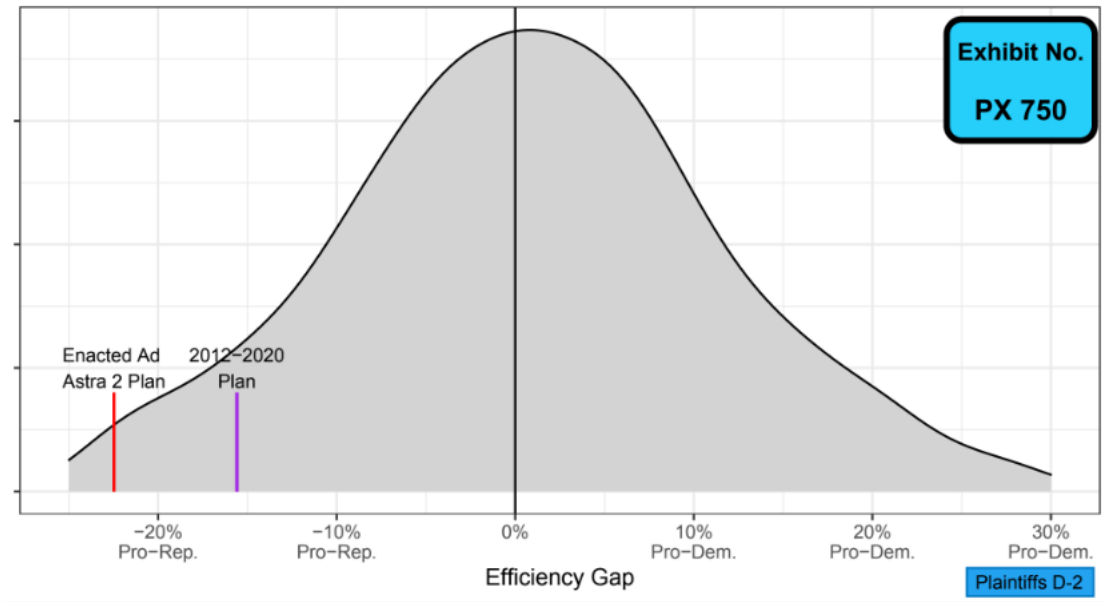
[8] Dr. Chen and Dr. Warshaw reached different efficiency gap numbers because they used slightly different election composites. The Court finds that this difference does not affect the credibility or reliability of their results because each used a consistent approach across their respective analyses.

Metric	Value	2012-2020 Composite > Biased than this % Elections	2012-2020 Composite > Pro-Rep. than this % Elections
2012-2020 plan			
Democratic Vote Share	41%		
Democratic Seat Share	16%		
Efficiency Gap	-15.6%	83%	93%
Enacted Ad Astra 2 plan			
Democratic Vote Share	41%		
Democratic Seat Share	9%		
Efficiency Gap	-22.5%	95%	98%

Table 2: Composite bias metrics for Ad Astra 2 plan based on statewide elections

182. Dr. Warshaw concluded that Ad Astra 2 exhibits more extreme partisan bias, as measured by the efficiency gap, than 95% of historical congressional plans with four or more seats, and is more Republican-favoring than 98% of historical plans. PX 105 at 12 & tbl.2 (Warshaw Rep.); Hr'g Tr. Day 2 Vol. 1 at 98:18-25 (Warshaw).

183. Plaintiffs' Exhibit 750 displays this information in graphical form: the chart compares the efficiency gap exhibited by Ad Astra 2 (marked in red) with the historical distribution of efficiency gaps in states with four or more congressional seats:



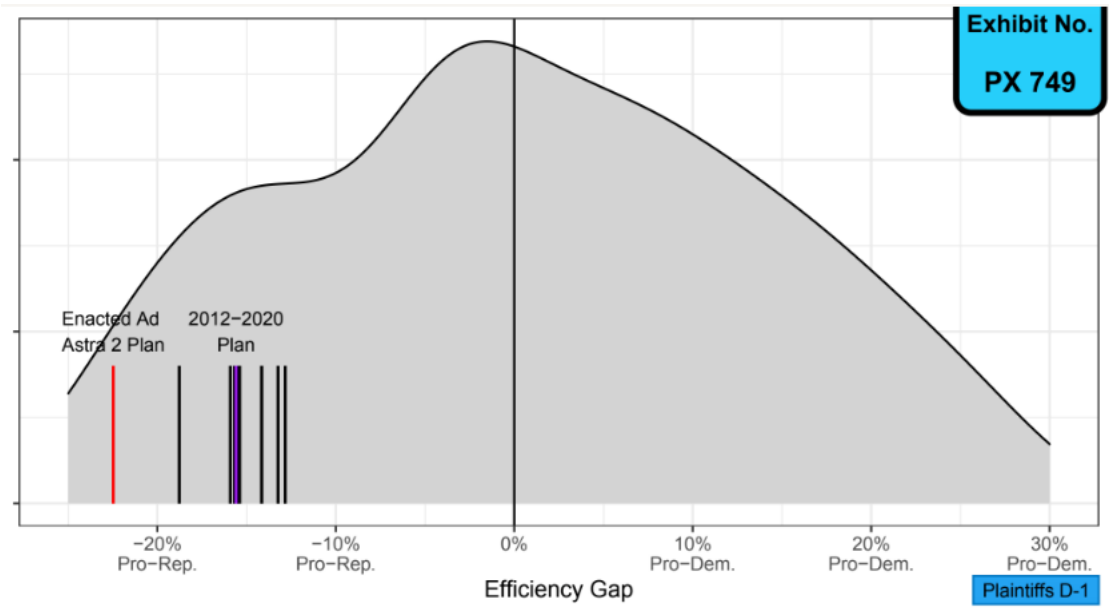
Hr'g Tr. Day 2 Vol. 1 at 101:4-15 (Warshaw).

184. Dr. Warshaw explained that Exhibit 750 shows that the average congressional plan over the past fifty years has had an efficiency gap of about 0%, and most plans fall relatively close to 0%; two-thirds land between -10% and 10%, and only a small fraction exhibit efficiency gaps of over 20%. Hr'g Tr. Day 2 Vol. 1 at 101:17-102:10 (Warshaw). This data demonstrates the "historical extremity" of Ad Astra 2's -22.5% efficiency gap. Hr'g Tr. Day 2 Vol. 1 at 102:5-10 (Warshaw).

185. Dr. Warshaw testified that this historical extremity is corroborated even by PlanScore, an online tool cited by Defendants whose methodology projects relatively elevated Democratic vote shares, *see* Hr'g Tr. Day 2 Vol. 1 at 160:16-161:3, 161:11-162:9 (Warshaw), which classifies Ad Astra 2 as exhibiting more extreme partisan bias than 98% of historical plans, Hr'g Tr. Day 2 Vol. 1 at 207:15-208:1 (Warshaw); *see* PX 746 at 4 (PlanScore evaluation of Ad Astra 2). PlanScore, too, thus marks Ad Astra 2 as "an extreme historical outlier [that] is more skewed than the vast, vast majority of plans in history." Hr'g Tr. Day 2 Vol. 1 at 207:15-08:7 (Warshaw); *see* PX 746 at 4 (PlanScore evaluation of Ad Astra 2).

186. Dr. Warshaw also concluded that Ad Astra 2 remains an extreme historical partisan outlier even when compared only to plans in states with small numbers of congressional districts. Hr'g Tr. Day 2 Vol. 1 at 107:16-108:13, 184:19-185:2 (Warshaw).

187. Plaintiffs' Exhibit 749 compares the efficiency gap of Ad Astra 2 (marked in red) to the historical distribution of efficiency gaps across states with four to seven congressional districts (displayed in gray):



Hr'g Tr. Day 2 Vol. 1 at 107:13-108:13 (Warshaw).

188. Dr. Warshaw testified that Ad Astra 2 exhibits more extreme partisan bias, as measured by the efficiency gap, than 90% to 91% of historical plans in states with 4 to 6 or 4 to 7 congressional seats. Hr'g Tr. Day 2 Vol. 1 at 184:19-185:2 (Warshaw). This figure shows that Ad Astra 2 remains "historically extreme" no matter what seat threshold applies. Hr'g Tr. Day 2 Vol. 1 at 108:7-13 (Warshaw).

189. Dr. Warshaw also concluded that Ad Astra 2's partisan bias, as measured by the efficiency gap, is "much more extreme" than the partisan bias of both the 2012 map and the other plans considered by the Legislature during the redistricting process. Hr'g Tr. Day 2 Vol. 1 at 105:14-24 (Warshaw); *see* PX 105 at 14-15 & fig.9 (Warshaw Rep.).

190. Figure 9 from Dr. Warshaw's report, also admitted as Plaintiffs' Exhibit 114, compares the efficiency gaps of Ad Astra 2 (in red), the 2012 plan (in purple), and other plans considered by the Legislature during the redistricting process (in black):

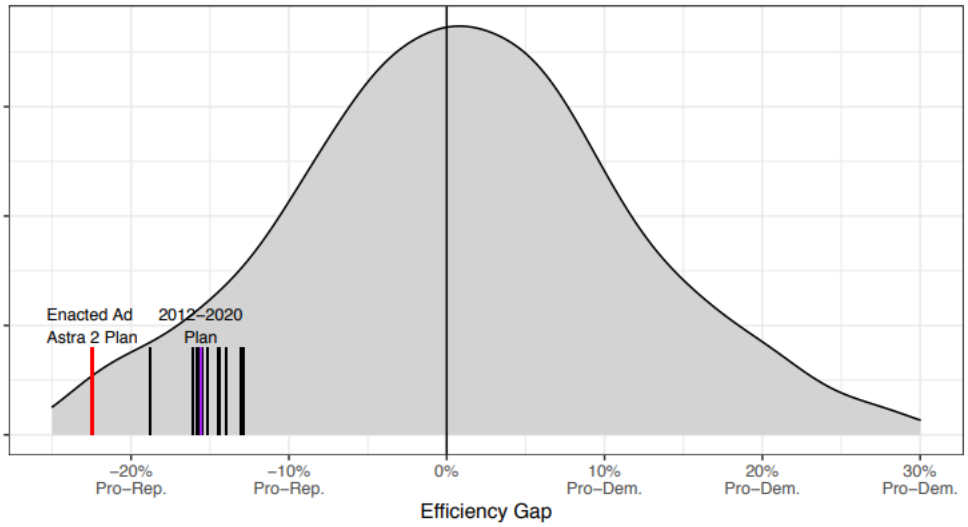


Figure 9: Comparison of efficiency gap on Ad Astra 2 plan, 2012-2020 plan, and other potential plans in Kansas based on composite of statewide elections with other congressional districting plans from 1972-2020 around the country.

Exhibit No.
PX 114

191. Dr. Warshaw concluded that this comparison shows that it is "certainly possible" to draw a Kansas congressional map that does not have the same level of bias as Ad Astra 2. Hr'g Tr. Day 2 Vol. 1 at 105:25-106:4 (Warshaw). In particular, Dr. Warshaw noted that the Mushroom Rock 2 plan considered by the Legislature (included in Figure 9's comparison) kept Johnson County intact within one congressional district, together with most of the Kansas City metro area, but still exhibited a substantially lower efficiency gap than Ad Astra 2. Hr'g Tr. Day 2 Vol. 1 at 105:14-24, 212:3-213:5 (Warshaw). Indeed, Dr. Warshaw testified that Mushroom Rock 2 was not even the most pro-Republican of the proposed, unenacted plans marked in black in Figure 9. Hr'g Tr. Day 2 Vol. 1 at 212:3-9 (Warshaw). This shows that it was possible to avoid splitting Johnson County while enacting a plan with a much less pro-Republican efficiency gap than Ad Astra 2's. Hr'g Tr. Day 2 Vol. 1 at 213:1-5 (Warshaw).

192. Dr. Warshaw further concluded that this comparison also indicates that "the intent of the Legislature appears to have been to draw the most extreme plan among the plans they had available to them." Hr'g Tr. Day 2 Vol. 1 at 106:5-7 (Warshaw).

193. The Court credits Dr. Warshaw's analysis of the partisan bias reflected in Ad Astra 2 as compared to historical congressional plans, and accepts his conclusions. The Court further credits Dr. Warshaw's analysis of the partisan bias reflected in Ad Astra 2 as compared to the 2012 plan and the other plans considered by the Legislature during the redistricting process, and adopts his conclusions. The Court finds that the efficiency gap is a reliable measure of partisan bias in Kansas's congressional plan. The Court further finds that Ad Astra 2 exhibits a historically extreme pro-Republican bias, as measured by the efficiency gap. The Court finds that Dr. Warshaw's analyses provide persuasive evidence that Ad Astra 2's partisan bias was not the result of political geography or, in particular, a desire to keep Johnson County intact. The Court also finds that Ad Astra 2's relatively high level of partisan bias is persuasive evidence that Ad Astra 2 is an intentional, effective partisan gerrymander.

D. Evidence presented by Dr. Patrick Miller demonstrates that Ad Astra 2 is an intentional, effective partisan gerrymander.

194. Dr. Patrick Miller is a tenured associate professor of political science at the University of Kansas. PX 58 at 2 (P. Miller Rep.); Hr'g Tr. Day 2 Vol. 2 at 5:3-4 (P. Miller). In addition to his full-time teaching and researching responsibilities at the University of Kansas ("KU"), Dr. Miller is a policy fellow at the Docking Institute of Public Affairs at Fort Hays State University. PX 58 at 2 (P. Miller Rep.). At both institutions, Dr. Miller teaches courses specifically related to Kansas politics and political geography. PX 58 at 2 (P. Miller Rep.). Dr. Miller also has a specialty in the history of racial discrimination throughout the state, particularly in Wyandotte County, and during his doctoral studies at the University of North Carolina at Chapel Hill, he

completed extensive coursework in quantitative research methodologies. PX 58 at 2-3 (P. Miller Rep.).

195. Dr. Miller has been published more than thirty times in peer-reviewed publications that are among the most prestigious in his field. PX 58 at 75-84 (P. Miller Rep.). Scholars in Dr. Miller's field have cited his published research more than 1,000 times. Hr'g Tr. Day 2 Vol. 2 at 6:14-16 (P. Miller).

196. The Court accepts Dr. Miller in this case as an expert in Kansas politics and the political geography of Kansas as well as in the history of racial discrimination in the state of Kansas. Hr'g Tr. Day 2 Vol. 2 at 8:2-11 (P. Miller). At trial the Court indicated that the testimony of Dr. Miller was relevant and admissible to the claims of both partisan gerrymandering and racial vote dilution. Hr'g Tr. Day 2 Vol. 2 at 3:6-4:18 (P. Miller).

197. Dr. Miller conducted an analysis of Kansas's congressional maps used in elections between 2012 and 2020, as well as the Legislature's recently enacted Ad Astra 2 congressional districting plan. PX 58 at 2 (P. Miller Rep.). Dr. Miller gathered Kansas's census data from the past 60 years and employed quantitative as well as qualitative methods. *See generally* PX 58 (P. Miller Rep.).

198. Based on his comprehensive and thorough analysis, Dr. Miller concluded that Ad Astra 2 constitutes a partisan gerrymander. *See generally* PX 58 (P. Miller Rep.).

199. After reviewing all statewide elections in Kansas from 2012 to 2020, Dr. Miller concluded that Kansas is not the Republican stronghold it once was. Hr'g Tr. Day 2 Vol. 2 at 10:9-13:8 (P. Miller). While Republicans still garner a majority of the statewide vote, the number of Democratic voters has grown dramatically over the last decade and now constitutes 40 percent of the state's electorate. Hr'g Tr. Day 2 Vol. 2 at 13:9-14:2 (P. Miller).

200. At the same time, support for each party is increasingly geographically segregated; Democrats tend to cluster in urban and suburban areas of the state while Republicans increasingly find their base in the state's rural and exurban areas. Hr'g Tr. Day 2 Vol. 2 at 13:9-14:2 (P. Miller). These trends have only accelerated in the last decade according to U.S. Census Bureau data and official election returns from the Kansas Secretary of State. Hr'g Tr. Day 2 Vol. 2 at 13:9-14:2 (P. Miller).

Map 1. County-Level Results, Kansas Gubernatorial Elections, 2002-2018

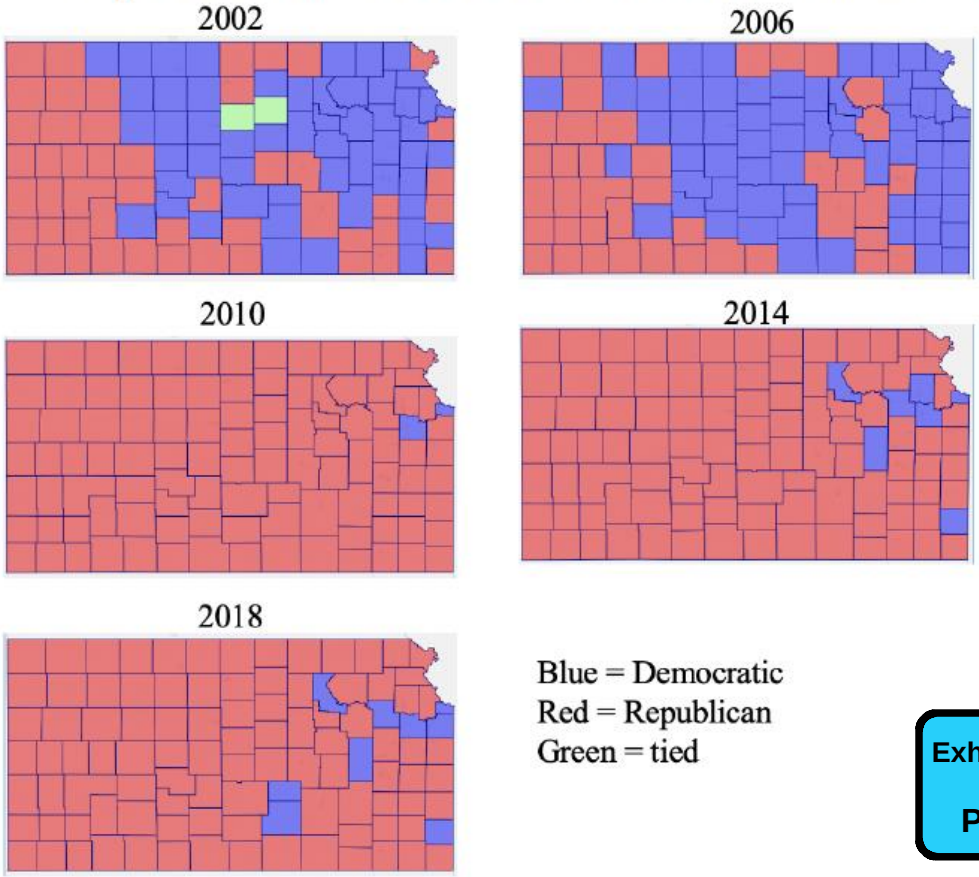


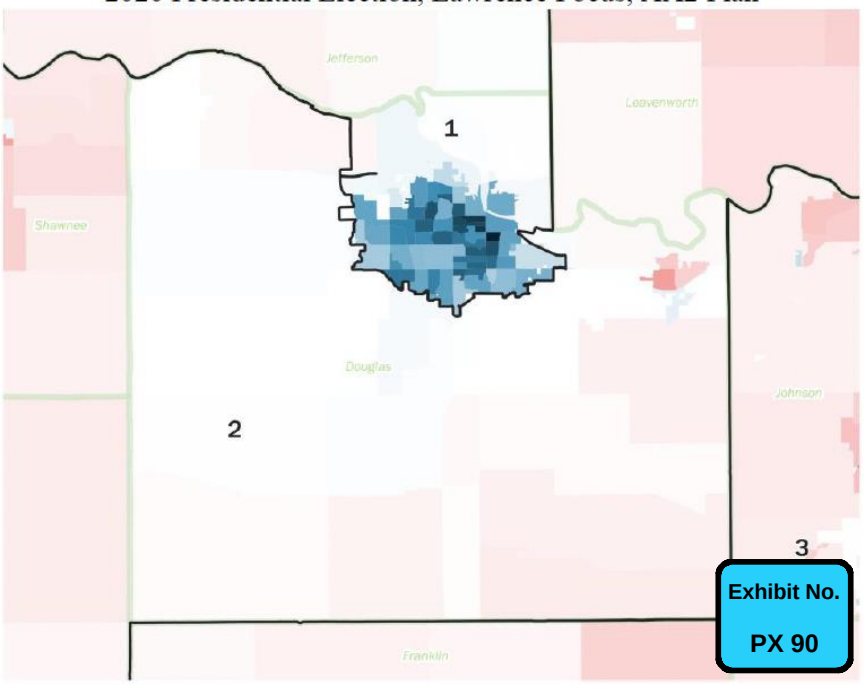
Exhibit No.
PX 59

201. Based on these trends, Dr. Miller explained that Democrats are capable of winning statewide offices in Kansas. Of the last five elections for Governor of Kansas, Democrats have prevailed in three contests: in 2002, 2006, and 2018. PX 58 at 6-8 (P. Miller Rep.); PX 61 (P.

Miller Map 3); PX 62 (P. Miller Map 4). Dr. Miller's analysis further confirms that the Legislature created a congressional plan that leans overwhelmingly Republican.

202. *First*, Dr. Miller convincingly showed that Ad Astra 2 carefully scoops the densely populated Democratic stronghold of Lawrence out of Douglas County and CD 2 and places it in the Big First to strengthen the state's Republican advantage. Hr'g Tr. Day 2 Vol. 2 at 50:7-51:19 (P. Miller). The Lawrence "scoop" is depicted in the map below.

Map 32. Two-Party Vote Margin Per Acre by Precinct, 2020 Presidential Election, Lawrence Focus, AA2 Plan



203. This move has two effects: After losing Lawrence, CD 2 "leans so strongly Republican that the votes of Democratic-leaning and minority residents from Wyandotte are diluted to practical electoral irrelevance." PX 58 at 4 (P. Miller Rep.); *see also* Hr'g Tr. Day 2 Vol. 2 at 47:12-48:4 (P. Miller). Dr. Miller determined that "CD2 would not be a credibly competitive district in congressional races for the next decade." PX 58 at 54 (P. Miller Rep.). As for Lawrence itself, Ad Astra 2 drowns the city's Democratic voters in the overwhelmingly Republican Big First,

leaving them with effectively no opportunity to influence the district's electoral outcomes. PX 58 at 62 (P. Miller Rep.).

204. *Second*, Dr. Miller concluded that separating northern Wyandotte County from CD 3 renders that district significantly more Republican and dilutes the votes of Democratic voters "who remain in CD3," "mak[ing] the plan unrepresentative of the overall partisan composition of Kansas." PX 58 at 36-41 (P. Miller Rep.). Indeed, under Ad Astra 2, the Republican advantage in CD 3 increases from 1.0% to 6.6% averaged across elections between 2012 and 2020. PX 58 at 36-37 (P. Miller Rep.). The Wyandotte split was shown by Dr. Miller in the two maps below:

Map 19. Two-Party Vote Margin Per Acre by Precinct,
2020 Presidential Election, CD3 Focus, 2012 Plan

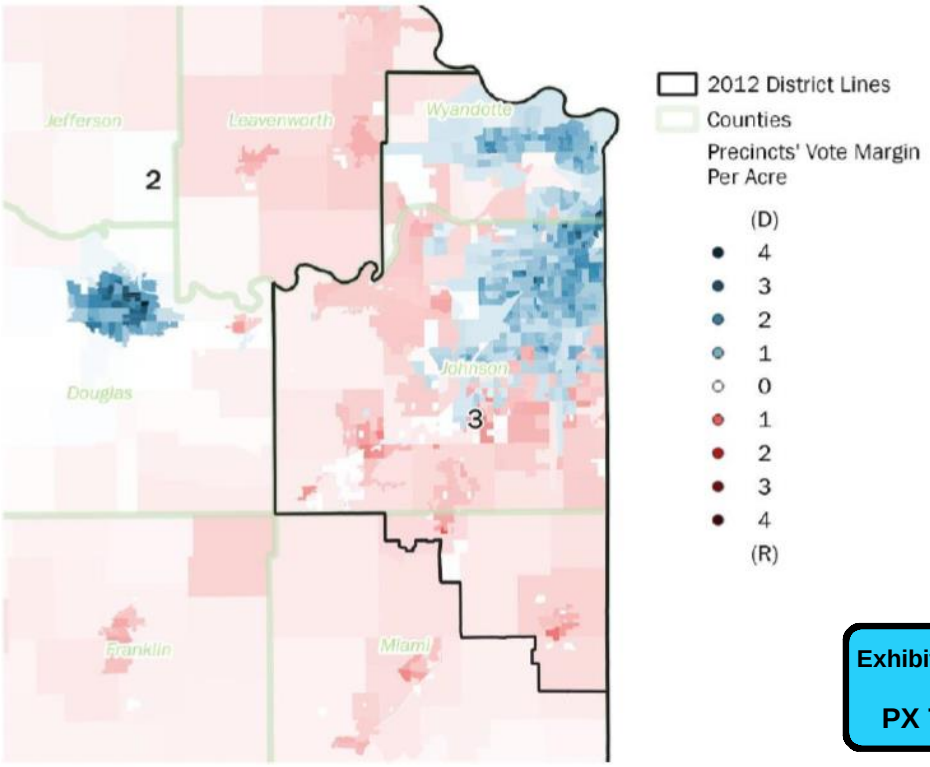


Exhibit No.
PX 77

Map 21. Two-Party Vote Margin Per Acre by Precinct,
2020 Presidential Election, CD3 Focus, AA2 Plan

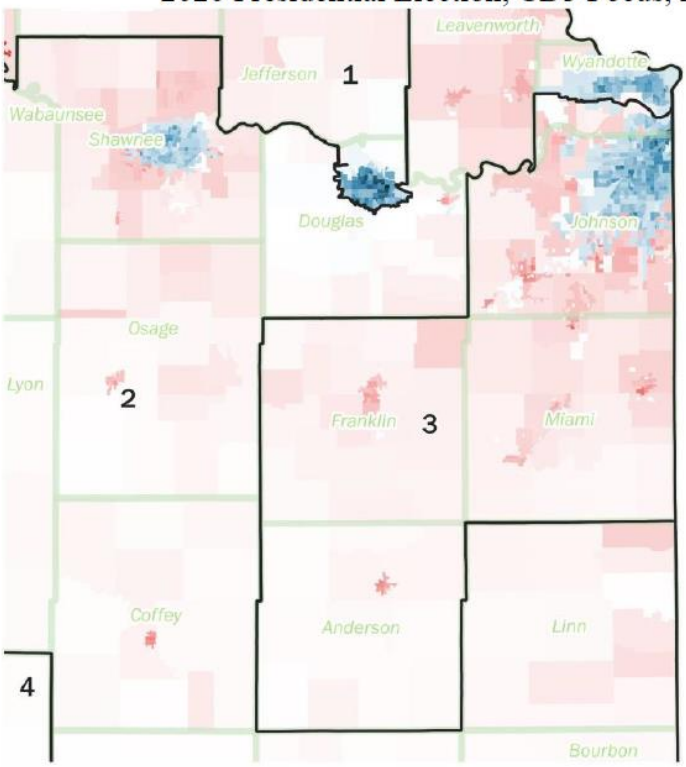


Exhibit No.
PX 79

205. *Third*, Dr. Miller testified that enacted CDs 1 and 4 are "strongly and safely Republican" districts, both of which contain overwhelming Republican majorities. PX 58 at 62, 68 (P. Miller Rep.); *see also* Hr'g Tr. Day 2 Vol. 2 at 16:22-17:15 (P. Miller).

206. In sum, Dr. Miller concluded that Ad Astra 2 "is not a result of natural packing or geographic clustering, as those factors should actually facilitate . . . a fair partisan map given partisan voting trends in Kansas and how the population is distributed." PX 58 at 70 (P. Miller Rep.). Instead, an analysis of Ad Astra 2 reveals that its "lines benefit the Republican Party, at the expense of minority Kansas, communities of interest, partisan fairness," and the traditional redistricting standards reflected in the Guidelines. PX 58 at 70 (P. Miller Rep.).

207. The Court finds Dr. Miller's analysis sound and convincing and concludes, as it has done with respect to Plaintiffs' other experts, that Ad Astra 2 was drawn intentionally and successfully to benefit Republican candidates and voters. During Dr. Miller's live testimony, the

Court carefully observed his demeanor, particularly as he was cross-examined for the first time about his work on this case. He consistently defended his work with careful and deliberate explanations of the bases for his opinions.

E. Evidence presented by Dr. Michael Smith demonstrates that Ad Astra 2 is an intentional, effective partisan gerrymander.

208. Plaintiffs' expert Dr. Michael A. Smith, Ph.D, is a tenured Professor of Political Science and Chair of the Department of Social Sciences, Sociology, and Criminology at Emporia State University. PX 135 at 2 (Smith Rep.); Hr'g Tr. Day 3 Vol. 1 at 8:10-15 (Smith)

209. Dr. Smith's research focuses on state and local politics, including campaigns and elections, election laws, and political history, with particular focus on Kansas and Missouri. Hr'g Tr. Day 3 Vol. 1 at 8:23-9:6 (Smith). Dr. Smith has published journal articles and four books on these topics. PX 135 at 2 (Smith Rep.); Hr'g Tr. Day 3 Vol. 1 at 9:17-10:20 (Smith).

210. The Court accepts Dr. Smith in this case as an expert in Kansas politics and elections and the history thereof.

211. Dr. Smith testified that the Legislature's split of Lawrence from Douglas County could not be explained by neutral redistricting criteria and had the effect of diluting the votes of Democratic voters in the region. PX 135 at 1 (Smith Rep.).

212. Dr. Smith explained that over the last three decades, at "no point was any portion of Lawrence or Douglas County ever located in the Big First, which is centered in the rural, western and central parts of the state." PX 135 at 3-4 (Smith Rep.). Ad Astra 2, however, "scooped" Lawrence out of Douglas County and placed it into the Big First, Hr'g Tr. Day 3 Vol. 1 at 22:16-23:9 (Smith)—a decision, Dr. Smith concluded, that could not be explained by compliance with the Guidelines, *see* PX 135 at 6-10 (Smith Rep.) (summarizing Ad Astra 2's deviations from traditional redistricting principles); Hr'g Tr. Day 3 Vol. 1 at 22:16-26:4 (Smith) (discussing

communities of interest); Hr'g Tr. Day 3 Vol. 1 at 26:5-28:4 (Smith) (discussing districts' odd shapes); Hr'g Tr. Day 3 Vol. 1 at 19:11-15, 27:25-30:14 (Smith) (discussing changes to past district boundaries and unnecessary transfer of Kansans between districts).

213. Indeed, Dr. Smith stated that Ad Astra 2's configuration of CD 2 scored poorly on the Polsby-Popper compactness measure, which is "an indication of gerrymandering." PX 135 at 8 (Smith Rep.). Moreover, Dr. Smith explained that Ad Astra 2 fails to abide by the Guidelines' instruction that communities of interest and the cores of existing districts should be kept whole. By severing Lawrence from Douglas County, Ad Astra 2 "divides Douglas County, which is a community of interest," PX 135 at 9 (Smith Rep.), and dismantled the "core" of the prior configuration of CD 2, which comprised all of Douglas and Shawnee Counties, PX 135 at 10 (Smith Rep.).

214. On this last point, Dr. Smith also testified that Ad Astra 2 unnecessarily transferred population from Douglas County to the Big First. Hr'g Tr. Day 3 Vol. 1 at 28:5-29:24 (Smith). To achieve population equality, the 2020 census required the Legislature to add 33,855 residents to the Big First. But the population of Lawrence is 94,934, roughly *three times* the number of residents needed to balance CD 1. PX 135 at 11 (Smith Rep.). The Legislature did not need to make this decision; as Dr. Smith testified, "there [were] a number of different ways the Big First could have been redrawn to add an additional 33,000 votes" without splitting Lawrence from Douglas County and while remaining compliant with traditional redistricting factors. Hr'g Tr. Day 3 Vol. 1 at 30:3-14 (Smith).

215. The effects of this unnecessary decision are devastating for Lawrence's overwhelmingly Democratic population. Dr. Smith testified that Ad Astra 2 places Lawrence into "one of the most Republican districts in the United States." Hr'g Tr. Day 3 Vol. 1 at 22:16-23:9

(Smith); *see also* PX 135 at 12 (Smith Rep.). Until now, Lawrence's 72.9% Democratic population resided in CD 2, which has a 41%-54.3% Democratic-Republican split. PX 135 at 12 (Smith Rep.). Although CD 2 has not elected a Democrat, elections in the district have been competitive, making CD 2 a "lean Republican" rather than a "safe Republican" district. PX 135 at 12 (Smith Rep.). Ad Astra 2 dilutes the vote of Lawrence's overwhelmingly Democratic population by placing it in the Big First, which has significantly fewer Democratic voters and is therefore a "safe Republican" district. PX 135 at 12 (Smith Rep.).

216. Dr. Smith explained that the consequences of Ad Astra 2's reconfiguration of Lawrence will negatively affect political outcomes for Democratic voters in the city. Because CD 2 is not a safe Republican district, it has hosted "heavily-contested elections featuring experienced Democratic candidates who conducted extensive fundraising and mounted strong campaigns, including voter registration and get-out-the-vote efforts in Lawrence and Douglas County." PX 135 at 12-13 (Smith Rep.). These campaigns have had significant voter engagement effects. PX 135 at 13-14 (Smith Rep.); Hr'g Tr. Day 2 Vol. 1 at 31:18-20 (Smith). Even when well-funded candidates lose, "their campaigns help energize voters, boost turnout, and recruit volunteers" and "can also lead to a culture of participation and volunteerism from which future candidates may be recruited." PX 135 at 14 (Smith Rep.). These close races and the attention CD 2 enjoys as a result "helped motivate, register, and turn out [Democratic] voters and volunteers" in Lawrence. PX 135 at 14 (Smith Rep.). Dr. Smith testified that "[t]he redrawing of Lawrence into a noncompetitive district is predicted to suppress voter turnout and other forms of political activity" by eliminating the residents of Lawrence's belief "that their candidates have any realistic chance of winning an election." PX 135 at 14 (Smith Rep.). Dr. Smith put it sharply in court: By placing Lawrence in the Big First, the Legislature "disincentiv[izes]" Democratic "voter mobilization, voter

registration, voter turnout, fundraising, all of the activities that build a political base because the election would not be competitive." Hr'g Tr. Day 3 Vol. 1 at 32:1-32:9 (Smith).

217. The Court credits Dr. Smith's expert testimony and finds that it supports the foregoing expert evidence demonstrating the Legislature's partisan intent and the pro-Republican effect Ad Astra 2 will have, particularly with respect to CD 2 and the City of Lawrence. During Dr. Smith's live testimony, the Court carefully observed his demeanor, particularly as he was cross-examined for the first time about his work on this case. He consistently defended his work with careful and deliberate explanations of the bases for his opinions.

F. Evidence presented by Plaintiffs' fact and expert witnesses demonstrates that Ad Astra 2 disregards communities of interest in support of partisan gains.

218. The testimony of Plaintiffs' fact witnesses establishes that Ad Astra 2 runs roughshod over communities of interest for the purpose of securing maximum Republican advantage. In so doing, Ad Astra 2 pairs together geographically disparate communities that share little in common.

219. First, Ad Astra 2 breaks up the Kansas City metro area. Witnesses at trial were in accord that the Kansas side of the Kansas City metro area constitutes a community of interest. Hr'g Tr. Day 1 Vol. 2 Hr'g Tr. Day 1 Vol. 2 at 225:21-226:6 (Corson); Hr'g Tr. Day 2 Vol. 1 at 16:9-17:5 (Burroughs); Hr'g Tr. Day 2 Vol. 1 at 48:8-18 (Edwards). Witnesses described this area as consisting of Wyandotte County and the suburban and urban areas in the northeastern portion of Johnson County. These communities share a great deal in common, with strong overlaps in their "business sector, . . . healthcare facilities," "transportation, water, and social services," not to mention the many "people who live in Johnson County and work in Wyandotte County." Hr'g Tr. Day 1 Vol. 2 at 225:21-226:6 (Corson); *see also* Hr'g Tr. Day 2 Vol. 1 at 16:17-21 (Burroughs)

(testifying that the areas "share major hospitals" as well as "transportation corridors," and noting the "sundown community" that lives in Johnson but works in Wyandotte). In fact, 80% of the educators in Kansas City, Kansas public schools live in Johnson County. Hr'g Tr. Day 2 Vol. 1 at 48:10-18. (Edwards). Additionally, because Wyandotte County does not have a grocery chain, residents are heavily reliant on surrounding communities, including neighboring Johnson County, for groceries. Hr'g Tr. Day 2 Vol. 1 at 47:12-48:7 (Edwards).

220. Expert testimony similarly confirmed that the Kansas City metro area is a community of interest. In discussing the previous congressional plan, Dr. Patrick Miller testified that the former CD 3 reflects the community of interest of the Kansas City metro area, taking account of "all the ways those . . . communities are interrelated." Hr'g Tr. Day 2 Vol. 2 at 27:21-28:5 (P. Miller). Focusing on Wyandotte County in particular, Dr. Rodden confirmed that the county constitutes not only a community of interest, but also a single "political and social and economic unit[]" given Wyandotte's unified county and city government. Hr'g Tr. Day 1 Vol. 2 at 25:14-25 (Rodden). When a congressional map splits Wyandotte County, it "split[s] an important American city right down the middle." Hr'g Tr. Day 1 Vol. 2 at 26:25-27:2 (Rodden). It was for this reason that Dr. Rodden considered "a starting point" for any plan he drafted to "keep Kansas City and Wyandotte together"; it simply "would not have occurred to [him]" to split Wyandotte. Hr'g Tr. Day 1 Vol. 2 at 26:25-27:9 (Rodden).

221. Despite these significant ties within the Kansas City metro area, Ad Astra 2 splits the region in two, dividing Wyandotte County along I-70 and the Kansas River. The result is that major portions of the greater Kansas City area—including the Legends shopping area, Kansas Speedway, KC Park, and Hollywood Casino—are now in CD 2. Hr'g Tr. Day 1 Vol. 2 at 226:20-227:2 (Corson); Hr'g Tr. Day 2 Vol. 1 at 42:17-22 (Edwards). By splitting Wyandotte County

alone, Ad Astra 2 divides a county that has had a unified county and city government since 1997. Hr'g Tr. Day 2 Vol. 1 at 41:3-10 (Edwards). It also takes the portion of Wyandotte County that "historically has been disinvested" and separates it from the remainder of the Greater Kansas City area. Hr'g Tr. Day 2 Vol. 1 at 52:7-10 (Edwards). Mildred Edwards, the chief of staff to the Mayor of the Unified Government of Wyandotte County and Kansas City, Kansas, testified that dividing Wyandotte County in this manner is likely to make it more difficult for the city/county government to advocate for federal funds, since a portion of the county will now be represented by a member of Congress with whom the Wyandotte County unified government has no relationship. Hr'g Tr. Day 2 Vol. 1 at 49:12-20 (Edwards).

222. Additionally, Ad Astra 2 splits the City of Lawrence from the remainder of Douglas County. This is despite the fact that Douglas County has a "joint health department between the city of Lawrence and Douglas County," as well as a "joint city, county, planning commission because [Douglas does] planning from a countywide perspective." Hr'g Tr. Day 2 Vol. 2 at 110:14-20 (Portillo). In her capacity as a Douglas County Commissioner, witness Shannon Portillo represents a district that is now split by Ad Astra 2. Hr'g Tr. Day 2 Vol. 2 at 109:1-7 (Portillo). Portillo testified that the issues on which she advocates are not Lawrence-specific; she handles issues that are countywide. Hr'g Tr. Day 2 Vol. 2 at 110:9-13 (Portillo). Nonetheless, Lawrence and the remainder of Douglas County are now in separate districts.

223. In addition to carving up communities with significant commonality, Ad Astra 2 pairs several far-flung communities that share little in common. In CD 3, as discussed, Ad Astra 2 splits Wyandotte County and pairs its southern portion with Johnson, Miami, Franklin, and Anderson Counties. As a result, a large chunk of the Kansas City metro area is now paired with rural areas in southern Johnson County, as well as Miami, Franklin, and Anderson Counties.

Senator Corson, who represents northeast Johnson County, testified that Kansans live in Miami, Franklin, and Anderson Counties precisely because they "don't really prioritize being part of the Kansas City metro and don't see themselves that way," and prefer instead "a more rural way of life." Hr'g Tr. Day 1 Vol. 2 at 228:11-20 (Corson).

224. On the other side of the divide between CD 2 and CD 3, the pairings are even more confounding. In CD 2, Ad Astra 2 pairs the portion of Wyandotte County that is north of I-70 with a wide array of counties, stretching from the northeast to southeast corner of the state, and westward out to Marion County. Dr. Edwards testified that residents of northern Wyandotte County share "nothing" in common with other communities in CD 2. Hr'g Tr. Day 2 Vol. 1 at 51:5-14 (Edwards).

225. Likewise, Ad Astra 2 places urban Lawrence into the very rural CD 1, which includes counties along the entire Colorado border as well as a large portion of the Oklahoma border. As Dr. Portillo testified, "we're all Kansans, . . . but I don't think there's a unique kind of cultural relationship between the 1st Congressional District and the city of Lawrence." Hr'g Tr. Day 2 Vol. 2 at 113:2-5 (Portillo).

226. The Court credits this testimony from numerous fact and expert witnesses for Plaintiffs and finds it persuasive evidence that the Ad Astra 2 map subordinated communities of interest for partisan gains. In particular, the Court finds that this evidence bolsters the empirical and mathematical findings made by Plaintiffs' experts.

G. Although Former Senate President Susan Wagle was not in the Legislature when Ad Astra 2 was enacted, her comments regarding partisan intent provide additional support for the overwhelming evidence that Ad Astra 2 is an intentional, effective partisan gerrymander.

227. The Court notes that in enacting a partisan gerrymander, Republican legislators delivered on a campaign promise made by former Senate President Susan Wagle. Shortly before

the 2020 election, then-Senate President Wagle told a group of Republican activists and donors that Republican legislators could produce a congressional plan "that takes out Sharice Davids up in the third." PX 150; see Hr'g Tr. Day 1 Vol. 2 at 218:11-219:17 (Corson). She boasted: "[W]e can do that. I guarantee you we can draw four Republican congressional maps. But we can't do it unless we have a two-thirds majority in the Senate and House." PX 150; *see* Hr'g Tr. Day 1 Vol. 2 at 218:11-219:17 (Corson).

228. Although Wagle left the Legislature prior to the current redistricting cycle, Senator Corson offered unrebutted testimony that the Senate President serves as the leader of her party; that many current Republican legislators worked with Wagle; and that it is "overwhelmingly likely" that as leader of the Republican caucus, she communicated her policy preferences regarding redistricting to other members of her caucus. Hr'g Tr. Day 1 Vol. 2 at 259:11-260:5, 260:22-261:14 (Corson).

229. Republican legislators seemed to have gotten the message. Despite repeated warnings during floor debates that Ad Astra 2 was unduly partisan and diluted minority votes, *see, e.g.*, PX 172 at 16:6-9, 18:7-12, 19:10-18, 26:16-21, 27:19-28:11, 29:7-15, 30:8-14, 30:18-22, 32:2-10, 32:19-21, 33:19-19-34:2, 36:1-15, 37:8-18, 37:20-25, 38:4-14, 39:15-21, 45:10-15, 54:22-25, 55:2-10, 56:8-10, 89:14-18, 106:6-13 (House debate); PX 169 at 23:1-25:13, 26:3-18, 27:12-28:22, 46:16-47:6, 68:9-74:13, 75:8-78:9, 128:4-134:7, 141:2-19 (Senate debate), Republican legislators still voted in support.

III. Ad Astra 2 intentionally and effectively dilutes the voting power of Wyandotte County's minority communities.

230. Using distinct evidence and analyses, the analysis of three of Plaintiffs' experts—Drs. Rodden, Collingwood, and Chen—shows that Ad Astra 2 intentionally and successfully dilutes the votes of minority voters in Wyandotte County and northern Johnson County.

A. Evidence presented by Dr. Jonathan Rodden demonstrates that Ad Astra 2 intentionally and effectively dilutes minority votes.

231. As discussed above, Dr. Rodden analyzed the racial implications of Ad Astra 2. *See supra* FOF § II.B. Without restating the details of his analyses, in brief, Dr. Rodden found that racial minorities were moved among districts far more often than white Kansans and that they were divided between districts in a way that contravenes Kansas's racial geography and dilutes minority voting strength.

232. For example, Dr. Rodden testified that under Ad Astra 2, minority Kansans were shifted among districts at rates much higher than the overall population. While Ad Astra 2 kept about 86% of all Kansans in the same districts, it kept just 75% of Black Kansans, 83% of Hispanic Kansans, and 79% of Native American Kansans in their former districts. *See* PX 1 at 26 tbl.3 (Rodden Rep.).

Table 3: Core Preservation in the Enacted Plan and Illustrative Plans as Compared to Prior Plan

	Enacted Plan	Least Change Plan	Community of Interest Plan
Share of **total** population in the same district	86.46%	96.68%	83.39%
Share of **Black** population in the same district	74.88%	99.04%	88.39%
Share of **Hispanic** population in the same district	83.22%	98.47%	90.03%
Share of **Native American** population in the same district	79.44%	98.50%	81.97%

233. Dr. Rodden's racial dislocation analysis confirmed that the nature of the movement of minority Kansans served to crack those communities among districts, such that minority voters

as a whole and individual minority groups were placed in districts that do not match the racial composition of their neighborhoods. *See supra* FOF § II.B. Minority Kansans were consistently divided and placed in districts that are far less diverse than would be expected under a neutral map-drawing process. *See supra* FOF § II.B.

234. The Court credits Dr. Rodden's testimony on the racial consequences of Ad Astra 2 and concludes that it was enacted intentionally and effectively to diminish the electoral influence of minority voters in the state.

B. Evidence presented by Dr. Loren Collingwood demonstrates that Ad Astra 2 intentionally and effectively dilutes minority votes.

235. Dr. Loren Collingwood, Ph.D., is an Associate Professor in the Department of Political Science at the University of New Mexico and the founder of Collingwood Research LLC, a research organization that conducts statistical and demographic analysis of political data for a variety of clients. PX 122 at 2 (Collingwood Rep). Dr. Collingwood has "published two books with Oxford University Press, 39 peer-reviewed journal articles, and nearly a dozen book chapters focusing on sanctuary cities, race/ethnic politics, election administration, and racially polarized voting." PX 122 at 2 (Collingwood Rep). Within the field of American politics, Dr. Collingwood conducts research and teaches in the areas of political behavior, voting behavior, political methodology, applied statistics, and racially polarized voting ("RPV"). Hr'g Tr. Day 3 Vol. 1 at 68:2-7 (Collingwood).

236. Dr. Collingwood has extensive experience in redistricting litigation, having testified on behalf of parties challenging redistricting plans drawn by both the Republican and Democratic parties. Hr'g Tr. Day 3 Vol. 1 at 74:20-75:2 (Collingwood). Dr. Collingwood has been retained in at least five other redistricting cases to offer analysis of RPV specifically and racial voting patterns more broadly. PX 122 at 2 (Collingwood Rep.). Courts have consistently credited

Dr. Collingwood's work in these cases. Hr'g Tr. Day 3 Vol. 1 at 70:12-17, 96:13-16 (Collingwood).

237. The Court accepts Dr. Collingwood as an expert in American politics, with particular expertise in voting behavior, race and ethnicity, RPV, and political methodology. Hr'g Tr. Day 3 Vol. 1 at 75:13-20 (Collingwood).

238. Dr. Collingwood analyzed the 2012 congressional plan and Ad Astra 2 to determine whether RPV exists in CDs 2 and 3 and to assess whether Ad Astra 2 dilutes the votes of racial minorities. "Racially polarized voting" is a technical term used to describe an electoral environment in which "a majority of voters belonging to one racial/ethnic group vote for one candidate and a majority of voters who belong to another racial/ethnic group prefer the other candidate." PX 122 at 3 (Collingwood Rep.); Hr'g Tr. Day 3 Vol. 1 at 68:19-69:8 (Collingwood). As the term RPV is used in Dr. Collingwood's analysis, and in this Court's findings, RPV is an observable fact—not a legal conclusion or standard. Hr'g Tr. Day 3 Vol. 1 at 138:13-139:2 (Collingwood).

239. Dr. Collingwood's RPV analysis relies on aggregating demographic data from U.S. Census data through a method known as "ecological inference." PX 122 at 3 (Collingwood Rep.); Hr'g Tr. Day 3 Vol. 1 at 69:12-80:15 (Collingwood). Defendants assail the reliability of the ecological inference method by invoking an article authored by Dr. Collingwood and others entitled "eiCompare: Comparing Ecological Inference Estimates across EI and EI:R×C." *See* Hr'g Tr. Day 3 Vol. 1 at 61:12-62:17, 106:8-110:21 (Collingwood); DX 1068 (Collingwood article). As counsel for Defendants emphasized during cross-examination of Dr. Collingwood, the article states, in part, that "[e]cological inference is a widely debated methodology" that "has come under fire for being unreliable, especially in the fields of biological sciences, ecology, epidemiology,

public health and many social sciences." DX 1068 at 1 (Collingwood article); *see* Hr'g Tr. Day 3 Vol. 1 at 105:8-110:8 (Collingwood). The article also notes that the "challenges surrounding ecological inference are well documented." DX 1068 at 2 (Collingwood article).

240. What Defendants' counsel did not emphasize, however, is the article's explanation that "within the narrow subfield of racial voting patterns in American elections ecological inference is regularly used" and that the "American Constitution Society for Law and Policy explains that ecological inference is one of the three statistical analyses that must be performed in voting rights research on racial voting patterns." DX 1068 at 1 (Collingwood article); *see* Hr'g Tr. Day 3 Vol. 1 at 61:12-62:17, 71:3-74:8, 105:8-110:8 (Collingwood). Dr. Collingwood specifically testified that questioning the reliability of ecological inference in the field of American politics was not the purpose of the article, Hr'g Tr. Day 3 Vol. 1 at 73:16-74:4 (Collingwood); that ecological inference is the "go-to standard" in assessing RPV, Hr'g Tr. Day 3 Vol. 1 at 71:19-72:5 (Collingwood); and that it is "definitely" a reliable methodology in that context, Hr'g Tr. Day 3 Vol. 1 at 71:19-72:5 (Collingwood). Dr. Collingwood also testified that he has used ecological inference to produce reports and testimony in other redistricting cases and that courts have accepted and credited his testimony in those cases. Hr'g Tr. Day 3 Vol. 1 at 70:12-17 (Collingwood). Furthermore, Defendants' own expert, Dr. Alford, agreed that ecological inference is "by far the most widely used technique" in the field, and indeed that it is the "gold standard" for analyzing RPV. Hr'g Tr. Day 4 Vol. 1 at 21:21-25 (Alford). Based on this testimony, and Defendants' inability to point to any case or academic source questioning the reliability of ecological inference in the field of American politics, the Court finds that ecological inference is a reliable and accurate method for analyzing RPV and racial vote dilution and that Dr. Collingwood used the method reliably. Hr'g Tr. Day 3 Vol. 1 at 66:4-19, 75:11-22 (Collingwood). Using RPV

data, derived from ecological inference analysis, the Court can reliably analyze racial voting patterns in districting plans, including in Ad Astra 2.

241. Dr. Collingwood evaluated RPV by considering nine statewide elections that took place in Kansas between 2016 and 2020.[9] Hr'g Tr. Day 3 Vol. 1 at 80:20-81:4 (Collingwood); PX 122 at 3-4 (Collingwood Rep.). Throughout the trial, Defendants criticized Plaintiffs' experts for relying on statewide election results, or "exogenous elections," rather than results from congressional elections carried out in the relevant districts themselves, or "endogenous elections," based one paragraph of a law review article about partisan (not racial) gerrymandering. *See, e.g.*, Hr'g Tr. Day 1 Vol. 2 at 99:25-108:2 (Rodden). Dr. Collingwood testified, however, that the use of statewide elections is necessary to provide constant and consistent results in an environment where particular congressional districts (for example, CD 3), cover different geographic areas and sets of voters between plans (for example, between the 2012 congressional plan and Ad Astra 2). Hr'g Tr. Day 3 Vol. 1 at 81:6-22 (Collingwood). Using statewide election results, he continued, is "extremely common" in analyzing racial voting patterns and is a "reliable indicator[] of future voting patterns." Hr'g Tr. Day 3 Vol. 1 at 81:23-82:3, 96:3-9 (Collingwood). Furthermore, Dr. Collingwood testified that "the most proximate round of elections," which his report used, is "generally going to be the most appropriate" to "get an understanding of how the electorate is now and how it's going to be in the next couple years." Hr'g Tr. Day 3 Vol. 1 at 82:6-14 (Collingwood). The Court finds that the statewide election results Dr. Collingwood relied upon are a proper dataset for analyzing RPV.

[9] One sentence in Dr. Collingwood's report misstates that he analyzed ten statewide elections. PX 122 at 3 (Collingwood Rep.). Dr. Collingwood testified, and the Court accepts, that this was a typographical error that has no bearing on the weight of his testimony. Hr'g Tr. Day 3 Vol. 1 at 80:20-81:4 (Collingwood).

242. The set of statewide elections upon which Dr. Collingwood's RPV analysis relies is produced in Table 1 of his report and replicated in Plaintiffs' Exhibit 131:

Table 1 List of contests analyzed between 2016-2020. The columns list the year, the candidate names, and whether minorities voted cohesively.

Year	Contest	Dem Candidate	GOP Candidate	2012 CD3 POC Cohesion	Enacted CD3 POC Cohesion	Enacted CD2 POC Cohesion
2020	President	Biden	Trump	YES	YES	YES
2020	U.S. Senate	Bollier	Marshall	YES	YES	YES
2018	Governor	Kelly/Rogers	Koback/Hartman	YES	YES	YES
2018	Secretary of State	McClendon	Schwab	YES	YES	YES
2018	Attorney General	Swain	D. Schmidt	YES	YES	YES
2018	Treasurer	Francisco	LaTurner	YES	YES	YES
2018	Insurance Commissioner	McLaughlin	V. Schmidt	YES	YES	YES
2016	President	Clinton	Trump	YES	YES	YES
2016	U.S. Senate	Wiesner	Moran	YES	YES	YES

Exhibit No.
PX 131

243. Using this data, Dr. Collingwood analyzed whether RPV existed in three distinct electoral environments: CD 3 under the 2012 congressional plan, CD 2 under Ad Astra 2, and CD 3 under Ad Astra 2. He set the confidence interval throughout his analysis to 95%, which is the generally accepted standard in the field, and which the Court finds appropriate here. Hr'g Tr. Day 3 Vol. 1 at 90:22-93:25 (Collingwood).

244. First, Dr. Collingwood analyzed RPV in CD 3 under the 2012 congressional plan, which is depicted in Figure 1 of his report. PX 122 at 4-5 & fig.1 (Collingwood Rep.). Figure 1 contains two columns and nine rows, with four horizontal bars presented at the intersection of each row and each column. PX 122 at 4-5 & fig.1 (Collingwood Rep.). The column on the left-hand side displays election returns by racial demographic for the candidate preferred by white voters;

the column on the right-hand side displays election results by racial demographic for the candidate preferred by minority voters. PX 122 at 4-5 & fig.1 (Collingwood Rep.). The nine rows, identified on the left-hand side of the chart, correspond to the nine statewide elections Dr. Collingwood analyzed. PX 122 at 4-5 & fig.1 (Collingwood Rep.). The four color-coded bars within reach row display election returns by racial demographic. PX 122 at 4-5 & fig.1 (Collingwood Rep.). For each election, the Figure shows the relevant candidate's share of the white vote (red), Latino vote (green), Black vote (blue), and total minority vote (purple). PX 122 at 4-5 & fig.1 (Collingwood Rep.).

Figure 1. Racially Polarized Voting assessment statewide, subset to 2012-enacted CD-3, for white, Black, Hispanic, and non-white (all).

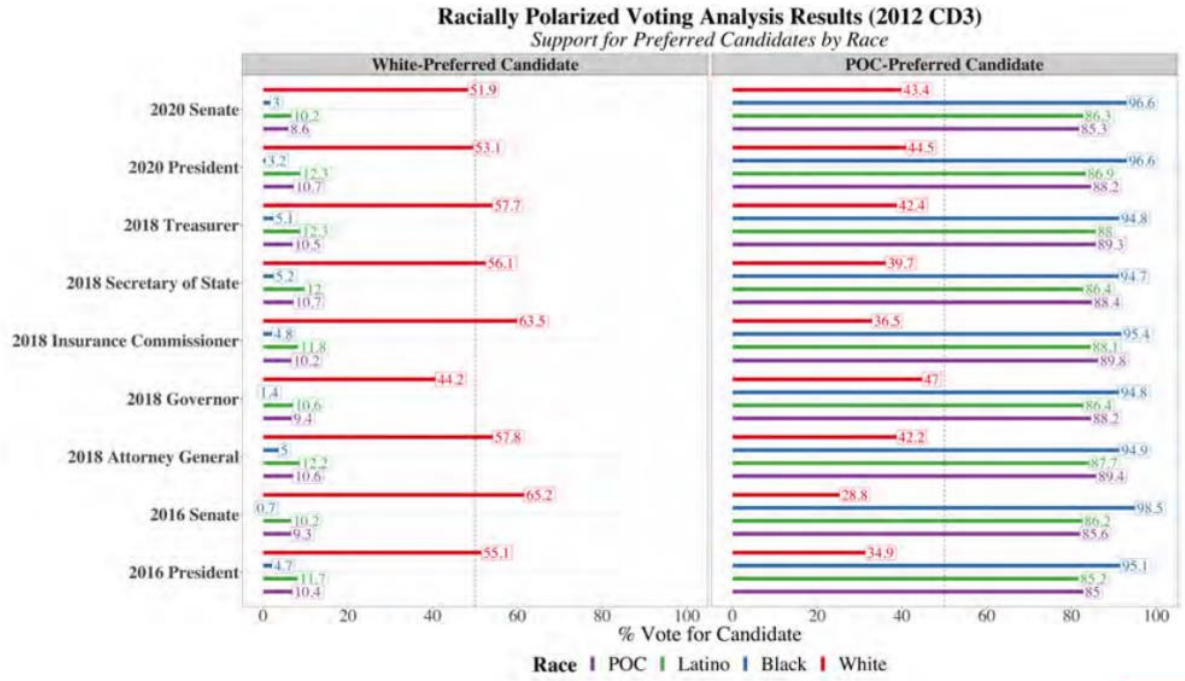


Exhibit No.
PX 123

245. Based on the data depicted in Figure 1, Dr. Collingwood concluded that RPV existed in eight of the nine elections he examined in CD 3 under the prior plan. Hr'g Tr. Day 3 Vol. 1 at 82:23-83:3 (Collingwood); PX 122 at 4 (Collingwood Rep.); PX 123 (Collingwood Rep.

Fig. 1). The 2018 gubernatorial election, in which Laura Kelly ran against Kris Kobach—and which Dr. Collingwood described as "a unique circumstance," Hr'g Tr. Day 3 Vol. 1 at 100:17-19 (Collingwood)—was the only election in which RPV did not exist, Hr'g Tr. Day 3 Vol. 1 at 82:23-83:3 (Collingwood); PX 122 at 4-5 & fig.1 (Collingwood Rep.); PX 123 (Collingwood Rep. Fig. 1).

246. Second, Dr. Collingwood analyzed RPV in CD 2 under Ad Astra 2, which is depicted in Figure 2 of his report and reproduced in Plaintiffs' Exhibit 124. PX 122 at 6 & fig.2 (Collingwood Rep.); PX 124 (Collingwood Rep. Fig. 2). Figure 2 follows the same visual presentation as Figure 1 but uses precinct-level data to plot historic election returns onto the newly enacted map. PX 122 at 4, 6 (Collingwood Rep.). Dr. Collingwood concluded that under Ad Astra 2, RPV would exist in CD 2 in all nine of the elections he studied, including the 2018 gubernatorial election. PX 122 at 5-6 & fig.2 (Collingwood Rep.); PX 124 (Collingwood Rep. Fig. 2).

Figure 2. Racially Polarized Voting assessment statewide subset to newly-enacted CD-2, for white, Black, Hispanic, and non-white

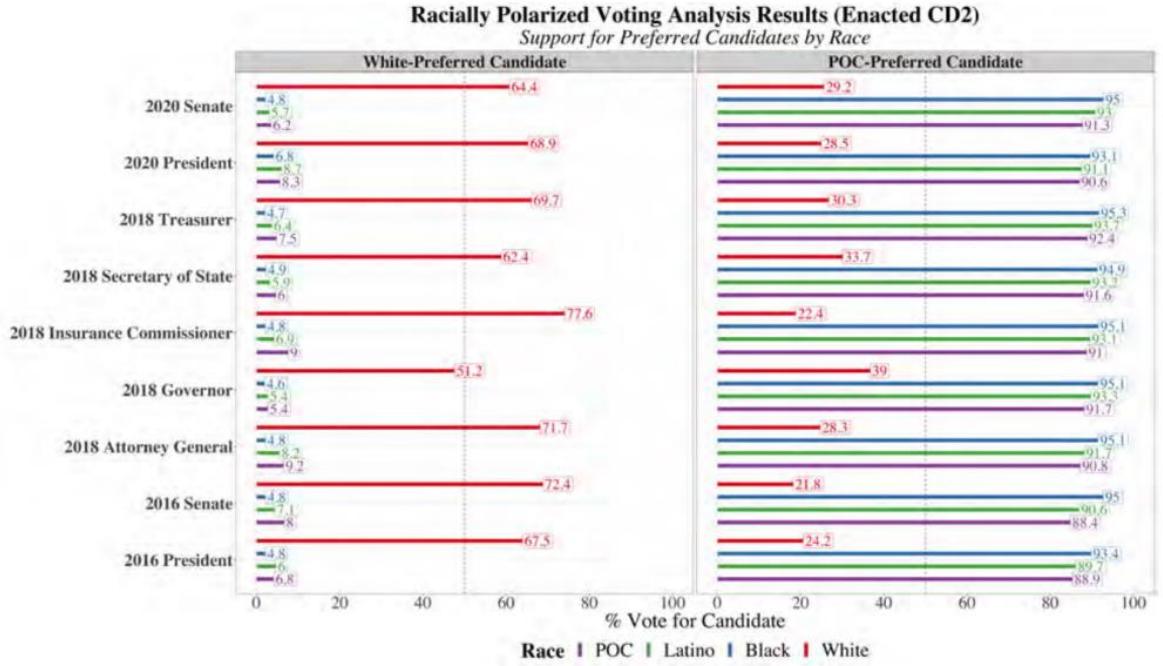


Exhibit No.
PX 124

247. Third, Dr. Collingwood analyzed RPV in CD 3 under Ad Astra 2, which is depicted in Figure 3 of his report and reproduced in Plaintiffs' Exhibit 125. PX 122 at 7 (Collingwood Rep.); PX 125 (Collingwood Rep. Fig. 3). Figure 3 follows the same visual presentation and methodology as Figure 2. PX 122 at 4, 7 (Collingwood Rep.). Dr. Collingwood concluded that like in the prior CD 3, RPV would exist in eight of nine elections in the new CD 3, with the 2018 gubernatorial election remaining the only exception. Hr'g Tr. Day 3 Vol. 1 at 88:20-89:1 (Collingwood); PX 122 at 7 & fig.3 (Collingwood Rep.); PX 125 (Collingwood Rep. Fig. 3).

Figure 3. Racially Polarized Voting assessment statewide subset to newly-enacted CD-3, for white, Black, Latino, and non-white

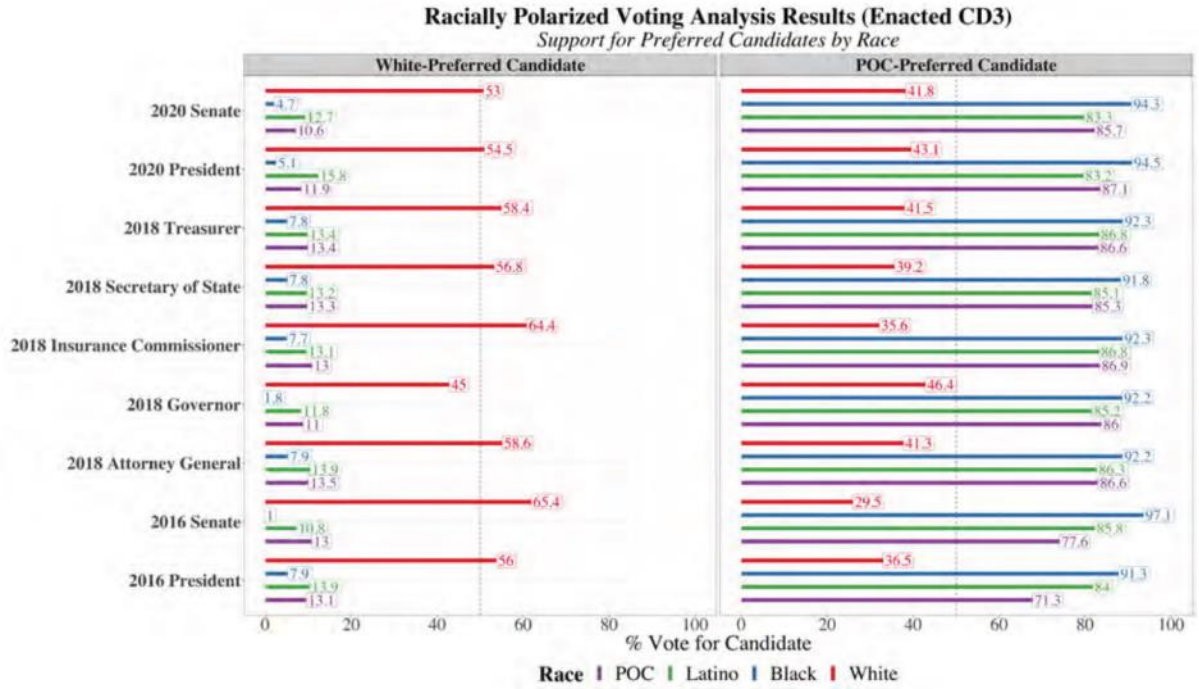


Exhibit No.
PX 125

248. Based on this analysis, Dr. Collingwood concluded that RPV is present in each of the three districts he analyzed—the prior CD 3, the new CD 2, and the new CD 3. The Court credits Dr. Collingwood's RPV analysis and finds that RPV exists in CD 3 under the 2012 congressional plan, CD 2 under Ad Astra 2, and CD 3 under Ad Astra 2.

249. The nuances of Dr. Collingwood's RPV analysis have important implications on minority vote dilution, which is discussed more fully in the following section. Under the prior plan, an average of 40% of white voters in CD 3 voted for the minority-preferred candidate. PX 122 at 5 (Collingwood Rep.). This relatively lower level of RPV—combined with a relatively large and cohesive number of minority voters—made the prior CD 3 a performing crossover district for minority voters. Hr'g Tr. Day 3 Vol. 1 at 83:22-84:8 (Collingwood). Under Ad Astra 2, however, CD 3 contains 7% more white voters than under the prior plan, a dynamic that dilutes minority

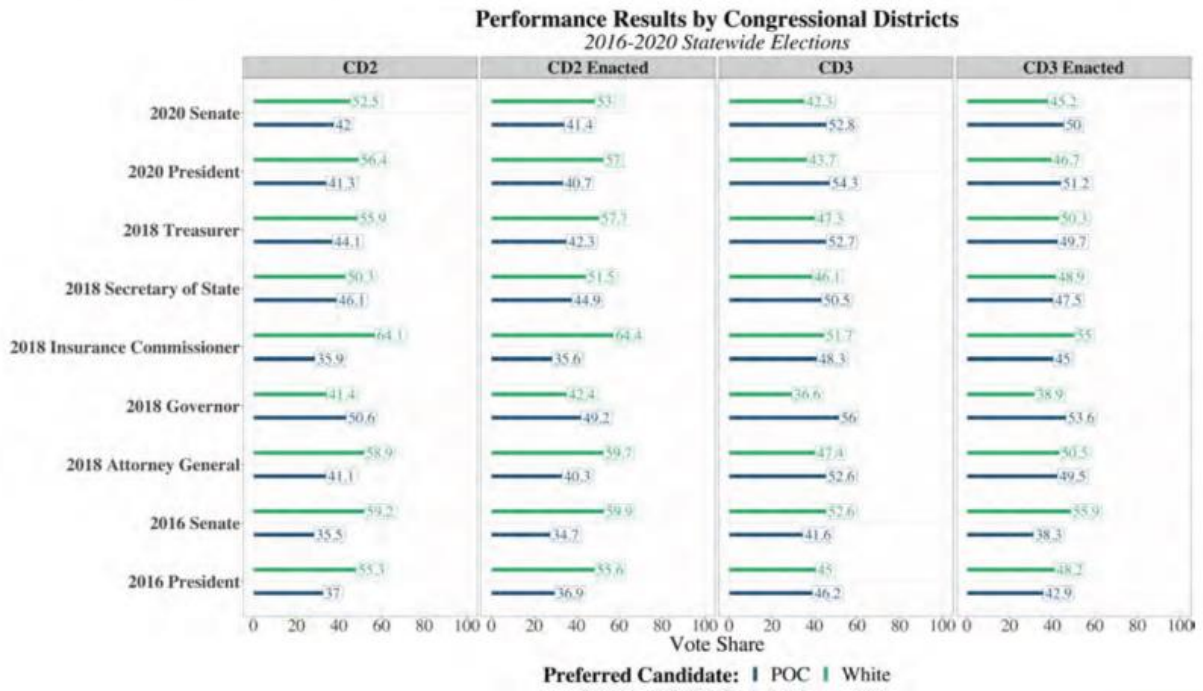
votes even as the overall level of RPV remains relatively constant. PX 122 at 7 (Collingwood Rep.). Ad Astra 2 also moves over 45,000 minority voters to CD 2, PX 122 at 10 (Collingwood Rep.), where only 28.6% of white voters vote for the minority candidate of choice, PX 122 at 5 (Collingwood Rep.), a far more extreme level of RPV than in CD 3, which will prevent minority voters from electing their preferred candidates.

250. Dr. Collingwood conducted a performance analysis as his principal method of determining whether the RPV in CD 2 and CD 3 translates into minority vote dilution under Ad Astra 2. PX 122 at 7-8 (Collingwood Rep.). To conduct the performance analysis, Dr. Collingwood mapped precinct-level election returns onto the maps for each plan, and subset them to the appropriate district boundaries for each district he analyzes. PX 122 at 4, 7-8 (Collingwood Rep.). He then totaled the number of votes for the white-preferred candidate and the minority-preferred candidate in the relevant district and divided by the total number of votes to reach a vote share for each candidate in each district. PX 122 at 7 (Collingwood Rep.). This is also known as a reconstituted election analysis. *See* PX 122 at 1-2 (Collingwood Rep.).

251. The results of Dr. Collingwood's performance analysis are depicted in Figure 4 of his report and reproduced in Plaintiffs' Exhibit 126. PX 122 at 8 & fig.4 (Collingwood Rep.); PX 126 (Collingwood Rep. Fig. 4). Figure 4 contains four columns and nine rows. PX 122 at 8 & fig.4 (Collingwood Rep.). The columns represent the prior CD 2, the enacted CD 2, the prior CD 3, and the enacted CD 3 respectively. PX 122 at 8 & fig.4 (Collingwood Rep.). The rows indicate the nine statewide elections Dr. Collingwood analyzed, which are identified on the left-hand side of the Figure. PX 122 at 8 & fig.4 (Collingwood Rep.). The two horizontal bars at the intersection of each column and row display the performance analysis for the white-preferred candidate (green)

and minority-preferred candidate (purple) for each respective election. PX 122 at 8 & fig.4 (Collingwood Rep.).

Figure 4. Performance analysis assessment in CD-2 (2012 enacted), CD-2 (2022 enacted),CD-3 (2012 enacted), CD-3 (2022 enacted).



252. Dr. Collingwood's performance analysis demonstrates that Ad Astra 2 has an extreme dilutive effect on the ability of minority voters to elect their preferred candidates. This is true for both the minority voters Ad Astra 2 moves from CD 3 into CD 2 and the minority voters who remain in CD 3. Under the prior plan, minority voters in CD 3 were able to elect their candidates of choice in 75% of the elections in which RPV existed, making CD 3 a performing crossover district for minority voters. PX 122 at 7-8 (Collingwood Rep.); Hr'g Tr. Day 3 Vol. 1 at 99:5-8 (Collingwood). Ad Astra 2, however, moves over 45,000 minority voters out of CD 3 into CD 2. PX 122 at 10 (Collingwood Rep.). These new CD 2 voters are no longer able to elect their candidate of choice in any of the elections in which RPV is present—their votes are completely

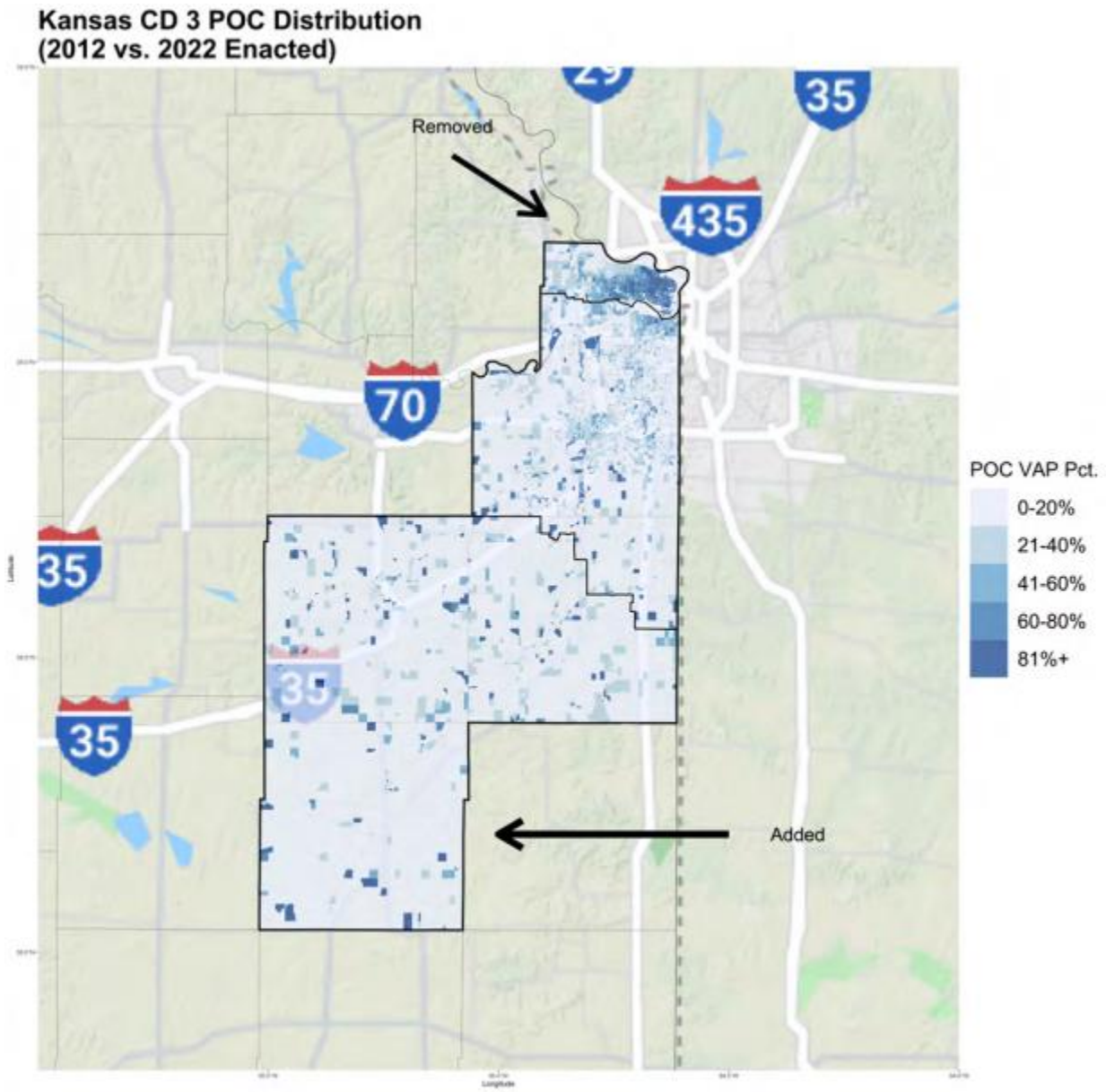
diluted. PX 122 at 7-8 (Collingwood Rep.). At the same time, Ad Astra 2 leaves a portion of Wyandotte County's minority population in CD 3. PX 122 at 10 (Collingwood Rep.). These voters are now able to elect their candidate of choice in only 25% of the elections in which RPV is present—a performance rate 67% lower than the prior CD 3's. PX 122 at 7-8 (Collingwood Rep.).

253. Ad Astra 2's dilution of minority votes, demonstrated by Dr. Collingwood's performance analysis, has the effect of eliminating a performing minority crossover district. Under the prior plan, CD 3 was a performing crossover district for minority voters. *See, e.g.*, PX 122 at 8 (Collingwood Rep.); Hr'g Tr. Day 3 Vol. 1 at 99:5-8 (Collingwood). But under Ad Astra 2, CD 3 will no longer perform for the minority voters who remain there. *See, e.g.*, PX 122 at 8 (Collingwood Rep.); Hr'g Tr. Day 3 Vol. 1 at 100:6-9 (Collingwood). Likewise, under Ad Astra 2, CD 2 will not perform for minority voters either—despite the significant number of minority voters moved there from the previously performing CD 3.[10] *See, e.g.*, PX 122 at 8 (Collingwood Rep.); Hr'g Tr. Day 3 Vol. 1 at 100:10-101:14 (Collingwood). Indeed, minority voters in CD 2 have even less opportunity to elect their preferred candidates than do white Democrats in CD 3 and white Republicans throughout the state. *See, e.g.*, PX 122 at 8 (Collingwood Rep.); Hr'g Tr. Day 3 Vol. 1 at 101:22-102:4 (Collingwood).

254. Dr. Collingwood reinforced his performance analysis with a demographic analysis that provides further evidence that Ad Astra 2 dilutes minority votes. Figures 5 through 8 in Dr. Collingwood's report depict Dr. Collingwood's demographic analysis, and Table 4 contains additional data underlying the Figures. PX 122 at 11-15 (Collingwood Rep.). Figure 8, in

[10] This is, in large part, because Ad Astra 2 moves the heavily Democratic city of Lawrence out of CD 2 and into CD 1. PX 122 at 7 (Collingwood Rep.); Hr'g Tr. Day 3 Vol. 1 at 101:17-21 (Collingwood).

particular, highlights the surgical manner in which Ad Astra 2 excises the census blocks with the most concentrated minority populations from CD 3 into CD 2.



255. Using U.S. Census data, Figure 8 depicts block-level demographics for the geographic regions that Ad Astra 2 removes from CD 3, retains in CD 3, and introduces to CD 3. PX 122 at 13-14 (Collingwood Rep.). The more lightly shaded the area, the whiter its population; the more darkly shaded the area, the greater its minority population. PX 122 at 13-14 (Collingwood

Rep.). The arrow positioned at the Figure's top left-hand side identifies the portion of Wyandotte County that Ad Astra 2 moves out of CD 3 into CD 2. PX 122 at 13-14 (Collingwood Rep.); Hr'g Tr. Day 3 Vol. 1 at 103-04 (Collingwood). The arrow positioned at the Figure's bottom right-hand side identifies the counties Ad Astra 2 moves into CD 3 for the first time. PX 122 at 13-14 (Collingwood Rep.); Hr'g Tr. Day 3 Vol. 1 at 103-04 (Collingwood). The middle portion of the Figure contains Johnson County and the portion of Wyandotte County that remains in CD 3 under Ad Astra 2. PX 122 at 13-14 (Collingwood Rep.); Hr'g Tr. Day 3 Vol. 1 at 103:12-104:7 (Collingwood).

256. Figure 8 illustrates that although CD 2 and CD 3 now have minority voting age populations ("VAPs") of 26.7% and 22.1% respectively, PX 122 at 10 (Collingwood Rep.), the portion of Wyandotte County severed from CD 3 into CD 2 is 66.21% minority—over three times the minority VAP in CD 3 as a whole, PX 122 at 14-15 (Collingwood Rep.). Ad Astra 2 then compensates for this population loss in CD 3 by adding counties from the southwest that are 90.3% white. PX 122 at 14 (Collingwood Rep.). In Dr. Collingwood's view, this makes Ad Astra 2 among the starkest cuts along racial lines that he has "ever seen" in his professional work. Hr'g Tr. Day 3 Vol. 1 at 104:8-11 (Collingwood).[11]

257. The Court credits Dr. Collingwood's analysis and finds that Ad Astra 2 has an extreme dilutive effect on the vote share of minority voters in both CD 2 and CD 3. The Court further finds that that the minority vote dilution in Ad Astra 2 has the effect of eliminating a performing crossover district for minority voters and replaces it with a plan that will not perform

[11] The Court finds that the legislative proponents' suggestion that the location of I-70 explains the stark racial division in the map is pretextual. Any number of highways that do *not* split the district along racial lines were available to be selected, and as explained below, the enacted plan departs from 94.9% of Dr. Chen's simulated plans in its demographic and electoral composition with respect to minority voters.

for minority voters in any congressional district. Finally, the Court finds that the racially discriminatory effects of Ad Astra 2 are particularly pronounced—and entirely distinct from its partisan effects—because the plan treats Democratic minority voters considerably worse than it treats white Democratic and white Republican voters.

258. Based on Dr. Collingwood's analysis, the Court concludes that there is persuasive evidence that the Legislature intended to dilute minority voting strength by cracking minority voters in northern Wyandotte into CD 2 and by drowning the minority voters who remain in CD 3 in an overwhelmingly white district. Not only does Dr. Collingwood's analysis provide uncontroverted evidence of minority vote dilution, it is also persuasive evidence the Legislature intended the result it achieved, in light of the reasonable inferences the Court draws from all the direct and circumstantial evidence.

259. First, courts can reach a strong inference that the Legislature intended the natural, foreseeable results of its actions—particularly where has here there is no countervailing evidence to rebut that inference. *See infra* FOF §§ IV, V. As the Court's entire discussion of Dr. Collingwood's analysis makes plain, his report is replete with evidence that Ad Astra 2 has the effect of diluting minority votes to an extreme degree.

260. Moreover, Ad Astra 2's effect on minority voters was widely discussed in the legislative debate, and Senate President Masterson expressly acknowledged that the plan carved out the largest concentration of minority voters in the state. *See, e.g.*, PX 168 at 31:24-32:8, 67:10-17-73:21 (transcript of January 20, 2022 Senate Redistricting Committee hearing). In an exchange with Senate President Masterson, Senator Corson recited in detail the map's projected impact on minority voters. He explained that the plan would shift 25,240 Black voters and 70,288 Hispanic voters out of CD 3, removing nearly one-half of its Black population and one-third of its Hispanic

population. PX 168 at 67:10-17, 68:13-22. He also noted that Kansas's population growth did not require this result. Senator Corson pointed out that an available alternative, the proposed map entitled "United," would actually *increase* CD 3's minority population. PX 168 at 68:23-69:4.

261. In response, the majority party acknowledged Ad Astra 2's dilutive effects. Senate President Masterson, who introduced Ad Astra 2, acknowledged that he was "aware" that Wyandotte County is the state's most diverse county and replied, "I appreciate that" to Senator Corson's figures, but characterized them as "red herrings" and "political arguments." PX 168 at 32:3-8, 70:10, 73:11, 76:15. Minority votes could not be "deprived," in Senator Masterson's view, "when they have the right to vote." PX 168 at 72:1-2. To settle whether Ad Astra 2's vote dilution was unlawful, Senator Masterson concluded, "I'm sure we'll be able to get that through a court of law and figure that answer." PX 168 at 73:19-21.

262. While awareness alone does not establish invidious intent, it raises a strong inference that the outcome that was achieved was intended, particularly where, as here, the negative effect on the targeted group is so extreme and so foreseeable. Indeed, Dr. Collingwood's demographic analysis underscores the surgical precision with which the Legislature divided Wyandotte County on racial (and not merely partisan) lines. PX 122 at 14 (Collingwood Rep.). The Court finds that the discriminatory effects Dr. Collingwood's report shows are powerful evidence of the Legislature's intent to dilute minority votes.

263. Second, Dr. Collingwood's analysis demonstrates that Ad Astra 2 has substantially more negative effects on minority voters than it does on white voters. In his testimony, Dr. Collingwood explained that although minority voters preferred the Democratic candidate in each election he analyzed, the Court should not mistake that trend for evidence that Ad Astra 2 treats minority Democrats the same way it treats white Democrats. Hr'g Tr. Day 3 Vol. 1 at 142:14-22

(Collingwood). Indeed, Dr. Collingwood testified that Ad Astra 2 treats minority Democrats much less favorably than it treats white Democrats. Hr'g Tr. Day 3 Vol. 1 at 142:23-143:14 (Collingwood). Under Ad Astra 2, minority Democrats in CD 2 have a "very low" chance of electing their candidate of choice; in fact, with the exception of the 2018 gubernatorial race, enacted CD 2 never performs for minority Democrats. Hr'g Tr. Day 3 Vol. 1 at 100:17-21 (Collingwood); *see* PX 122 at 7-8 (Collingwood Rep.). Meanwhile, in CD 3, where most of the district's Democrats are white, Democrats have an opportunity to elect their preferred candidate in three of the nine elections Dr. Collingwood analyzed (including the 2018 gubernatorial election). PX 122 at 7-8 (Collingwood Rep.). The result is that by moving minority Democrats into CD 2, and leaving white Democrats in CD 3, Ad Astra 2 dilutes minority votes even when controlling for partisan affiliation—a result that could have been avoided by moving white Democrats or white Republicans from CD 3 to CD 2 instead. Hr'g Tr. Day 3 Vol. 1 at 143:11-144:7 (Collingwood). The Court therefore finds that Ad Astra 2 has a more negative effect on minority voters than on white voters, which is additional evidence of the Legislature's intent to dilute minority voters' political voices.

264. Third, Dr. Collingwood's testimony also makes clear that Ad Astra 2 substantively departs from prior plans as it relates to minority voters. As discussed above, the plan moves over 45,000 minority voters out of CD 3 into CD 2, cracking apart a performing crossover district so that minority voters can no longer elect their candidate of choice in either CD 2 or CD 3. PX 122 at 10 (Collingwood Rep.). To achieve this effect, Ad Astra 2 is drawn with pinpoint precision to move the most densely populated minority census blocks from CD 3 and place them into CD 2. PX 122 at 14-15 (Collingwood Rep.). The result is that Wyandotte County—the state's only majority-minority county—is split for the first time in decades and that CD 3, which previously

had the highest minority population of any congressional district in the state, now has the lowest minority population of any congressional district in the state. Hr'g Tr. Day 3 Vol. 1 at 104:22-25 (Collingwood). In light of this testimony, the Court finds that Ad Astra 2 substantively departs from prior plans as it relates to minority voters, which, again, is evidence that the Legislature intended to dilute the votes of racial and ethnic minorities.

265. The Court credits Dr. Collingwood's findings, finds his analysis and testimony to be reliable, places great weight on his testimony, and adopts each of his conclusions. During Dr. Collingwood's live testimony, the Court carefully observed his demeanor, particularly as he was cross-examined for the first time about his work on this case. He consistently defended his work with careful and deliberate explanations of the bases for his opinions.

C. Evidence presented by Dr. Jowei Chen demonstrates that Ad Astra 2 intentionally and effectively dilutes minority votes.

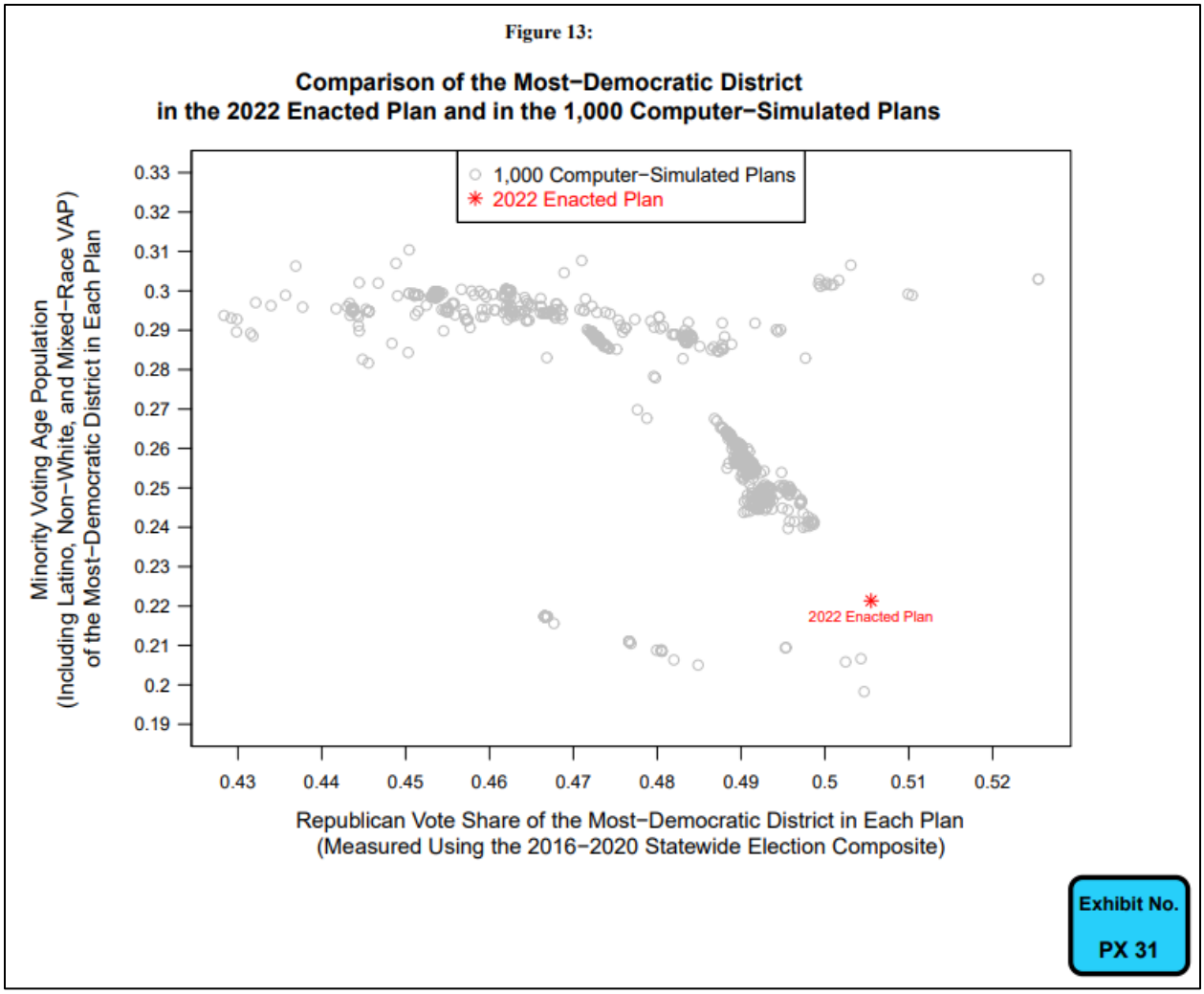
266. As discussed above, the Court accepts Dr. Chen as an expert in redistricting, political geography, and redistricting simulation analysis. *See supra* FOF § II.A; Hr'g Tr. Day 1 Vol. 2 at 117:4-14 (Chen).

267. Dr. Chen examined whether Ad Astra 2 dilutes minority votes using a computer simulation technique. PX 31 ¶ 71 (Chen Rep.). Dr. Chen's simulation process, which the Court has already explained in depth, *see supra* FOF § II.A, ignores all racial considerations when drawing districts and instead produces 1,000 simulated maps programmed to adhere to the Guidelines and other "traditional districting criteria." PX 31 ¶¶ 7-9 (Chen Rep.). Dr. Chen's simulation of a large number of districting plans that adhere to these criteria enables him to assess whether a particular plan is more dilutive of minority vote share than expected from a plan that solely follows neutral districting criteria in the context of Kansas's political geography. Hr'g Tr. Day 1 Vol. 2 at 154:19-155:14 (Chen).

268. Dr. Chen assessed the level of minority vote dilution in Ad Astra 2 by comparing the minority VAP in the most-Democratic district under Ad Astra 2 (that is, the district most favorable to the minority-preferred candidate[12]) to the minority VAP in the most Democratic district in each of his 1,000 simulated plans. PX 31 ¶ 72 (Chen Rep.). Under Ad Astra 2, the most-Democratic district is CD 3, which has a Republican vote share of 50.6% and a minority VAP of 22.14%. PX 31 ¶ 73 (Chen Rep.).

269. Figure 13 of Dr. Chen's report depicts the comparison between the minority VAP of Ad Astra's CD 3 and the minority VAP in the most-Democratic district in each of Dr. Chen's 1,000 simulated plans. PX 31 fig.13 (Chen Rep.). In the Figure, the red star represents Ad Astra 2's most-Democratic district, CD 3, and the 1,000 gray circles represent the most-Democratic district in each of the simulated plans. PX 31 ¶ 74 (Chen Rep.). The minority VAP of each district is indicated on the vertical axis and Republican vote share in each district is indicated on the horizontal axis. PX 31 ¶ 74 (Chen Rep.).

[12] In Kansas, the "most-Democratic district" corresponds to the district most likely to elect a minority-preferred candidate. *See, e.g.*, Hr'g Tr. Day 3 Vol. 1 at 119:24-120:3 (Collingwood).



270. Figure 13 demonstrates that the minority VAP in Ad Astra 2's most-Democratic district is a low-end outlier relative to the minority VAP in the most-Democratic districts in the computer-simulated plans. PX 31 ¶ 75 (Chen Rep.). Whereas most of the simulated districts have minority VAPs between 24% and 30%, CD 3 has a minority VAP of just 22.14%. PX 31 ¶ 74 (Chen Rep.). CD 3's minority VAP "is lower than 94.9% of the most-Democratic districts in the 1,000 simulated plans." PX 31 ¶ 74 (Chen Rep.). From this analysis, Dr. Chen concluded that Ad Astra 2 has the effect of diluting minority votes. Hr'g Tr. Day 1 Vol. 2 at 154:19-155:14 (Chen).

271. The Court credits Dr. Chen's analysis of whether the minority VAP in the most-Democratic district in Ad Astra 2 is an outlier as compared to the most-Democratic districts in

plans that adhere to traditional districting criteria. Accordingly, the Court finds that Ad Astra 2 has the effect of diluting minority vote strength by exporting minority voters out of the district in which they have the best opportunity to elect their preferred candidate. Moreover, the Court finds that Dr. Chen's analysis is compelling evidence that the Legislature intended to dilute minority voting strength. The fact that 94.9% of the simulated plans have a higher minority share in the most Democratic district—the district in which minority voters are likeliest to elect their preferred candidate—than does Ad Astra 2 demonstrates that the removal of minority voters from CD 3 in Ad Astra 2 was purposeful, and not explained by some neutral justification.

D. Evidence presented by Dr. Patrick Miller demonstrates that Ad Astra 2 intentionally and effectively dilutes minority votes.

272. Dr. Miller also analyzed the racial effects of Ad Astra 2. *See generally* PX 58 (P. Miller Rep.).

273. Dr. Miller testified that race is a foundational element of Kansas politics. PX 58 at 13 (P. Miller Rep.); Hr'g Tr. Day 2 Vol. 2 at 16:22-17:15 (P. Miller).

274. The racial composition of the state has changed over the last decade. As of the 2020 census, Kansas has a minority population of at least 25%. Hr'g Tr. Day 2 Vol. 2 at 17:16-18:5 (P. Miller). That figure represents significant growth since the 2010 census, particularly in the state's most populous counties like Douglas, Johnson, and Wyandotte. PX 63 (P. Miller Map 5). Meanwhile, the overall white population of Kansas declined by more than 100,000, or 4.3%. Hr'g Tr. Day 2 Vol. 2 at 18:11-19:21 (P. Miller).

275. Mirroring geographic differences in the state's partisan breakdown, most minority Kansans reside in urban communities, Native American reservations, southwest Kansas, and military communities, whereas the state's white population predominantly resides in more rural regions. PX 58 at 14 (P. Miller Rep.).

276. Kansas has a long history of racial violence and terror. Hr'g Tr. Day 2 Vol. 2 at 16:22-17:15 (P. Miller). Professor Brent Campney conducted extensive research into this history, particularly focusing on the years 1861 to 1927. During that period, Dr. Campney found direct evidence of 37 lynchings, 105 threatened lynchings, 42 racially motivated homicides, 26 killing be police, 26 race riots, and 22 racially motivated muggings. PX 58 at 15-16 (P. Miller Rep.); *see also* Hr'g Tr. Day 2 Vol. 2 at 20:24-21:7 (P. Miller). Nineteen of these incidents occurred in Wyandotte County. PX 58 at 16 (P. Miller Rep.).

277. Kansas also has a long history of racial segregation in its public and private educational facilities and in its residential housing. The seminal U.S. Supreme Court case *Brown v. Board of Education*, 347 U.S. 483 (1954), arose from Topeka's public schools. PX 58 at 16-17 (P. Miller Rep.). And Kansas long saw highly racially segregated residential areas in Wyandotte County and across the state. In the 1930s, the federal Home Owners' Loan Corporation surveyed Wyandotte County and assigned its lowest grade, D, to any neighborhoods that had significant populations of "negroes" or "Mexicans." Hr'g Tr. Day 2 Vol. 2 at 21:8-25:6 (P. Miller); PX 58 at 17-19 (P. Miller Rep.).

278. Kansas's racial discrimination extended even to its infrastructure. Interstate I-70 and its precursor, the Kansas Turnpike, were built by dividing many of these minority neighborhoods, including Argentine, Armourdale, and Rosedale. PX 58 at 17-19 (P. Miller Rep.). In this way, I-70 became a permanent fixture built along, and reinforcing, significant racial scars. PX 58 at 17-19 (P. Miller Rep.). Indeed, I-70 continues to divide minority communities to this day. PX 58 at 21-22 (P. Miller Rep.).

279. Dr. Miller has shown that Ad Astra 2 exacerbates Kansas's racial divisions.

280. He testified that Ad Astra 2 "has a disastrous effect on minority Kansans" in CD 2. PX 58 at 46 (P. Miller Rep.). Although CD 2 becomes more diverse under the new plan, it remains "overwhelmingly White," while the map "simultaneously makes" the district "more Republican." PX 58 at 47 (P. Miller Rep.); *see also* Hr'g Tr. Day 2 Vol. 2 at 31:8-32:9 (P. Miller). "Indeed, the new CD2 is arguably so Republican-leaning that its new minority, Democratic-leaning residents from northern Wyandotte have no credible chance to meaningfully impact elections in the district. In effect, [Ad Astra 2] neutralizes them to the point of arguable irrelevance." PX 58 at 47 (P. Miller Rep.).

281. Dr. Miller also explained that Ad Astra 2 negatively impacts the state's Native American community. Under the prior congressional plan, CD 2 contained "all four reservations in Kansas." PX 58 at 48 (P. Miller Rep.). Ad Astra 2, however, splits this community by separating the Prairie Band Potawatomi reservation into CD 1, further dividing and diminishing the "potential political power" of "this already small population." PX 58 at 48 (P. Miller Rep.).

282. Enacted CD 3 is similarly flawed. Since it was drawn in 2012 by the U.S. District Court for the District of Kansas, the district has gone from a relatively reliable Republican district to something much "bluer over the course of the decade." Hr'g Tr. Day 2 Vol. 2 at 27:6-13 (P. Miller). Ad Astra 2 dismantles the district by "crack[ing] Wyandotte County along racial lines and add[ing] significant white populations to CD3—transforming it from the most racially diverse district in Kansas to the least racially diverse." PX 58 at 38 (P. Miller Rep.); *see also* Hr'g Tr. Day 2 Vol. 2 at 33:23-35:14 (P. Miller). As a consequence, CD 3's minority voices are now drowned out by the district's new, overwhelmingly white population. The Wyandotte split is shown by Dr. Miller in the two maps below:

Map 16. Minority Population Percentage by VTD in 2020 Census, CD3 in 2012 Plan

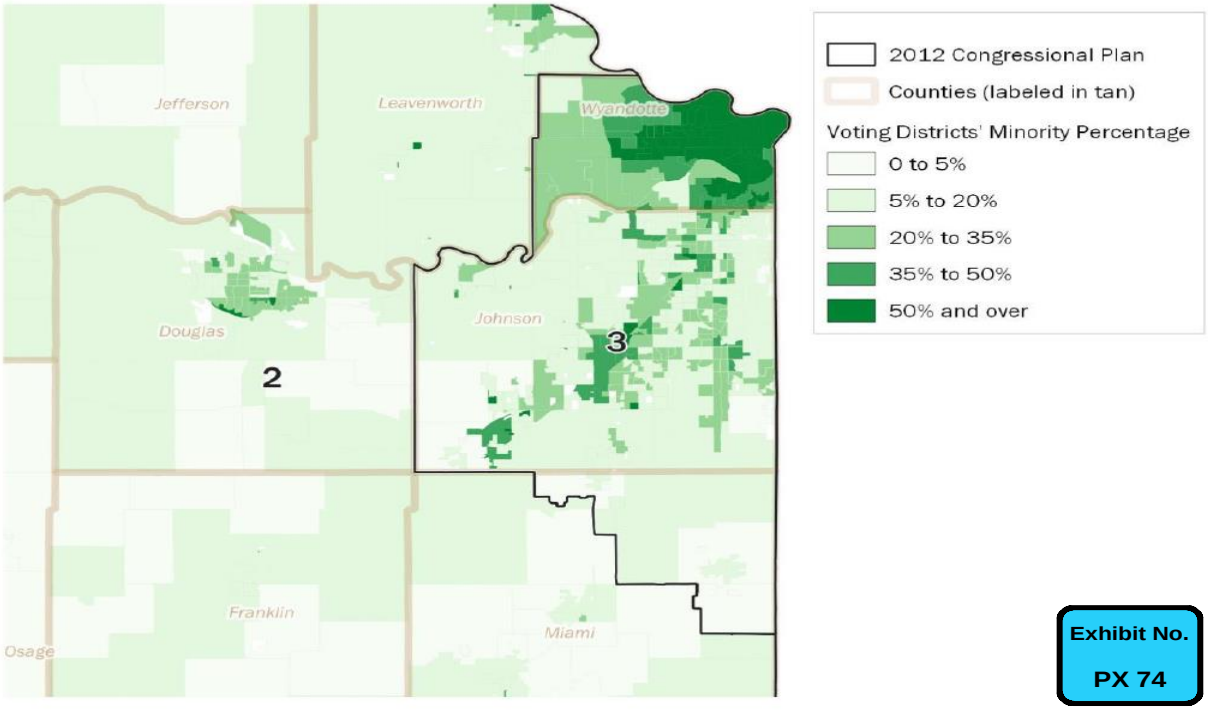


Exhibit No.
PX 74

Map 18. Minority Population Percentage by VTD in 2020 Census, Wyandotte in AA2 Plan

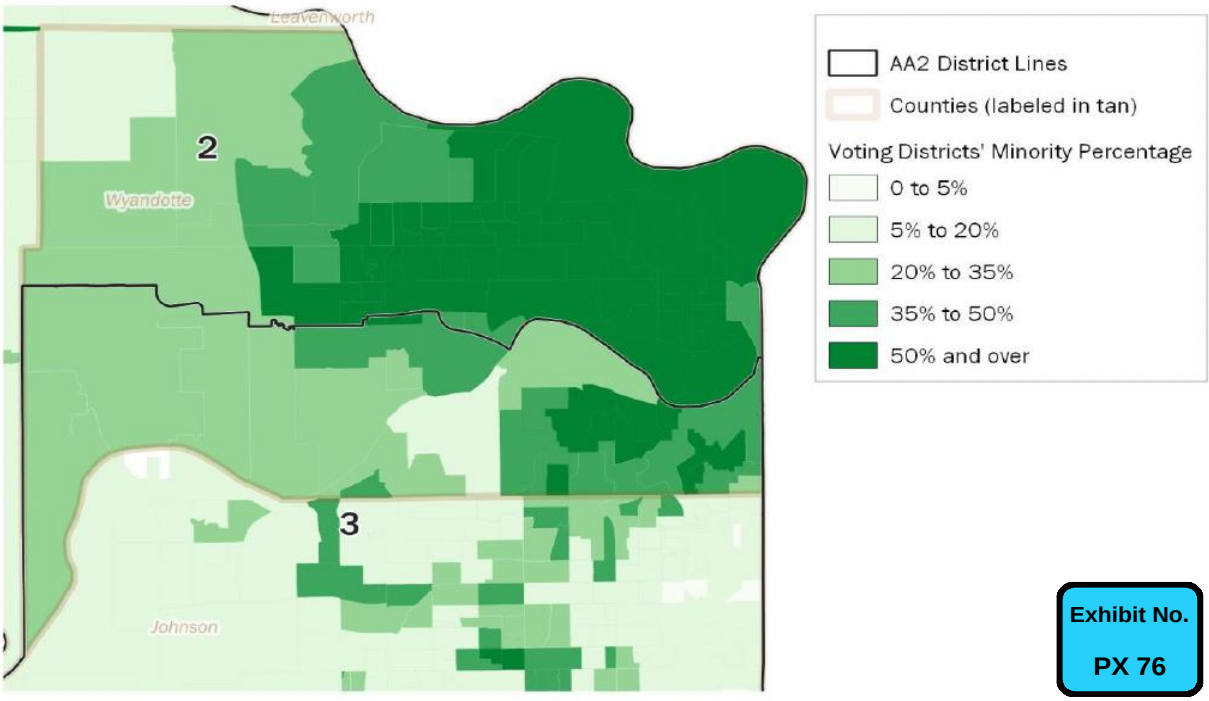


Exhibit No.
PX 76

283. The Legislature did not need to make this choice. As Dr. Miller testified, the Legislature could have made "minimal changes to CD3" that "would have avoided diluting minority voting strength, and in fact would have made CD3 even more diverse than it had previously been." PX 58 at 36 (P. Miller Rep.).

284. Having diluted minority Kansan's voting power in CDs 2 and 3, Ad Astra 2 effectively nullifies the minority vote in congressional elections. Dr. Miller testified that given the significant white majorities in CDs 1 and 4, they are not districts "where minority Kansans have significant voting power," even though CD 4 is now the most diverse district in the state. PX 58 at 62, 67 (P. Miller Rep.).

285. The Court credits Dr. Miller's testimony on the racial consequences of Ad Astra 2 and concludes that it was enacted intentionally and effectively to diminish the electoral influence of minority voters in the state.

E. Additional evidence provided by fact witnesses supports Plaintiffs' experts' analyses that Ad Astra 2 will dilute minority votes.

286. Several fact witnesses for Plaintiffs that live in, work in, or participate in the local government of Wyandotte County offered testimony that supports Plaintiffs' experts' statistical and empirical analyses. For example, Representative Tom Burroughs, a witness for Plaintiffs, is a Democratic member of the Kansas House of Representatives where he has represented the South-Central portion of Wyandotte County for twenty-six years. Hr'g Tr. Day 2 Vol. 1 at 7:22-25 (Burroughs). He is also a Commissioner At-Large for District 2 in Wyandotte County, a position he has held for over four years. Hr'g Tr. Day 2 Vol. 1 at 7:19-21, 8:1-3 (Burroughs). Rep. Burroughs testified that Ad Astra 2 is a "deliberate action[] taken" by the Legislature "to mute" and "disenfranchise members of [his] community," Hr'g Tr. Day 2 Vol. 1 at 15:5-12 (Burroughs), because the map "split[s] [Wyandotte County] right down a main artery of our community and

split[s] heavy minority districts," Hr'g Tr. Day 2 Vol. 1 at 15:2-4 (Burroughs). Rep. Burroughs testified that this would have an "a palling [sic] effect. . . . in the majority minority community, it would be very difficult for a minority member of our community to ever run for state or federal office and [they will] have their voices muted when it comes to having interest[s] of theirs presented on either [the] federal [or] state level." Hr'g Tr. Day 2 Vol. 1 at 23:3-9 (Burroughs).

287. Dr. Mildred Edwards, Ph.D., also testified for Plaintiffs. Dr. Edwards is Chief of Staff to Wyandotte County Unified Government Mayor Tyrone Garner and a lifelong Kansan. Hr'g Tr. Day 2 Vol. 1 at 40:9-12, 40:22-23 (Edwards). Dr. Edwards testified that Ad Astra 2, which "divided [Wyandotte C]ounty" along Highway 70, would have a "tremendous negative impact" on the county's minority communities. Hr'g Tr. Day 2 Vol. 1 at 49:2, 50:24-25 (Edwards). Dr. Edwards testified that Wyandotte County is a majority-minority county, and that diversity is an attribute the county "celebrate[s]" and is "most proud of." Hr'g Tr. Day 2 Vol. 1 at 44:11-45:7 (Edwards). Wyandotte County only expects this diversity to grow, because its school age population is even more diverse than the county as a whole. Hr'g Tr. Day 2 Vol. 1 at 46:23-47:11 (Edwards). Dr. Edwards explained that the plan splits Wyandotte County along racial lines, keeping the whiter, wealthier southern half of Wyandotte County in CD 3, and moving the northern half—which contains "68 percent of the people of color in Wyandotte," has a median income $15,000 below that of the southern portion of the county, and "has the greatest need identified"—into CD 2. Hr'g Tr. Day 2 Vol. 1 at 42:2-43:13, 49:2-7, 51:18-52:2 (Edwards). This division, she testified, would "devastate the northern part of Wyandotte County." Hr'g Tr. Day 2 Vol. 1 at 51:15-19 (Edwards), fracturing the symbiotic relationship northern and southern Wyandotte County currently enjoy, Hr'g Tr. Day 2 Vol. 1 at 42:2-44:10 (Edwards), and jeopardizing $9.5 million in

federal funds the county is counting on to serve its minority communities, Hr'g Tr. Day 2 Vol. 1 at 49:8-50:3 (Edwards).

288. The Court credits these fact witnesses' testimony regarding the communities they serve, and finds their testimony to be additional evidence to support Plaintiffs' claims that the Ad Astra 2 map intentionally and effectively dilutes minority votes.

IV. Defendants' experts failed to rebut Plaintiffs' claims.

289. Defendants offered three expert witness to rebut Plaintiffs' partisan gerrymandering and racial vote dilution claims, Dr. Brad Lockerbie, Dr. Alan Miller, and Dr. John Alford. Collectively, they testified that Plaintiffs' experts failed to demonstrate partisan gerrymandering or racial vote dilution in Ad Astra 2. The Court considers their testimony below.

A. Defendants' experts failed to rebut Plaintiffs' partisan gerrymandering claims.

290. Drs. Lockerbie, Miller, and Alford each testified to purported issues with Plaintiffs' experts' partisan gerrymandering analysis. Their central contentions were that Ad Astra 2 contains only a modest level of partisan bias and that Plaintiffs' experts improperly used the efficiency gap as a measure of partisan gerrymandering in Kansas's congressional elections. For the reasons discussed below, the Court agrees that the efficiency gap must be applied with caution in Kansas's congressional elections. It has already concluded, however, that Plaintiffs' experts exercised appropriate care in their use of the efficiency gap, *see supra* FOF § II.C, and it finds that Defendants' experts did not show otherwise. The Court also finds that Defendants' experts did not rebut Plaintiffs' evidence that Ad Astra 2 has an extreme level of partisan bias.

Dr. Brad Lockerbie's conclusions regarding partisan gerrymandering were unpersuasive.

291. Dr. Brad Lockerbie, Ph.D., is a Professor of Political Science at East Carolina University. DX 1059 ¶ 2 (Lockerbie Rep.). The Court admitted Dr. Lockerbie as an expert on partisan and racial gerrymandering, minority vote dilution, and RPV. Hr'g Tr. Day 3 Vol. 2 at 31:7-32:18 (Lockerbie). After reviewing Dr. Lockerbie's report and testimony in this case, the Court finds his opinion unpersuasive.

292. Dr. Lockerbie's most germane testimony was his assertion that Dr. Chen incorrectly concluded that Republicans will win all four congressional districts under Ad Astra 2 and that Ad Astra 2's level of compactness is an extreme outlier. DX 1059 ¶¶ 8-9, 13-17 (Lockerbie Rep.); Hr'g Tr. Day 3 Vol. 2 at 34:21-35:12 (Lockerbie). Although Dr. Lockerbie did not independently analyze the level of partisan bias in Ad Astra 2, he testified that two outside sources, PlanScore and the Princeton Gerrymandering project, anticipate that under Ad Astra 2 CD 3 will have a modest Democratic lean. DX 1059 ¶¶ 13-17 (Lockerbie Rep.); Hr'g Tr. Day 3 Vol. 2 at 38:14-39:8 (Lockerbie). Dr. Lockerbie testified further that although Dr. Chen's compactness analysis was "mathematically correct," Ad Astra 2's compactness scores are higher than the nationwide average, which he "took to be evidence that the state did try to make districts as compact as possible." Hr'g Tr. Day 3 Vol. 2 at 34:25-35:12 (Lockerbie).

293. On cross-examination, Dr. Lockerbie undercut his own conclusions. He suggested that Dr. Chen used a more reliable election composite to project partisanship than does PlanScore or the Princeton Gerrymandering Project, and that Dr. Chen's conclusion may therefore be "better" than the sources Dr. Lockerbie relied upon. Hr'g Tr. Day 3 Vol. 2 at 63:7-64:25 (Lockerbie). He also recognized that comparing compactness scores between states may be inappropriate because a state's shape and political geography limit its potential compactness, a constraint that varies from state to state. Hr'g Tr. Day 3 Vol. 2 at 57:8-59:21 (Lockerbie). Dr. Chen's analysis, he agreed,

showed that Ad Astra 2's compactness, as measured by both Reock and Polsby-Popper scores, was an extreme outlier in the Kansas-specific context. Hr'g Tr. Day 3 Vol. 2 at 59:22-60:20 (Lockerbie). Given this testimony, the Court finds Dr. Lockerbie's opinion that Democrats have an advantage in CD 3 and that Ad Astra 2 is as compact as possible unpersuasive.

294. The Court has considered these and other points raised by Dr. Lockerbie and finds them unpersuasive or insufficient to rebut Plaintiffs' evidence of partisan gerrymandering.

Dr. Alan Miller's conclusions regarding partisan gerrymandering are unpersuasive.

295. Dr. Alan Miller, Ph.D., is an Associate Professor of Law and the Canada Research Chair in Law and Economics at Western University. DX 1061 at 4 (A. Miller Rep.). The Court accepted Dr. Miller as an expert in axiomatic measurement and its application to the efficiency gap. Hr'g Tr. Day 3 Vol. 2 at 92:13-93:5 (A. Miller). For the reasons discussed below, the Court finds that Dr. Miller appropriately suggests the efficiency gap must be used with caution in Kansas congressional elections. The Court finds further, however, that Plaintiffs' experts employed appropriate caution and that Dr. Miller did not suggest otherwise. The Court finds the remainder of Dr. Miller's testimony unpersuasive.

296. Dr. Miller's principal testimony was that, for a variety of reasons, the efficiency gap does not effectively measure partisanship in redistricting plans.[13] Dr. Miller predicated this testimony on his article, "Flaws in the Efficiency Gap," which he published in a student-edited law review and which has not been peer reviewed. Hr'g Tr. Day 3 Vol. 2 at 153:22-54:20 (A. Miller). That article stands in contrast, however, to "robust" peer reviewed scholarship that has

[13] Dr. Miller also testified that, even accepting the efficiency gap as a measure of partisan bias, Dr. Warshaw used the incorrect formula to calculate it. Hr'g Tr. Day 3 Vol. 2 at 105:110-23 (A. Miller). The Court finds this unpersuasive in light of the extensive peer-reviewed literature validating Dr. Warshaw's formula as the standard in the field. Hr'g Tr. Day 2 Vol. 1 at 82:8-15 (Warshaw).

"extensively" validated the measure. Hr'g Tr. Day 2 Vol. 1 at 82:19-84:5 (Warshaw). It is further undercut by Dr. Warshaw's testimony that the efficiency gap is "an excellent metric," Hr'g Tr. Day 2 Vol. 1 at 84:2-5 (Warshaw), and Defendants' expert Dr. Alford's testimony that the efficiency gap is the "best measure" of partisan gerrymandering, Hr'g Tr. Day 4 Vol. 1 at 23:4-10 (Alford). The Court therefore finds Dr. Miller's opinion that the efficiency gap is a poor measure of partisanship unpersuasive.

297. Dr. Miller also testified that even if the efficiency gap were an appropriate measure of partisan symmetry, it could not be used in states with fewer than seven seats. DX 1061 at 13, 17-26; Hr'g Tr. Day 3 Vol. 2 at 129:16-135:15 (A. Miller). The Court finds Dr. Miller's testimony persuasive evidence that the efficiency gap must be applied with caution in Kansas. But Dr. Warshaw addressed this concern, observing that although Dr. Miller appropriately "points out a rule of thumb people have used when looking at observed Congressional election results . . . there's certainly no research that has said definitively any bright line, and I don't think anybody to my knowledge has asserted or found that there's no way to use elections below seven seats." Hr'g Tr. Day 2 Vol. 1 at 107:4-12 (Warshaw). Dr. Warshaw explained that the basis for the seven-seat guideline is that election return variance in smaller states can skew observed results in the short-term. Hr'g Tr. Day 2 Vol. 1 at 107:4-7 (Warshaw). Averaging across multiple elections is necessary to stabilize results. Hr'g Tr. Day 2 Vol. 1 at 107:11-12 (Warshaw). The Court finds that Dr. Warshaw credibly justified his methodology, that his methodology produces an appropriate measure of partisan symmetry in Kansas's congressional elections, and that Dr. Miller did not rebut it.

298. The Court has considered these and other points raised by Dr. Miller and finds them unpersuasive or insufficient to rebut Plaintiffs' evidence of partisan gerrymandering.

Dr. John Alford's conclusions regarding partisan gerrymandering are unpersuasive.

299. Dr. John Alford, Ph.D., is a Professor of Political Science at Rice University. Hr'g Tr. Day 4 Vol. 1 at 12:10-18 (Alford). The Court accepted Dr. Alford as an expert in redistricting, racially polarized voting, and vote dilution. Hr'g Tr. Day 4 Vol. 1 at 26:3-15 (Alford). The Court finds that, like Dr. Miller, Dr. Alford counseled appropriate caution in applying the efficiency gap in Kansas, Hr'g Tr. Day 4 Vol. 1 at 46:18-20 (Alford), but that his testimony does not rebut Dr. Warshaw's application of the efficiency gap. It finds that the remainder of Dr. Alford's testimony as to Ad Astra 2's partisanship supports Plaintiffs' claims.

300. Dr. Alford's central testimony on partisan gerrymandering was that, although Ad Astra 2 "certainly" reflects "evidence of partisanship," it evinces only a "very modest" amount. Hr'g Tr. Day 4 Vol. 1 at 28:10-21 (Alford). He based this conclusion on a review of Plaintiffs' expert reports, which he characterized as reflecting a modest pro-Republican shift in the partisanship of Ad Astra 2 that merely makes CD 3 more competitive. *See, e.g.*, Hr'g Tr. Day 4 Vol. 1 at 39:20-40:3 (Alford). Dr. Alford's testimony, as a factual matter, corroborates Plaintiffs' experts' findings. He confirmed that Ad Astra 2 has a pro-Republican effect that is "compatible with the notion that the majority party is trying to tilt things in their direction." Hr'g Tr. Day 4 Vol. 1 at 81:5, 82:2-4, 82-20-83:3 (Alford). Dr. Alford diverged from Plaintiffs only as to whether the admittedly partisan effect of Ad Astra 2 is so extreme as to be "impermissible." Hr'g Tr. Day 4 Vol. 1 at 60:14-19 (Alford); *see e.g.*, Hr'g Tr. Day 4 Vol. 1 at 83:18-22 (Alford). That is a legal matter for the Court to resolve. As a factual matter, the Court finds that Dr. Alford's testimony supports the testimony of Plaintiffs' experts that Ad Astra 2 has partisan effects.

301. The Court has considered these and other points raised by Dr. Alford and finds them unpersuasive or insufficient to rebut the evidence of partisan gerrymandering advanced by Plaintiffs.

B. Defendants' experts failed to rebut Plaintiffs' racial vote dilution claims.

302. In addition to their testimony on partisan gerrymandering, Drs. Lockerbie and Alford opined on Plaintiffs' racial vote dilution evidence. Dr. Lockerbie, in his testimony, retracted in full his criticisms of Dr. Collingwood, Hr'g Tr. Day 3 Vol. 2 at 56:14-16 (Lockerbie), and offered no criticism of Dr. Miller that is central to Plaintiffs' claims, *see* Hr'g Tr. Day 3 Vol. 2 at 41:3-47:12 (Lockerbie). The Court therefore limits its discussion to Dr. Alford, whose opinions the Court finds unpersuasive for the reasons discussed below.

303. First, Dr. Alford asserted that Plaintiffs failed to demonstrate RPV exists in Kansas. In essence, Dr. Alford testified that Plaintiffs' evidence of RPV was inconclusive because it failed to distinguish between racial and partisan polarization. Hr'g Tr. Day 4 Vol. 1 at 59:18-60:13, 76:15-20, 77:7-17 (Alford). But that is not what Plaintiffs' evidence purported to show. Dr. Collingwood explained that RPV describes an electoral environment in which "a majority of voters belonging to one racial/ethnic group vote for one candidate and a majority of voters who belong to another racial/ethnic group prefer the other candidate." PX 122 at 3 (Collingwood Rep.); Hr'g Tr. Day 3 Vol. 1 at 68:19-69:8, 138:19-22 (Collingwood). RPV, in other words, is "a fact" about voting patterns—not an assessment of causal basis for those patterns. Hr'g Tr. Day 3 Vol. 1 at 138:23-24 (Collingwood). The Court therefore finds that Dr. Alford's testimony does not rebut Dr. Collingwood's conclusion that RPV exists in Kansas.

304. Second, Dr. Alford testified that Ad Astra 2 does not dilute minority votes in Kansas because it does not alter the overall dispersion of minority voters across congressional districts. DX 1057 at 8 (Alford Rep.); *see* Hr'g Tr. Day 4 Vol. 1 at 53:23-54:3 (Alford). In his view, because the overall "character" of the districts remains the same on a statewide basis, shifting

a subset of minority voters between districts could not amount to minority vote dilution. Hr'g Tr. Day 4 Vol. 1 at 55:18-56:7, 59:18-60:13 (Alford).

305. Dr. Alford undermined this position on cross-examination. He testified that to break up a performing cross-over district, a legislature might either remove part of the district's minority population or change the district's composition of white voters to reduce crossover voting. Hr'g Tr. Day 4 Vol. 1 at 55:18-56:7 (Alford). Ad Astra 2 does the former by moving nearly 50,000 minority voters, or 7% of CD 3's total VAP, out of the previously performing CD 3 and into CD 2, which will not perform. PX 122 at 7-8, 10 (Collingwood Rep.). It does the latter by replacing CD 3's displaced minority voters with a population that is over 90% white, making CD 3 unlikely to perform for the nearly 125,000 minority voters who remain there. PX 122 at 7-8, 10 (Collingwood Rep.). The Court therefore finds Dr. Alford's testimony that Kansas's disbursement of minority voters obviates Plaintiffs' claim of minority vote dilution unpersuasive.

306. The Court has considered these and other points raised by Dr. Alford and finds them unpersuasive or insufficient to rebut the evidence of RPV and minority vote dilution advanced by Plaintiffs.

V. Defendants' other justifications for Ad Astra 2 fail.

307. Throughout trial, Defendants asserted pretextual justifications for Ad Astra 2 that cannot withstand scrutiny. Indeed, Defendants offered these justifications exclusively through argument by lawyers, which are not evidence and not through evidence from any witness.

A. Ad Astra 2 cannot be justified by the Legislature's purported desire to keep Johnson County whole within a single congressional district.

308. Defendants suggested that Ad Astra 2's division of Wyandotte County was simply a good faith attempt to keep Johnson County whole. Because Johnson and Wyandotte Counties could not be kept in a single district, the argument went, the Legislature was placed in a bind. *See,*

e.g., Hr'g Tr. Day 1 Vol. 2 at 244:12-245:10 (Corson). And having been forced to split one of the two counties, it chose Wyandotte. *See, e.g.*, Hr'g Tr. Day 1 Vol. 2 at 244:12-245:10 (Corson). This is an inaccurate characterization of the Legislature's decision and cannot explain Ad Astra 2's partisan bias.

309. At the outset, a desire to keep Johnson County whole cannot explain the outsized Republican bias in Ad Astra 2. Dr. Chen found that 514 of his simulated plans kept Johnson County whole (out of a total of 1,000 simulations, the remainder of which split Johnson). PX 757; Hr'g Tr. Day 4 Vol. 1 at 92:-5:22 (Chen). Every single one of the Johnson County-preserving plans created a most-Democratic district that was more favorable to Democrats, and often significantly more favorable, than Ad Astra 2's CD 3. Hr'g Tr. Day 4 Vol. 1 at 94:8-95:1 (Chen).

310. Examining the map further belies the proffered justification. As Senator Corson pointed out, the Legislature responded to population growth within Wyandotte and Johnson Counties by *expanding* the geographical reach of CD 3 by splitting off a large chunk of Wyandotte County and replacing it with three whole rural counties, two of which were not even part of CD 3 in the previous map. Hr'g Tr. Day 1 Vol. 2 at 258:15-259:10 (Corson). That result is not consistent with a simple desire to choose preserving Johnson over Wyandotte.

311. No legislator took the stand to testify that preserving Johnson County while splitting Wyandotte County was a justifiable or even non-pretextual goal. Defendant did not call any witnesses to explain why Ad Astra 2 was drawn in the manner it was. Therefore, providing no evidence justifying it's configuration.

312. Moreover, the single-minded preservation of Johnson County was not what Kansans asked for during the redistricting process. Rather, Senator Corson—who represents part of Johnson County and was present at all but one of the redistricting listening sessions—dismissed

the Johnson County-first justification as an "invented post hoc rationale" that does not comport with the "vast, vast majority of the testimony" at the listening tour sessions. Hr'g Tr. Day 1 Vol. 2 at 211:21-212:2 (Corson). Instead, throughout the legislative process, Kansans asked that "the core of the Kansas side of the Kansas City metro area" be kept whole. Hr'g Tr. Day 1 Vol. 2 at 212:2-9 (Corson); *see also* PX 168 at 4:9-15 (transcript of January 20, 2022 Senate Redistricting Committee hearing) (statement of Mike Taylor); PX 168 at 15:18-25 (statement of Amy Carter); PX 168 at 18:13-20:23 (statement of Connie Brown-Collins).

313. To the extent there was testimony asking that Johnson County be kept whole, almost all of it came at a time when census data was not available and it was not yet clear that Wyandotte and Johnson Counties could not both be kept whole in the same district. Hr'g Tr. Day 1 Vol. 2 at 211:15-212:20 (Corson).

314. Defendants offered no evidence or testimony that a legislature not seeking partisan advantage could or would have concluded that Johnson County is a more important community of interest than the Kansas City metro area.

315. In fact, evidence presented at trial demonstrated that Democratic representative Stephanie Clayton introduced a different map, "Mushroom Rock," that *did* preserve all of Johnson County in a single district. Hr'g Tr. Day 2 Vol. 1 at 18:13-19:11 (Burroughs). Yet Republican leadership still voted against it, Hr'g Tr. Day 2 Vol. 1 at 18:13-19:11 (Burroughs), perhaps because Representative Clayton's plan did not secure the same significant pro-Republican advantage as Ad Astra 2, *see* PX 112 (figure from Dr. Warshaw's report showing that other plans introduced, including Mushroom Rock, had a higher Democratic vote share than Ad Astra 2).

316. Johnson County is demographically and geographically diverse. While northeastern Johnson County is highly urban and suburban, the southern portion is rural. Hr'g Tr.

Day 1 Vol. 2 at 229:8-20 (Corson). Unlike residents of the northeastern portion of Johnson County, citizens in the southern portion of the county do not interact with Wyandotte County nearly as much, nor do they share health care, transportation, and other community services to the same degree. Hr'g Tr. Day 1 Vol. 2 at 229:8-20 (Corson). In the absence of any evidence supporting Defendants' argument, the Court concludes that the Legislature did not enact Ad Astra 2 because of a genuine desire to elevate a supposed community of interest constituting the entirety of Johnson County over preserving the Kansas City metro area.

B. Ad Astra 2 cannot be justified by the Legislature's purported desire to reunite Kansas State and the University of Kansas in the same congressional district.

317. Defendants' second purported justification, that Ad Astra 2 unites KU and Kanas State University ("K State") in CD 1, similarly finds no basis in the legislative record. At no point during the listening tour sessions in August, the town halls in November, or the legislative hearings in January was there ever a suggestion that the two universities should be joined in a single district. Hr'g Tr. Day 1 Vol. 2 at 230:9-231:7 (Corson). Indeed, the Kansas Board of Regents—the governing body responsible for overseeing Kansas's public universities—made clear that they had *no position* on redistricting. Hr'g Tr. Day 1 Vol. 2 at 230:24-231:7 (Corson).

318. No legislator took the stand to testify that combining KU and K State was a justifiable or even non-pretextual goal.

319. Defendants presented no evidence that residents of the two university towns—Lawrence and Manhattan—would have supported their pairing in the same district. Dr. Portillo, a Douglas County resident, County Commissioner, and Associate Dean for Academic Affairs at KU's Edwards Campus and School of Professional Studies, testified that while Manhattan and Lawrence are "both college towns," they are two "unique college towns." Hr'g Tr. Day 2 Vol. 2

at 113:8-10 (Portillo). Lawrence is a city of "about 94,000 people" with a large portion of residents commuting to Kansas City or Topeka on a daily basis. Hr'g Tr. Day 2 Vol. 2 at 113:10-14 (Portillo). Manhattan, on the other hand, is more "isolated as a college community" and "probably dominated a bit more by the university in that space." Hr'g Tr. Day 2 Vol. 2 at 113:15-19 (Portillo).

C. Ad Astra 2 cannot be justified by a desire to retain the cores of prior congressional districts.

320. Nor can Defendants justify Ad Astra 2 as an attempt to preserve the cores of prior districts. Ad Astra 2 upends the prior CD 3. That district has long been recognized as one with the Kansas side of the Kansas City metro area as its core. *See Essex v. Kobach*, 874 F. Supp. 2d 1069, 1086 (D. Kan 2012) (per curiam) (three-judge court) ("[T]he entirety of Johnson and Wyandotte Counties should be included in the Third District. Those counties have formed the core of the Third District for decades, and as the Court concluded in [an earlier redistricting decision], they should be placed in the same district because they 'represent the Kansas portion of greater Kansas City, a major socio-economic unit,' and the counties' economic, political and cultural ties are significantly greater than their differences.") (citation omitted); *O'Sullivan v. Brier*, 540 F. Supp. 1200, 1204 (D. Kan. 1982) (three-judge court) (similar). Ad Astra 2 dramatically reconfigures the district by extracting a large portion of Kansas City and adding two new rural counties, as well as the remainder of Miami County.

321. Ad Astra 2 also dramatically reconfigures CD 2 by adding the portion of Kansas City removed from CD 3 and by removing Lawrence.

322. Finally, in the overwhelmingly rural CD 1, Ad Astra 2 inexplicably adds urban Lawrence, bypassing a number of rural counties to scoop it from CD 2. The significant population shifts caused by Ad Astra 2 are illustrated by the chart below, which highlights population shifts between districts in the previous 2012 congressional plan and Ad Astra 2:

AD ASTRA 2 MAP:

COUNTIES MOVED TO NEW DISTRICTS

COUNTY	OLD CONGRESSIONAL DISTRICT 2012-2022	NEW CONGRESSIONAL DISTRICT IN AD ASTRA 2	RESIDENTS MOVED (2020 CENSUS)
Wyandotte	Third	Second (portion)	112,661
Douglas	Second	First (portion)	94,934
Chase	First	Second	2,572
Geary	First	Second	36,379
Lyon	First	Second	32,179
Marion	First	Second	11,823
Morris	First	Second	5,386
Wabaunsee	First	Second	6,877
Jackson	Second	First	13,249
Jefferson	Second	First	18,974
Marshall	First/Second	First	5,276
Miami	Second/Third	Third	20,495
Franklin	Second	Third	25,643
Anderson	Second	Third	7,877

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PX 139

323. This significant shift of population between districts was not the necessary result of population changes within the state between 2010 and 2020, nor the result of Kansas's political geography. As part of his report, Dr. Rodden drew an illustrative map with core preservation in mind, managing to keep *97 percent* of the state's population in its prior districts, compared to just 86 percent in Ad Astra 2. PX 1 at 26 (Rodden Rep.); Hr'g Tr. Day 1 Vol 2 at 36:2-11 (Rodden).

324. Dr. Smith's core-retention analysis, discussed above, further refutes Defendants' core-retention argument. *See supra* FOF § II.E.

325. Dr. Chen's core-retention analysis, discussed above, further refutes Defendants' core-retention argument. *See supra* FOF § II.A.

VI. Ad Astra 2's dilution of Democratic voting power will obstruct Plaintiffs' ability to elect and support their candidates of choice.

326. The evidence submitted at trial demonstrates that Ad Astra 2 will make it more difficult for Plaintiffs to elect and support Democratic candidates in Kansas.

327. As explained above, *see supra* FOF § II, the evidence adduced at trial shows that Ad Astra 2 will have the effect of negating Plaintiffs' electoral preferences by placing them in districts where they have a reduced ability to elect their candidates of choice.

Plaintiff	2012 Congressional District	District Under Ad Astra 2
Faith Rivera	CD 3	CD 2
Diosselyn Tot-Velasquez	CD 3	CD 2
Kimberly Weaver	CD 3	CD 2
Paris Raite	CD 2	CD 1
Donnavan Dillon	CD 2	CD 1
Amy Carter	CD 3	CD 3
Ana Maldonado	CD 3	CD 2
Anna White	CD 3	CD 3
Liz Meitl	CD 3	CD 3
Melinda Lavon	CD 2	CD 1
Richard Nobles	CD 3	CD 3
Rose Schwab	CD 3	CD 2
Sharon Al Uqdah	CD 3	CD 2
Sheyvette Dinkens	CD 3	CD 3
Thomas Alonzo	CD 3	CD 2

Sarah Frick	CD 2	CD 1
Sarah Schiffelbein	CD 2	CD 2
Connie Brown Collins	CD 3	CD 2

328. Dr. Miller explained that because of Lawrence's division from the rest of Douglas County, Ad Astra 2's CD 2 "leans so strongly Republican that the votes of Democratic-leaning and minority residents from Wyandotte are diluted to practical electoral irrelevance." PX 58 at 4 (P. Miller Rep.). Indeed, Dr. Miller explained that the residents in the northern portion of Wyandotte County moved to CD 2 "border on electoral irrelevance in the district," and that CD 2 "is a district where these Democratic-leaning minority voters" in northern Wyandotte County "really don't have much of a credible chance to impact congressional elections." Hr'g Tr. Day 2 Vol. 2 at 31:8-32:9, 38:21-39:13 (P. Miller).

329. Dr. Miller also testified that as a consequence of moving northern Wyandotte County from CD 3 to CD 2, Ad Astra 2 makes the former district much more Republican, "dilut[ing] the influence and voting power of" Democratic voters "who remain in CD3 and mak[ing] the plan unrepresentative of the overall partisan composition of Kansas." PX 58 at 36-41 (P. Miller Rep.). Ad Astra 2 increases the Republican advantage in CD 3 from 1.0% to 6.6% averaged across elections between 2012 and 2020. PX 58 at 36-37 (P. Miller Rep.). To put this in context, whereas under the prior plan CD 3 voted "Republican seven times in statewide elections and Democratic nine times," under Ad Astra 2 Republicans would have won 11 of 16 elections during the same period. PX 58 at 36-37 (P. Miller Rep.).

330. The evidence also persuasively shows that by splitting Lawrence from Douglas County in CD 2 and placing it instead in CD 1, Ad Astra 2 makes it significantly less likely for Plaintiffs and their fellow Democratic voters who live there to elect candidates of their choice. Dr.

Smith testified that under the previous congressional plan, Lawrence's Democratic voters were capable of waging competitive campaigns in CD 2. PX 135 at 12 (Smith Report). The First Congressional District, by contrast, has a much larger Republican population, which will thus make congressional elections far less competitive. PX 135 at 14 (Smith Report); *see also* PX 58 at 4 (P. Miller Rep.). This view was corroborated by Dr. Miller, who testified that "CD1 is a strongly and safely Republican district." PX 58 at 62 (P. Miller Rep.). In support of this point, Dr. Miller testified that even with the addition of heavily Democratic Lawrence to CD 3, the district has an overwhelming 29% Republican advantage. PX 58 at 62 (P. Miller Rep.).

331. Dr. Smith also testified that by placing Lawrence in the Big First, Ad Astra 2 "disincentive[s]" Democratic "voter mobilization, voter registration, voter turnout, fundraising, all of the activities that build a political base because the election would not be competitive." Hr'g Tr. Day 3 Vol. 1 at 31:17-32:9 (Smith).

332. Dr. Warshaw's analysis of the partisan effect of Ad Astra 2 reached similar conclusions. Dr. Warshaw analyzed the partisan fairness of Ad Astra 2 using the "efficiency gap," a tool for capturing "the packing and cracking that are at the heart of partisan gerrymanders" by "measur[ing] the extra seats one party wins over and above what would be expected if neither party were advantaged in the translation of votes to seats." PX 105 at 6 (Warshaw Report); *see also* Hr'g Tr. Day 2 Vol. 1 at 65:1-66:8 (Warshaw). Dr. Warshaw set out to measure the efficiency gap of Kansas's congressional districting plan by reviewing the configuration of the state's four congressional districts under Ad Astra 2.

333. Consistent with Plaintiffs' other experts, Dr. Warshaw testified that Republicans are likely to win all four of Kansas's new congressional districts. PX 105 at 7-10 (Warshaw Report). He found "that the Ad Astra 2 plan has a very substantial level of pro-Republican bias"

and that "the Ad Astra 2 plan is historically extreme relative to the 10,000 Congressional elections" Dr. Warshaw has reviewed from "the past 48 years" and is "also extreme relative to the other plans that Kansas considered in its redistricting process." Hr'g Tr. Day 2 Vol. 1 at 72:2-13 (Warshaw).

334. In particular, Dr. Warshaw noted that in CDs 1, 2, and 4, Republicans are expected to win above or near 60% of the vote in each district, singling out CD 1 as "overwhelmingly Republican" because "Republicans [there] are likely to win about 66% of the vote in this district." PX 105 at 7-8 (Warshaw Rep.). Dr. Warshaw further concluded that because Democratic voters are cracked between CDs 2 and 3, Republicans are likely to win about 53% of the vote in CD 3 as well. PX 105 at 8-9 (Warshaw Rep.). This is a significant change; Ad Astra 2 transformed that district "from being a closely contested slightly [D]emocratic leaning district to being a [R]epublican leaning district." Hr'g Tr. Day 2 Vol. 1 at 102:21-103:1 (Warshaw).

335. Dr. Warshaw then analyzed how these expected vote shares translated into seats by taking a composite of the state's previous elections from 2012 to 2020. PX 105 at 10 (Warshaw Rep.). He concluded that while Democrats "win 41% of the votes" statewide, under Ad Astra 2 they would receive only 9% of the seats on average across all statewide elections between 2012 and 2020, PX 105 at 11 (Warshaw Report), which "increases the efficiency gap" of Kansas's congressional map "to a historically extreme level of [22.5%]," Hr'g Tr. Day 2 Vol. 1 at 96:19-25 (Warshaw). This is nearly a 50% decrease in Democratic seat share from results under the prior congressional map, when, using the same analysis, Democrats would have won 16% of the seats. Hr'g Tr. Day 2 Vol. 1 at 96:19-25 (Warshaw).

336. Contextualizing Ad Astra 2's efficiency gap, Dr. Warshaw testified that election results under Ad Astra 2 would be "far more extreme than" about 95% of the 10,000 elections he

analyzed from last 48 years and 98% more pro-Republican "than . . . previous Congressional elections over the past five decades." Hr'g Tr. Day 2 Vol. 1 at 98:5-25 (Warshaw).

337. As a result of this Republican advantage, Dr. Warshaw explained, Democratic voters in Kansas, including Plaintiffs, will "have little, if any, voice" in Congress "on important issues." PX 105 at 15 (Warshaw Report). Partisan gerrymandering will "bias[] the policymaking process in favor of the advantaged party," "reduce[] the congruence between the public's preferences and state policies," "reduce voter turnout," and even "make[] it less likely voters will visit their congressional office." PX 105 at 20-21 (Warshaw Rep.).

338. Broadly speaking, Dr. Warshaw's research has revealed that "partisan gerrymandering . . . substantially harms our democracy and leads to a substantial bias in the political process and in so doing . . . degrades democracy for everyone." Hr'g Tr. Day 2 Vol. 1 at 72:14-25 (Warshaw).

339. Dr. Rodden agreed with this analysis, adding that by avoiding compliance with its own Guidelines, the Legislature was able to transform CD 3 from a Democratic district into a Republican-leaning district, and turn CD 2 from a competitive district into a solidly Republican district. PX 1 at 32-33 (Rodden Rep.). He testified in summary that under Ad Astra 2, "District 1 ends up being very comfortable a Republican district, District 2 is a comfortable Republican district, and the same thing is true of District 4. District 3 is more competitive but . . . it also is a district which on average has a Republican majority." Hr'g Tr. Day 1 Vol. 2 at 53:1-9 (Rodden).

340. Based on the weight of this overwhelming evidence, the Court concludes that Ad Astra 2 has a strong bias in favor of Republican candidates and that as a result, Democratic voters, including Plaintiffs, will have a reduced opportunity to elect candidates of their choice.

VII. Ad Astra 2's dilution of minority voting power will obstruct minority Plaintiffs' ability to elect and support their candidates of choice.

341. The Court finds that Ad Astra 2's dilution of minority votes harms those Plaintiffs who identify as Black or Hispanic/Latinx. Six Plaintiffs—Sharon Al-Uqdah, Connie Brown Collins, Donnavan Dillon, Sheyvette Dinkens, Richard Nobles, and Kimberly Weaver—identify as Black. PX 178, 180, 187, 189-90, 758. Five Plaintiffs—Tom Alonzo, Ana Marcela Maldonado Morales, Paris Raite, Faith Rivera, and Diosselyn Tot-Velasquez—identify as Hispanic or Latinx. PX 176-177, 179, 183, 191.

342. Each Plaintiff (1) identifies as Black or Hispanic/Latinx, (2) has voted consistently in Kansas congressional elections and intends to do so in the future, and (3) prefers to elect Democratic congressional candidates. See PX 176-80, 183, 187, 189-91, 758.

343. Under the 2012 congressional plan, Plaintiffs Alonzo, Al-Uqdah, Brown Collins, Dinkens, Maldonado Morales, Nobles, Rivera, Tot-Velasquez, and Weaver reside in CD 3, *see* PX 176-78, 183, 187, 189-91, 758, which, as Dr. Collingwood's expert testimony established, has allowed minority voters, including Plaintiffs, to elect the congressional candidate of their choice, Representative Davids, *see supra* FOF § III.B.

344. Under Ad Astra 2, those Plaintiffs who lived in CD 3 under the 2012 plan are cracked between the new CDs 2 and 3. Plaintiffs Alonzo, Al-Uqdah, Brown Collins, Maldonado Morales, Tot-Velasquez, and Weaver now reside in CD 2, while Plaintiffs Dinkens, Nobles and Rivera remain in CD 3. *See* PX 176-78, 183, 187, 189-91, 758. Plaintiffs Dillon and Raite, meanwhile, are moved from CD 2 to CD 1.

345. The Court finds that Ad Astra 2 injures each of these Plaintiffs by diluting their votes and making it less likely that they will be able to elect their candidates of choice. Dr. Collingwood's expert testimony established that the cracking of minority voters between CD 2 and CD 3 means that, unlike the CD 3 created by the 2012 plan, both CD 2 and CD 3 in Ad Astra

2 are unlikely to perform for minority voters, including these Plaintiffs. *See supra* FOF § III.B. Plaintiffs Alonzo, Al-Uqdah, Brown Collins, Dinkens, Maldonado Morales, Nobles, Rivera, Tot-Velasquez, and Weaver are therefore injured by the loss of the opportunity to elect the candidates of their choice under Ad Astra 2.

346. The Court finds that this conclusion is reinforced by Dr. Chen's expert testimony, which established that CDs 2 and 3 under Ad Astra 2 are pro-Republican partisan outliers compared to the corresponding districts in simulated maps generated using traditional redistricting criteria, and that the new CDs 1, 2, and 3 are unlikely to elect the Democratic candidates preferred by these Plaintiffs. *See supra* FOF § II.A. This conclusion accords with Dr. Collingwood's determination that the districts in Ad Astra 2 are unlikely to perform for minority voters. All Plaintiffs who identify as Black or Hispanic/Latinx are therefore injured by the loss of the opportunity to elect the Democratic candidates of their choice.

347. The Court also finds that these Plaintiffs are injured by the stigmatizing effects of being assigned to districts based on their membership in minority racial groups.

CONCLUSIONS OF LAW

I. Plaintiffs have standing to challenge Ad Astra 2.

348. Plaintiffs live in gerrymandered districts and have sworn through declarations that they prefer Democratic candidates and intend to vote in the upcoming 2022 elections. *See supra* FOF § VI.

349. Plaintiffs have shown through extensive expert testimony and personal declarations that they now live in districts that were drawn with the intent and effect of favoring Republicans to the disadvantage of Democratic candidates. *See* PX 176-193, 758-59 (Plaintiff declarations);

see supra FOF §§ II, VI. As a result, Plaintiffs have a severely reduced chance of electing Democratic candidates of their choice to Congress.

350. Plaintiffs have also shown that the districts in which they live have been reconfigured with the intent and effect of suppressing their minority voting strength and the minority voting strength of their communities by cracking minority voters between districts. *See* PX 176-193, 758-59 (Plaintiff declarations); *see supra* FOF §§ III, VII. Plaintiffs Tom Alonzo, Ana Marcela Maldonado Morales, Paris Raite, Faith Rivera, and Diosselyn Tot-Velasquez identify as Hispanic/Latinx and will have reduced opportunities to elect candidates of their choice as a consequence of Ad Astra 2. PX 176-77, 179, 183, 191 (Plaintiff declarations). Plaintiffs Sharon Al-Uqdah, Connie Brown Collins, Donnavan Dillon, Sheyvette Dinkens, Richard Nobles, and Kimberly Weaver identify as Black and will have reduced opportunities to elect candidates of their choice as a consequence of Ad Astra 2. PX 178, 180, 187, 189-90, 758 (Plaintiff declarations).

351. Because of these injuries and because Plaintiffs live in gerrymandered districts, they have standing to challenge Ad Astra 2 as unconstitutional.

352. The Court also concludes that Plaintiff Loud Light has standing to challenge Ad Astra 2. "An association has standing to sue on behalf of its members when '(1) the members have standing to sue individually; (2) the interests the association seeks to protect are germane to the organization's purpose; and (3) neither the claim asserted nor the relief requested require participation of individual members.'" *Bd. of Cnty. Comm'rs v. Bremby*, 286 Kan. 745, 761, 189 P.3d 494 (2008) (quoting *NEA-Coffeyville v. Unified Sch. Dist. No. 445*, 268 Kan. 384, 387, 996 P.2d 821 (2000) (internal quotation marks omitted)).

353. Plaintiff Loud Light meets this standard. Its mission is to mobilize "Kansas's youngest voters, with the goal of engraining in them the importance of remaining civically engaged

throughout their adult lives." PX 181 (Loud Light declaration). And Ad Astra 2 injures Loud Light's members "[b]y cracking the state's youth population in Wyandotte, Douglas, Riley, Shawnee, and Geary Counties." PX 181 (Loud Light declaration).

II. Congressional redistricting plans, like any other legislative action, are subject to judicial review.

D. The U.S. Constitution's Elections Clause does not bar state court review of congressional redistricting plans under state constitutions.

354. The U.S. Constitution's Elections Clause provides that "[t]he Times, Places, and Manner of holding Elections for Senators and Republicans, shall be prescribed in each State by the Legislature thereof; but the Congress may at any time by Law make or alter such Regulations." U.S. Const. art. I, § 4.

355. Defendants have argued that this Clause gives a state legislature free rein to enact congressional redistricting plans in defiance of the state's own constitution, as construed by the state courts. Indeed, according to Defendants, the Elections Clause deprives the state courts of *any role* in evaluating the validity of duly enacted congressional redistricting plans under the state's own constitution.

356. The Court finds this interpretation of the Elections Clause unpersuasive as a matter of constitutional text and history.

357. At the time of the Founding, the term state "Legislature" was well understood to mean an entity created and constrained by the state's constitution. *See* Vikram David Amar & Akhil Reed Amar, *Eradicating* Bush-*League Arguments Root and Branch: The Article II Independent-State- Legislature Notion and Related Rubbish*, 2021 Sup. Ct. Rev. (forthcoming) (manuscript at 24), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3731755. Numerous

Founding-era state constitutions explicitly restricted the actions of state legislatures, including with respect to the regulation of federal elections. *See id.* at 27-30.

358. Consistent with this practice, the U.S. Supreme Court has repeatedly rejected attempts to use the Elections Clause to shield legislatures from state constitutional requirements, holding that "[n]othing in that Clause instructs . . . that a state legislature may prescribe regulations on the time, place, and manner of holding federal elections in defiance of provisions of the State's constitution." *Ariz. State Legislature v. Ariz. Indep. Redistricting Comm'n*, 576 U.S 787, 817-18 (2015). And it has stated that "[i]t is fundamental that state courts be left free and unfettered by [federal courts] in interpreting their state constitutions," *Minnesota v. Nat'l Tea Co.*, 309 U.S. 551, 557 (1940).

359. Indeed, Defendants' interpretation of the Elections Clause would dismantle settled principles of federalism and fundamentally upend election administration in Kansas.

360. For all these reasons, the Court concludes that the Elections Clause does not bar state court judicial review of congressional redistricting plans. The Court reaches this conclusion following careful analysis of each of Defendants' arguments, as described below.

Defendants' Elections Clause theory ignores extensive U.S. Supreme Court precedent that a state legislature's congressional redistricting legislation is subject to state court judicial review under the state constitution.

361. The argument that the Elections Clause bars state courts from reviewing the validity of congressional redistricting legislation under a state's own constitution "is inconsistent with nearly a century of precedent of the Supreme Court of the United States affirmed as recently as 2015." *Harper v. Hall*, 868 S.E.2d 499, 551 (N.C.), *stay denied sub nom. Moore v. Harper*, 142 S. Ct. 1089 (2022). "It is also repugnant to the sovereignty of states, the authority of state constitutions, and the independence of state courts, and would produce absurd and dangerous consequences." *Id.*

362. Most recently, the U.S. Supreme Court declared in *Rucho v. Common Cause*, ___ U.S. ___, 139 S. Ct. 2484 (2019), that "[p]rovisions in . . . *state constitutions* can provide standards and guidance for *state courts* to apply" in partisan gerrymandering challenges to congressional redistricting plans enacted by state legislatures. *Id.* at 2507 (emphasis added). *Rucho* concerned North Carolina's 2016 congressional plan, and as an example of state courts' power in this realm, the U.S. Supreme Court pointed to another state's supreme court's decision striking down the state's legislatively enacted congressional plan under the state's constitution. *Id.* at 2507 (citing *League of Women Voters of Fla. v. Detzner*, 172 So.3d 363 (Fla. 2015)).

363. The Supreme Court's recognition that state courts can apply state constitutional provisions to rein in partisan gerrymandering was essential to *Rucho*'s holding: it enabled the Supreme Court to foreclose federal partisan gerrymandering claims while promising that "complaints about districting" would not "echo into a void." *Id.*

364. Even before *Rucho*, "a long line of decisions by the Supreme Court of the United States confirm[ed] the view that state courts may review state laws governing federal elections to determine whether they comply with the state constitution." *Harper*, 868 S.E.2d at 552 (citing cases).

365. Over a century ago, the Supreme Court held that state legislatures may not enact laws under the Elections Clause that are invalid "under the Constitution and laws of the state." *Ohio ex rel. Davis v. Hildebrant*, 241 U.S. 565, 568 (1916).

366. Reaffirming that principle, the Supreme Court held in *Smiley v. Holm*, 285 U.S. 355 (1932), that the Elections Clause does not "endow the Legislature of the state with power to enact laws in any manner other than that in which the Constitution of the state has provided," which may include the participation of other branches of state government. *Id.* at 368. *Smiley* made clear that

congressional redistricting legislation must comport with state constitutional requirements, explaining that the Elections Clause does not "render[] inapplicable the conditions which attach to the making of state laws," *id.* at 365, including "restriction[s] imposed by state Constitutions upon state Legislatures when exercising the lawmaking power," *id.* at 369.[14]

367. In two companion cases decided the same day as *Smiley*, the Supreme Court reiterated that state courts have authority to strike down legislatively enacted congressional redistricting plans that violate "the requirements of the Constitution of the state in relation to the enactment of laws." *Koenig v. Flynn*, 285 U.S. 375, 379 (1932); *see also Carroll v. Becker*, 285 U.S. 380, 381–82 (1932) (same).

368. The Supreme Court recently reaffirmed this principle, holding that "[n]othing in [the Elections] Clause instructs, nor has [the Supreme] Court ever held, that a state legislature may prescribe regulations on the time, place, and manner of holding federal elections in defiance of provisions of the State's constitution." *Ariz. State Legislature v. Ariz. Indep. Redistricting Comm'n*, 576 U.S. 787, 817–18 (2015); *see also id.* at 841 (Roberts, C.J., dissenting) (acknowledging that under the Elections Clause, congressional districting legislation remains subject to the "ordinary lawmaking process").

369. Not only are state courts authorized to evaluate a congressional redistricting plan's compliance with state constitutional provisions, the Supreme Court's decision in *Growe v. Emison*, 507 U.S. 25 (1993), makes clear that state courts have a *greater* role to play than federal courts in adjudicating congressional redistricting claims. *See id.* at 33 ("The power of the judiciary of a State

[14] As in *Smiley*, Kansas Governor Laura Kelly vetoed the congressional plan here pursuant to the gubernatorial veto power under the Kansas Constitution, and the Legislature did not challenge her authority to do so. *See supra* FOF § I. The Court finds no justification to explain why "lawmaking prescriptions" would include the referendum and gubernatorial veto but not judicial review.

to require valid reapportionment or to formulate a valid redistricting plan has not only been recognized by this Court but appropriate action by the States in such cases has been specifically encouraged." (internal quotation marks omitted)).

370. Writing for a unanimous Court, Justice Scalia expressly recognized state courts' role in redistricting—not only to review legislative enactments, but also to craft remedial plans on their own—and held that "[t]he District Court erred in not deferring to the state court's efforts to redraw Minnesota's . . . federal congressional districts." *Id.* at 42. Far from restricting apportionment responsibilities to a state's legislative branch alone, the Supreme Court affirmed that congressional reapportionment may be conducted "though [a state's] legislative *or* judicial branch." *Id.* at 33 (emphasis in original). As a result, the Supreme Court found that the state court's "issuance of its plan (conditioned on the legislature's failure to enact a constitutionally acceptable plan [by a certain date])" was "precisely the sort of state judicial supervision of redistricting [the Court] ha[s] encouraged." *Id.* at 34.

371. In reversing the district court in *Growe*, the Supreme Court explained that the lower court erred by "ignoring the . . . legitimacy of state *judicial* redistricting." *Id.* (emphasis in original). Defendants make the same error here.

372. Depriving courts of the power to evaluate the validity of congressional plans also directly conflicts with the Supreme Court's seminal decision in *Wesberry v. Sanders*, 376 U.S. 1 (1964). In *Wesberry*, the Supreme Court rejected the plurality opinion in *Colegrove v. Green*, 328 U.S. 549 (1946), which had concluded that the Elections Clause's reference to "Congress" deprives *federal* courts of power to review the validity of congressional plans. *See id.* at 554 (plurality opinion). *Wesberry* explained: "[N]othing in the language of [the Elections Clause] gives support to a construction that would immunize state congressional apportionment laws . . . from the power

of courts to protect the constitutional rights of individuals from legislative destruction." 376 U.S. at 6. In other words, the Court refused to allow voters "to be stripped of judicial protection" by Defendants' restrictive "interpretation of Article I." *Id.* at 7.

373. Defendants rely heavily on the unremarkable and uncontested proposition that redistricting is primarily the province of state legislatures. *See, e.g.*, *Democratic Nat'l Comm. v. Wis. State Legislature*, 141 S. Ct. 28, 29 (2020) (Gorsuch, J., concurring in denial of application to vacate stay)). But when the Kansas Legislature violates the Kansas Constitution, including in its enactment of congressional redistricting legislation, Kansas courts have the power and duty to exercise judicial review and invalidate the Legislature's unconstitutional action.

374. Indeed, this Court does not supplant legislative prerogatives when it enforces state constitutional limits any more than the U.S. Supreme Court supplants congressional prerogatives when it invalidates federal statutes for violating the U.S. Constitution. Federal courts regularly invalidate statutes Congress enacts pursuant to its Article I, section 8 powers, *e.g.*, *Iancu v. Brunetti*, ___ U.S. ___, 139 S. Ct. 2294 (2019), and even statutes Congress enacts pursuant to its Elections Clause powers, *e.g.*, *Citizens United v. FEC*, 558 U.S. 310 (2010). When legislatures legislate, they must do so consistently with constitutional restrictions as interpreted and applied by courts. *See generally Marbury v. Madison*, 5 U.S. 137 (1803).

375. This Court concludes that nothing in the Elections Clause restricts Kansas courts' authority to determine whether Ad Astra 2 is valid *solely* under the Kansas Constitution.

In any event, Congress has independently exercised its Elections Clause power to mandate that congressional redistricting plans enacted by state legislatures comply with substantive state constitutional provisions.

376. Regardless of the meaning of "Legislature" in the first part of the Elections Clause, the second part allows Congress "at any time" to make its own regulations related to congressional

redistricting. U.S. Const. art. I, § 4. Pursuant to this authority, Congress has mandated that states' congressional redistricting plans comply with substantive state constitutional provisions. Accordingly, Defendants' Elections Clause theory, even if accepted, would get them nowhere.

377. Under 2 U.S.C. § 2a(c), states must follow federally prescribed procedures for congressional redistricting unless a state, "after any apportionment," has redistricted "in the manner provided by the law thereof."

378. As the U.S. Supreme Court explained in *Arizona State Legislature*, a predecessor to § 2a(c) had mandated those default procedures "unless 'the legislature' of the State drew district lines." 576 U.S. at 809 (quoting, *inter alia*, Act of Jan. 16, 1901, ch. 93, § 4, 31 Stat. 734). But Congress "eliminated the statutory reference to redistricting by the state 'legislature' and instead directed that" the state must redistrict "in the manner provided by [state] law." *Id.* at 809–11 (emphasis omitted). Congress made that change out of "respect to the rights, to the established methods, and to the laws of the respective States," and "[i]n view of the very serious evils arising from gerrymanders." *Id.* at 810 (alteration in original) (internal quotation marks omitted).

379. And critically, as Justice Scalia explained for the plurality in *Branch v. Smith*, 538 U.S. 254 (2003), the phrase "the manner provided by state law" encompasses substantive restrictions in *state constitutions*: "the word 'manner' refers to the State's substantive 'policies and preferences' for redistricting, as expressed in a State's statutes, constitution, proposed reapportionment plans, or a State's 'traditional districting principles.'" *Id.* at 277-78 (plurality opinion) (citations omitted). Thus, unless a state's congressional plan complies with the substantive provisions of the state's constitution, § 2a(c)'s default procedures become applicable.

380. In addition to mandating compliance with state constitutions, Congress has authorized state courts to establish remedial congressional districting plans. *Branch* held that 2

U.S.C. § 2c, which requires single-member congressional districts, authorizes both state and federal courts to "remedy[] a failure" by the state legislature "to redistrict constitutionally," and "embraces action by *state and federal courts* when the prescribed legislative action has not been forthcoming." 538 U.S. at 270, 272 (majority opinion) (emphasis added). Section 2c "is as readily enforced by courts as it is by state legislatures, and is just as binding on courts—*federal or state*—as it is on legislatures." *Id.* at 272 (emphasis added).

381. Section 2a(c) also recognizes state courts' power to adopt congressional plans. Its default procedures apply "[u]ntil a State is redistricted in the manner provided by [state] law," and the *Branch* plurality explained that this "can certainly refer to redistricting by courts as well as by legislatures," and "when a court, *state or federal*, redistricts pursuant to § 2c, it necessarily does so 'in the manner provided by [state] law.'" *Id.* at 274 (plurality opinion) (emphasis added).

382. The Supreme Court reaffirmed this interpretation in *Arizona State Legislature*, explaining that, under § 2a(c), "Congress expressly directed that when a State has been 'redistricted in the manner provided by [state] law'—whether by the legislature, *court decree*, or a commission established by the people's exercise of the initiative—the resulting districts are the ones that presumptively will be used to elect Representatives." 576 U.S. at 812 (alteration in original) (emphasis added) (citation omitted) (citing *Branch*, 538 U.S. at 274 (plurality opinion)).

383. This Court concludes, therefore, that even if there were doubt whether the Elections Clause permits state courts to review and remedy congressional districting laws under state constitutions it does not matter because Congress has declared that state courts can do so.

Defendants' Elections Clause theory cannot be reconciled with the Fourteenth Amendment's Reduction Clause.

384. The Fourteenth Amendment's Reduction Clause confirms that the U.S. Constitution not only permits but *requires* states' congressional districting plans to comply with state constitutional provisions protecting voting rights.

385. The Reduction Clause provides that "when the right to vote at any election for . . . Representatives in Congress" is "denied . . . or in any way abridged," the state's representation in Congress "shall be reduced" proportionally. U.S. Const. amend. XIV, § 2. In *McPherson v. Blacker*, 146 U.S. 1 (1892), the U.S. Supreme Court held that for purposes of this clause, "[t]he right to vote intended to be protected refers to the right to vote *as established by the laws and constitution of the state*." *Id.* at 39 (emphasis added); *see also id.* at 38 ("The right to vote in the states comes from the states . . . .").

386. *McPherson* thus held that "the right to vote" in federal elections—meaning the right to vote *under the state's own constitution*—"cannot be denied or abridged without invoking the penalty" of reducing the state's representation in Congress. *Id.* at 39. These statements were essential to *McPherson*'s holding: the Supreme Court rejected the argument that the Fourteenth Amendment's Reduction Clause guarantees a *federal* constitutional right to vote in federal elections on the ground that the "right to vote" referenced in the clause instead refers to *state* constitutional (and statutory) rights.

387. The Supreme Court therefore has made clear that state constitutional provisions protecting voting rights *do* apply to voting in congressional elections. And if the Kansas courts determine that Ad Astra 2 violates the Kansas Constitution, it cannot be that the federal Elections Clause requires Kansas to conduct its congressional elections in a manner that would trigger a reduction in the state's representation in Congress under the Reduction Clause. Defendants' Election Clause arguments are likewise unpersuasive here.

Defendants' Elections Clause theory would wreak havoc on Kansas elections.

388. In addition to the extensive legal infirmities above, construing the Elections Clause to foreclose state court judicial review of state election legislation under state constitutions, as Defendants urge, would fundamentally upend Kansas's election administration.

389. Presently, Kansas election laws regarding voter registration, ballots, voting, vote-counting, and deadlines, among other things, apply to both state and federal elections. But under Defendants' Elections Clause theory, Kansas's election system would be forced to adopt a chaotic two-track system in which state constitutional provisions constrain the operation of state statutes for state and local elections, but not for federal elections on the same ballot. Not only would this result severely disrupt and confuse the ability for Kansans to participate in the electoral process, "[a]s a practical matter, it would be very burdensome for a State to maintain separate federal and state . . .processes." *Arizona v. Inter Tribal Council of Ariz.*, 570 U.S. 1, 41 (2013) (Alito, J., dissenting).[15]

[15] More still, if adopted nationally, Defendants' interpretation of the U.S. Constitution's Elections Clause would threaten to nullify dozens of state constitutional provisions across the country. Nearly every state's constitution contains provisions affording citizens the affirmative right to vote if they meet specified qualifications. Indeed, at least 24 state constitutions guarantee that "all elections"—including the state's congressional elections—shall be "free," "free and open," or "free and equal." *See, e.g.*, Colo. Const. art. II, § 5; Mo. Const. art. I, § 25; Mont. Const. art. II, § 13; Neb. Const. art. I, § 22; N.C. Const. art. I, § 10; Okla. Const. art. III, § 5; Pa. Const. art. I, § 5. Other states have more recently adopted state constitutional provisions guaranteeing voting rights in all elections, in reliance on the settled principle that state constitutions can provide broader or more specific protections for voting rights than the U.S. Constitution. *See, e.g.*, Cal. Const. art. II, § 5(a); Mich. Const. art. II, § 4. At least 12 state constitutions have provisions that *explicitly* restrict the drawing of congressional districts by providing criteria with which state legislatures must comply in drawing districts. *See, e.g.*, Mo. Const. art. III, § 45. Until now, nobody had even thought to suggest that the state legislatures could enact statutes countermanding these state constitutional provisions on the theory that they are null and void in congressional elections. But this Court finds that Defendants' Elections Clause theory would take us there and raise similar questions about the consequences for procedural requirements in state constitutions. May state legislatures ignore constitutional provisions that require a gubernatorial signature or veto override for legislation to be enacted, like in Kansas? May they ignore quorum requirements? Completely freed of the ordinary

390. And what about where state legislatures fail to redistrict at all as occurred in Kansas in 2012? *Growe* ordered deference to state courts on matters of state constitutional compliance in the course of impasse litigation, where the judiciary is called upon to adopt new district maps in the wake of a breakdown in the legislative process. 507 U.S. at 27-29, 42. The U.S. Supreme Court has long endorsed non- legislative map-drawing in this context, *see, e.g.*, *Gaffney v. Cummings*, 412 U.S. 735 (1973) (affirming map adopted by a bipartisan commission after legislative impasse). Furthermore, in other cases in the redistricting context, the U.S. Supreme Court has indicated that settled practice carries substantial weight. *See, e.g.*, *Evenwel v. Abbott*, 578 U.S. 54, 73 (2016) ("What constitutional history and our prior decisions strongly suggest, settled practice confirms."). Defendants' theory would upend this long-standing practice and again threaten the ability for voters across the country to vote under constitutional districting schemes.

391. The practical consequences of Defendants' arguments further support Plaintiffs' reading of the Election Clause: state legislatures maintain *primary* redistricting authority while acknowledging that the map-drawing pen is not without constitutional limits, and that state courts must retain power to order a state legislature to re-draw the map when their first attempt violates the state's own constitution.

The cases cited by Defendants do not support their theory.

392. As support for their interpretation of the Elections Clause, Defendants rely on inapplicable cases, several dissenting opinions, and Article 10, Section 1, of the Kansas

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checks and balances that are essential to liberty, the state legislature would wield unfathomable power. The Court finds it hard to imagine a more direct affront to federalism.

Constitution.[16] But these authorities do not support the proposition that the Elections Clause frees the Legislature from constitutional restrictions.

393. Every lower court to have considered the issue since *Smiley* has concluded that the Elections Clause does not bar state courts from invalidating a congressional map under the state's constitution. *See, e.g.*, *Detzner*, 172 So. 3d at 370 & n.2; *Harper*, 868 S.E.2d at 551-52. And this case would hardly be the first time a state court has applied a state constitutional provision to invalidate a congressional plan. *E.g.*, *Harper*, 868 S.E.2d at 553-55, 559 (invalidating 2021 congressional plan under the state constitution); *Moran v. Bowley*, 347 Ill. 148, 162-65, 179 N.E. 526 (1932) (citing cases and applying the Illinois Constitution's free and equal elections clause, pre-*Wesberry*, to require one-person one-vote).

394. Finally, this Court finds that Defendants' reliance on Article 10, Section 1, of the Kansas Constitution is misplaced. That section of the Kansas Constitution provides for the Kansas Supreme Court's automatic review state legislative plans. But that special provision has nothing to say about the Kansas's Supreme Court's jurisdiction over congressional plans. It also has no bearing on whether the *federal* Constitution prohibits state court judicial review of newly enacted congressional plans under other provisions of the state constitution.

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[16] For example, Defendants' Motion to Dismiss relied on *Parsons v. Ryan*, 144 Kan. 370, 60 P.2d 910 (1936). However, *Parsons* did not involve the Elections Clause, or congressional elections, or a claim that a state law violated the state constitution. Instead, *Parsons* merely enforced a straightforward state-law deadline to submit party nominations for presidential electors. *Id.* at 912 ("Because the nomination papers were offered for filing at too late a date, the secretary of state properly refused to receive and file them."). Another cited case, *Carson v. Simon*, 978 F.3d 1051 (8th Cir. 2020), likewise involved presidential elections and did not involve a state court's invalidation of a state election law under the state constitution. Of the cited cases that actually involved the Elections Clause, many pre-date *Smiley*. *See* Defs.' Mot. 12 (citing state court decisions from 1864, 1873, and 1887).

E. Partisan gerrymandering claims are justiciable under the Kansas Constitution.[17]

395. The Kansas Supreme Court has long recognized Kansas courts' duty to enforce constitutional protections in the redistricting process. "It is axiomatic that an apportionment act, as any other act of the legislature, is subject to the limitations contained in the [Kansas] Constitution, and where such act . . . violates the limitations of the Constitution, it is null and void and it is the duty of courts to so declare." *Harris v. Shanahan*, 192 Kan. 183, 207, 387 P.2d 771 (1963). Accordingly, "[e]very citizen and qualified elector in Kansas has an undoubted right to have [redistricting plans] created in accordance with the Kansas Constitution, and has a further right to invoke the power of the courts to protect such constitutional right." *Id.*

396. Notwithstanding the Court's "duty" to apply the Kansas Constitution in the redistricting context, Defendants argue that partisan gerrymandering claims present nonjusticiable political questions. The Court disagrees. The political question doctrine is a narrow exception to the judiciary's general responsibility to adjudicate parties' claims. *See Kan. Bldg. Indus.*, 302 Kan. at 668 (noting that overbroad application of political question doctrine would undermine constitutional protections). Under Kansas law, for a claim to raise a political question, one or more of the following factors, derived from *Baker v. Carr*, 369 U.S. 186 (1962),[18] must exist:

> [1] a textually demonstrable constitutional commitment of the issue to a coordinate political department; or [2] a lack of judicially discoverable and manageable standards for resolving it; or [3] the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or [4] the impossibility of a court's undertaking independent resolution without expressing lack of the respect due coordinate branches of government; or [5] an

[17] Defendants do not challenge the justiciability of racial vote dilution claims under the Kansas Constitution.

[18] The Court notes that in adjudicating Plaintiffs' claims, which arise solely under the Kansas Constitution, it cites federal precedents only for the purpose of guidance and does not consider itself bound by those decisions. *See Michigan v. Long*, 463 U.S. 1032, 1041 (1983).

> unusual need for unquestioning adherence to a political decision already made; or [6] the potentiality of embarrassment from multifarious pronouncements by various departments on one question.

Kan. Bldg. Indus., 302 Kan. at 668 (alterations in original) (quoting *Baker*, 369 U.S. at 217). The Court concludes that none of these factors preclude judicial review in this case.

397. As an initial matter, the Court notes that throughout this litigation, Defendants have relied heavily on case law holding that partisan gerrymandering claims cannot be heard in federal court. But justiciability in Kansas state courts is a question of Kansas law, and federal justiciability requirements do not apply. *Gannon*, 298 Kan. at 1119; *see also, e.g.*, *State ex rel. Morrison v. Sebelius*, 285 Kan. 875, 893, 179 P.3d 366 (2008) ("State courts are not bound by . . . federal justiciability requirements."). And while the U.S. Supreme Court has held that partisan gerrymandering claims cannot be heard in *federal* court, it has also acknowledged that "*state* constitutions can provide standards and guidance for *state* courts to apply." *See Rucho*, 139 S. Ct. at 2506-07 (emphasis added). The Court therefore examines whether partisan gerrymandering claims present a political question under the Kansas Constitution and concludes that they do not. As a result, the Court concludes that partisan gerrymandering claims are justiciable under the Kansas Constitution.

There are judicially discoverable and manageable standards for resolving Plaintiffs' partisan gerrymandering claims.

398. The Court first addresses the second *Baker* factor, on which most of Defendants' arguments in this case have focused. The Court concludes that the Kansas Constitution offers judicially manageable standards for adjudicating partisan gerrymandering claims. Kansas courts routinely determine manageable standards to enforce broad constitutional language—including in the redistricting context. And other states' supreme courts have successfully adjudicated similar

claims under their state constitutions, offering a model for this Court to apply. Indeed, the ample evidence of Ad Astra 2's extreme, intentional partisan bias makes this an easy case.

399. Kansas courts routinely develop manageable standards to enforce provisions of the state Constitution, including in the redistricting context. Developing manageable standards to enforce state constitutional protections is the ordinary business of Kansas courts, including in the redistricting context. In *Harris*, for example, the Kansas Supreme Court considered claims brought under since-amended Kansas constitutional provisions governing state legislative redistricting that did not provide for judicial review or articulate explicit standards for it. *See* 192 Kan. at 201-02. Nonetheless, *Harris* recognized that a redistricting plan, like "any other act of the legislature, is subject to the limitations contained in the Constitution" and to legal challenge by Kansas residents and looked to the equal protection guarantees of Sections 1 and 2 of the Kansas Bill of Rights to provide substantive guidance in determining the challenged map's constitutionality. *Id*. at 204-05, 207. *Harris* thus confirms that state constitutional challenges, like this one, to the validity of redistricting plans are justiciable.

400. *Harris* also demonstrates Kansas courts' ability to define manageable standards for applying constitutional protections in the redistricting context. Interpreting an earlier version of the Kansas Constitution that allocated state legislative seats by county, the Court concluded that constitutional equality norms embodied by Sections 1 and 2 of the Kansas Bill of Rights required that the seats be allocated using the method of equal proportions (the same algorithm used to distribute seats in the U.S. House of Representatives among the states). *See id.* at 204-05, 207-13. The redistricting provisions at issue did not use the word "equal," let alone reference the method of equal proportions. *See id.* at 201-02. Rather, the Kansas Supreme Court discerned manageable standards based on the Kansas Constitution's equal protection provisions to ensure that those

provisions remained enforceable in the redistricting context. Similarly, in this case, the Court concludes that the Kansas Constitution's equal protection, free speech and assembly, and suffrage provisions provide manageable standards to adjudicate partisan gerrymandering claims.

401. Decisions from outside the redistricting context reaffirm this conclusion. As the Kansas Supreme Court has recognized, "courts are frequently called upon, and adept at defining and applying various, perhaps imprecise, constitutional standards," *Gannon*, 298 Kan. at 1155, and "[t]he judiciary is well accustomed" to doing so, *id.* at 1149 (quoting *Neeley v. West Orange-Cove Consol. Indep. Sch. Dist.*, 176 S.W.3d 746, 778 (Tex. 2005)); *see also id.* (recognizing that constitutional provisions that are "imprecise" are nonetheless "not without content" (quoting *Neeley*, 176 S.W.3d at 778)). *Gannon*, for instance, concluded that the state courts could define manageable standards to enforce the Kansas Constitution's requirement that the Legislature "make suitable provision for finance of the educational interests of the state." Kan. Const. art. 6, § 6(b); *see Gannon*, 298 Kan. at 1149-51. The court explained that although the "Kansas Constitution clearly leaves to the legislature the myriad of choices available to perform its constitutional duty" to provide suitable educational funding, "when the question becomes whether the legislature has actually performed its duty, that most basic question is left to the courts to answer under our system of checks and balances." *Gannon*, 298 Kan. at 1151. In the same way, while the Legislature may enjoy broad discretion in the redistricting process, that discretion is not unlimited: the Kansas Constitution requires state courts to determine whether a redistricting plan violates residents' and voters' fundamental rights. *See, e.g.*, *Harris*, 192 Kan. at 206-07. And the key provisions here—involving equality, free speech, and suffrage—have long been the basis of litigation in state courts, from which Kansas courts can draw and provide manageable standards. *See infra* COL § III

(discussing constitutional provisions' applicability to partisan gerrymandering). Partisan gerrymandering claims brought under those provisions are therefore justiciable.

402. And in applying broad constitutional language, Kansas courts have not been afraid to deviate from federal justiciability standards. For example, the U.S. Supreme Court has repeatedly declared claims brought under the Guarantee Clause nonjusticiable in federal court. *See, e.g.*, *Pac. States Tel. & Tel. Co. v. Oregon*, 223 U.S. 118, 133 (1912). Yet *VanSickle v. Shanahan*, 212 Kan. 426, 511 P.2d 223 (1973), held that at least some claims under the Guarantee Clause remain justiciable in Kansas courts, with the Kansas Constitution supplying the necessary legal standards. *See id.* at 437-38; *see also Gannon*, 298 Kan. at 1156 (reaffirming this holding). Thus, while federal courts may be unable to hear partisan gerrymandering claims under the federal Constitution, the Kansas Constitution allows this Court to hear those claims.

403. Indeed, Kansas courts' duty to safeguard state constitutional protections is strongest where, as here, the federal courts have retreated from enforcing those protections' federal counterparts. "[S]tate courts have relied upon their own state constitutions to depart from United States Supreme Court decisions deviating or retreating from a broader rule of constitutional law." *State v. Scott*, 286 Kan. 54, 95-96, 183 P.3d 801 (2008), *overruled on other grounds by State v. Dunn*, 304 Kan. 773, 375 P.3d 332 (2016); *see, e.g.*, *State v. McDaniel*, 228 Kan. 172, 184-85, 612 P.2d 1231 (1980). *McDaniel*, for example, held that a federal Supreme Court decision that "retreat[ed]" from earlier holdings by reducing the scope of Eighth Amendment protections "force[d] [the Kansas Supreme] Court to reconsider its reliance" on federal precedent in applying Section 9 of the Kansas Bill of Rights. 228 Kan. at 184-85. The Court concluded that the Kansas Constitution provides heightened protections against cruel and unusual punishment guided by the

former, more expansive federal standards that existed before the U.S. Supreme Court's retreat. *See id.* at 185.

404. As in *McDaniel*, federal courts have retreated from applying federal constitutional standards in the context of partisan gerrymandering—and invited state courts to step in. Kansas courts can and should mitigate the consequences of this retreat by enforcing state constitutional protections. Such an approach was encouraged by the Supreme Court itself, which noted that its holding in *Rucho* did not "condemn complaints about districting to echo into a void," because "state constitutions can provide standards and guidance for state courts to apply." 139 S. Ct. at 2507.

405. Moreover, other states' supreme courts have successfully adjudicated partisan gerrymandering claims under their state constitutions, providing a model for this Court. Kansas courts routinely look to the jurisprudence of sister states for guidance in interpreting constitutional language. *See, e.g.*, *Gannon*, 298 Kan. at 1135, 1149-55. Doing so in this case buttresses the Court's conclusion that partisan gerrymandering claims are justiciable, as numerous other state courts have already accepted *Rucho*'s invitation to adjudicate such claims. The supreme courts of Florida, North Carolina, Ohio, and Pennsylvania have all applied their state constitutions to protect against partisan gerrymandering in congressional and legislative redistricting. *See Detzner*, 172 So. 3d at 371-72; *Harper*, 868 S.E.2d at 559; *Adams v. DeWine*, ___ N.E.3d ___, Nos. 2021-1428 & 2021-1449, 2022 WL 129092, at *1-2 (Ohio Jan. 14, 2022); *League of Women Voters of Pa. v. Commonwealth*, 645 Pa. 1, 128, 178 A.3d 737 (2018); *League of Women Voters of Ohio v. Ohio Redistricting Comm'n*, ___ N.E.3d ___, Nos. 2021-1193, 2021-1198, & 2021-1210, 2022 WL 110261, at *1 (Ohio Jan. 12, 2022). These decisions—several of which relied on broad

constitutional text not specific to redistricting—demonstrate that state courts can discern the manageable standards necessary to hear partisan gerrymandering claims.[19]

406. Specifically, the North Carolina Supreme Court recently held that partisan gerrymandering of congressional or state legislative maps violates the North Carolina Constitution's equal protection, free speech, freedom of assembly, and free elections clauses. *Harper*, 868 S.E.2d at 559. The court determined that each of these clauses—including the first three, under whose Kansas equivalents the claims in this case arise—independently provides "manageable judicial standards" to govern partisan gerrymandering claims. *Id.* Those North Carolina constitutional provisions do not offer more detailed language or substantive guidance than do their Kansas equivalents; for example, the relevant portion of North Carolina's equal protection clause provides only that "[n]o person shall be denied the equal protection of the laws." *Id.* at 511 (quoting N.C. Const. art. I, § 19); *cf.* Kan. Const. Bill of Rights, § 2 (more explicitly discussing "political power"). Rather, the North Carolina court recognized that pursuant to the state judiciary's "fundamental [and] sacred dut[y]" to "protect[] the constitutional rights of the people . . . from overreach by the General Assembly," courts could discern a manageable framework for adjudicating partisan gerrymandering claims—a framework that could be further developed "in the context of actual litigation." *Harper*, 868 S.E.2d at 510, 547-50 (quoting *Reynolds v. Sims*, 377 U.S. 533, 578 (1964)).

407. Thus, the court held that a redistricting plan constitutes a partisan gerrymander—and is therefore subject to strict scrutiny—if "it deprives a voter of his or her right to substantially

[19] Indeed, the Kansas Constitution "can be traced through prior state constitutions to the English Bill of Rights," Kirk Redmond & David Miller, *The Kansas Bill of Rights: "Glittering Generalities" or Legal Authority*, J. Kan. Bar Ass'n, Sept. 2000, at 18, 20 (2000), the same document on which the Pennsylvania and North Carolina constitutions are based, *see Harper*, 868 S.E.2d at 540. These decisions are thus of particular value in interpreting the Kansas Constitution.

equal voting power," as demonstrated by "direct [or] circumstantial evidence" that "the plan makes it systematically more difficult for [the] voter to aggregate his or her vote with other likeminded voters, thus diminishing or diluting the power of that person's vote on the basis of his or her views." *Harper*, 868 S.E.2d at 552, 559. The court declined to give an exhaustive list of evidence that would satisfy this burden—although it noted that, if necessary, it could have selected one of various bright-line statistical tests offered by experts in that case. *See id.* at 547-49. Instead, it simply recognized the overwhelming evidence of the challenged maps' partisan skew. *See id.* at 547-49, 553-57.

408. The Pennsylvania Supreme Court similarly relied on broad constitutional language in striking down the state's congressional map as a partisan gerrymander in 2018. *See League of Women Voters of Pa.*, 645 Pa. at 128. The court explained that although the Pennsylvania Constitution's Free Elections clause does not provide "explicit standards" for evaluating the constitutionality of congressional districts, deviation from longstanding, widely accepted map-drawing criteria—such as contiguity, compactness, and respect for political subdivisions—can provide evidence that a redistricting plan constitutes a partisan gerrymander. *See id.* at 118-21. Like the North Carolina court, Pennsylvania's high court declined to provide an exhaustive framework for evaluating partisan gerrymandering claims, recognizing that future litigation would allow courts to flesh out the doctrine over time. *See id.* at 122-23. The court held only that one method of proving that a map is an unconstitutional partisan gerrymander is to show that it subordinates traditional neutral redistricting criteria to "extraneous considerations such as gerrymandering for unfair partisan political advantage," and that the facts of the congressional plan at issue clearly showed that type of subordination. *Id.* at 122, 128.

409. These decisions demonstrate that state courts can successfully adjudicate partisan gerrymandering claims under state constitutions, even where the relevant constitutional text does not provide explicit standards for evaluating such claims. Like the Pennsylvania and North Carolina supreme courts, this Court can discern the necessary manageable standards—indeed, in Kansas, it is "the duty of courts" to do so. *Harris*, 192 Kan. at 207.

410. As discussed below, *see* COL § III, the Court concludes that partisan gerrymanders are subject to strict scrutiny pursuant to the Kansas Constitution's guarantees of equal protection, free speech and assembly, and suffrage. Building on precedent from sister states, the Court determines that at minimum, a congressional plan constitutes a partisan gerrymander subject to strict scrutiny where the Court finds, as a factual matter, (1) that the Legislature acted with the purpose of achieving partisan gain by diluting the votes of disfavored-party members, and (2) that the challenged congressional plan will have the desired effect of substantially diluting disfavored-party members' votes. *See Harper*, 868 S.E.2d at 552, 559 (recognizing unconstitutional gerrymander based on effect on voting power); *League of Women Voters of Pa.*, 645 Pa. at 122 (finding unconstitutional gerrymander where traditional criteria were subordinated to partisan considerations).

411. The ample evidence of Ad Astra 2's intentional, extreme partisan bias makes the factfinding in this case straightforward, demonstrating the judicially manageable nature of the inquiry. The Court therefore concludes that judicially manageable standards for adjudicating partisan gerrymandering claims exist, and this *Baker* factor does not render such claims nonjusticiable.

Adjudicating partisan gerrymandering claims does not require policy determinations based on nonjudicial discretion.

412. Hearing Plaintiffs' partisan gerrymandering claims also would not require the Court to make "an initial policy determination of a kind clearly for nonjudicial discretion." *Kan. Bldg. Indus.*, 302 Kan. at 668 (quoting *Baker*, 369 U.S. at 217). Rather, the Kansas Supreme Court has recognized that while the Legislature enjoys broad discretion in redistricting matters, "[t]he exercise of [that] discretion . . . by the [L]egislature in enacting an apportionment law must be limited to the standards provided in our Constitution." *Harris*, 192 Kan. at 205. Accordingly, it is the "duty" of Kansas courts to ensure that redistricting takes place within constitutional bounds. *Id.* at 207. Applying the Constitution in this way to cabin the Legislature's discretion is *precisely* the judicial role—not a policy determination.

413. Decisions from the Kansas Supreme Court considering partisan gerrymandering claims while reviewing state legislative reapportionment plans underscore this point. Although the Court has never held a redistricting plan unconstitutional on partisan gerrymandering grounds, it has repeatedly indicated that partisan gerrymandering claims are cognizable under the Kansas Constitution, and that the allegations in past cases failed *on the merits* because the challengers—unlike Plaintiffs here—had failed to offer evidence substantiating their claims. *See In re Stephan*, 251 Kan. 597, 607, 836 P.2d 574 (1992) ("No evidence has been offered that would indicate the size and shape of House District 47 was engineered to cancel out the voting strength of any cognizable group or locale."); *In re Senate Bill No. 220*, 225 Kan. 628, 637, 593 P.2d 1 (1979) (concluding that challengers had failed to "show[]" an unconstitutional gerrymander); *In re House Bill No. 2620*, 225 Kan. 827, 834-35, 595 P.2d 334 (1979) (concluding that "no claim or showing of gerrymandering . . . ha[d] been made"). Although these decisions did not discuss the gerrymandering allegations at great length—likely because of the lack of supporting evidence—or give clear rules for resolving future claims, none suggested that the Court lacked jurisdiction to

consider the allegations. Instead, each indicated that the Legislature's discretion in redistricting is not boundless, and that Kansas courts have jurisdiction to hear partisan gerrymandering claims.

414. The Court concludes that this *Baker* factor does not render Plaintiffs' partisan gerrymandering claims nonjusticiable

Redistricting matters are not textually committed to the Legislature.

415. The next *Baker* factor is similarly inapplicable: No "textually demonstrable constitutional commitment of [congressional redistricting] to [a] coordinate [branch]" prevents this Court from adjudicating Plaintiffs' partisan gerrymandering claims. *Kan. Bldg. Indus.*, 302 Kan. at 668 (quoting *Baker*, 369 U.S. at 217). The Kansas Constitution is silent as to congressional redistricting; nothing in its text commits authority over congressional redistricting entirely to another branch.

416. The fact that Article 10 of the Kansas Constitution explicitly provides for judicial review of state legislative maps does not change this conclusion or suggest that Kansas courts are powerless to review congressional plans—in fact, it proves the opposite. First, the Constitution's treatment of the courts' role in each type of redistricting process parallels its treatment of the Legislature's role: the document explicitly describes the Legislature's authority in state legislative reapportionment, *see id*. art. 10, § 1, but is silent as to congressional redistricting. That contrast does not mean that the Legislature has no power over congressional redistricting, and it similarly does not preclude judicial review in this context. Instead, it indicates only that the Constitution leaves congressional redistricting to the state's ordinary lawmaking process of enactment by the Legislature and ordinary review by the state courts. *Cf. Harris*, 192 Kan. at 207. Second, before the current version of Article 10 was adopted in the 1980s, *Harris* explained that state courts have a "duty" to ensure that redistricting plans comply with the Kansas Constitution even in the absence of an explicit judicial review provision. 192 Kan. at 207. The current review provision provides a

streamlined process for carrying out that duty in the state legislative context, *see* Kan. Const. art. 10, § 1(b)-(e), but its adoption does not change the fact that as in *Harris*, courts can adjudicate redistricting cases under the longstanding substantive constitutional provisions involved here. Article 10 thus does nothing to limit this Court's power to hear this case.

417. Finally, to the extent Defendants argue this factor applies because of the federal Constitution's Elections Clause, the argument fails for two reasons. First, as explained above, *see supra* COL § II.A, the Elections Clause does not prevent this Court from adjudicating challenges to congressional plans. Second, justiciability in this Court—including the applicability of the political question doctrine—is a matter of Kansas law. *See e.g., Gannon*, 298 Kan. at 1119. The federal Elections Clause is therefore irrelevant to this Court's jurisdiction under the Kansas Constitution.

418. The Court concludes that this *Baker* factor does not render Plaintiffs' partisan gerrymandering claims nonjusticiable.

The remaining* Baker *factors do not bar adjudication of partisan gerrymandering claims.

419. Defendants have not argued that the other three *Baker* factors—"the impossibility of a court's undertaking independent resolution without expressing lack of the respect due coordinate branches of government," "an unusual need for unquestioning adherence to a political decision already made," or "the potentiality of embarrassment from multifarious pronouncements by various departments on one question," *Kan. Bldg. Indus.*, 302 Kan. at 668 (quoting *Baker*, 369 U.S. at 217)—render Plaintiffs' claims nonjusticiable, and with good reason: none applies in this case. These three factors all reflect the same basic idea: that some issues so firmly belong to the political branches that courts cannot interfere. But the Kansas Supreme Court has recognized that redistricting is not such an issue; rather, "an apportionment act, as any other act of the legislature, is subject to the limitations contained in the Constitution, and where such act . . . violates the

limitations of the Constitution, it is null and void and it is the duty of courts to so declare." *Harris*, 192 Kan. at 207. Partisan gerrymandering claims raise no more concerns about respect for coordinate branches, adherence to political decision making, or multifarious pronouncements than the malapportionment claims adjudicated in *Harris*—or other redistricting claims, like racial gerrymandering or vote dilution, that courts routinely hear.

420. Ultimately, to conclude that partisan gerrymandering claims are nonjusticiable would render the Bill of Rights "little more than a compilation of glittering generalities"—a result the Kansas Supreme Court has consistently rejected for over a century. *Atchison St. Ry. Co. v. Missouri Pac. Ry. Co.*, 31 Kan. 660, 3 P. 284, 286 (1884); *see, e.g.*, *Hodes & Nauser, MDs, P.A. v. Schmidt*, 309 Kan. 610, 633-38, 440 P.3d 461 (2019) (per curiam) (reaffirming that Kansas Bill of Rights is independent source of enforceable constitutional rights). Instead, the Kansas Constitution "limit[s] the power of the legislature, and no act of that body can be sustained which conflicts with [it]." *Atchison St. Ry. Co.*, 3 P. at 286. The Court will therefore carry out its "duty" to determine whether the challenged congressional plan "violates the limitations of the Constitution." *Harris*, 192 Kan. at 207.

III. The intentional, effective partisan gerrymandering in Ad Astra 2 violates the Kansas Constitution.

421. Plaintiffs argue that Ad Astra 2 constitutes a partisan gerrymander in violation of the Kansas Constitution. Specifically, Plaintiffs argue that Ad Astra 2 violates the equal protection guarantees of Sections 1 and 2 of the Kansas Bill of Rights; the right to vote under Sections 1 and 2 of the Kansas Bill of Rights and Article 5, Section 1 of the Kansas Constitution; the right to free speech and assembly under Sections 11 and 3, respectively, of the Kansas Bill of Rights; and the

right to be free from retaliation for the exercise of their free speech rights, similarly secured under Section 11 of the Kansas Bill of Rights.[20] The Court addresses each of these claims in turn.

A. The Kansas Constitution guarantees the right to equal protection, and partisan gerrymandering infringes on this right.

422. For the reasons set forth below, the Court concludes that partisan gerrymandering violates the equal protection guarantees of Sections 1 and 2 of the Kansas Bill of Rights. Section 1 provides that "[a]ll men are possessed of equal and inalienable natural rights, among which are life, liberty, and the pursuit of happiness." Kan. Const. Bill of Rights, §§ 1. Section 2 guarantees that "[a]ll political power is inherent in the people, and all free governments are founded on their authority, and are instituted for their equal protection and benefit." *Id.* § 2. In interpreting the equal protection guarantees enshrined in the Kansas Constitution, the Kansas Supreme Court has emphasized that "the Kansas Constitution affords separate, adequate, and greater rights than the federal Constitution." *Farley v. Engelken*, 241 Kan. 663, 671, 740 P.2d 1058 (1987).

423. The Kansas Supreme Court has explained that Sections 1 and 2 incorporate broad protections for political equality in redistricting—protections that prohibit partisan gerrymandering. Under the Kansas Constitution, "every qualified elector . . . is given the right to vote for officers . . . [and] is possessed of equal power and influence in the making of laws which govern him," and "[i]nsofar as he is accorded less representation than is his due under the Constitution, to that extent the governmental processes fail to record the full weight of his

[20] The *Frick* Plaintiffs also invoke Section 20 of the Kansas Bill of Rights in their Petition. Section 20 of the Kansas Bill of Rights reinforces and brings home the other rights, protections, and principles enumerated and discussed herein. Section 20 makes clear two fundamental and critical principles: (1) the "enumeration of rights shall not be construed to impair or deny others retained by the people"; and (2) "all powers not herein delegated remain with the people." Section 20 is not a nullity; it enervates the many specific Bill of Rights provisions that precede it.

judgment and the force of his will." *Harris*, 192 Kan. at 204. Applying the guarantee of equality enshrined in Sections 1 and 2, *Harris* concluded that seats in the Legislature must be apportioned among counties based on their populations with "as close an approximation to exactness as possible." *Id.* at 205. Like the malapportionment redressed in *Harris*, partisan gerrymandering deprives voters of "equal power and influence in the making of laws which govern [them]." *Id.* at 204. By design, the practice "strategically exaggerates the power of voters who tend to support the favored party while diminishing the power of voters who tend to support the disfavored party." *Adams*, 2022 WL 129092, at *1. Like malapportionment, partisan gerrymandering is thus inconsistent with equal protection under Sections 1 and 2.

424. The text of Section 2 also indicates that the Kansas Constitution provides strong protections for political equality and against partisan gerrymandering. In determining the scope of state constitutional provisions, the Kansas Supreme Court examines the constitutional text. *See, e.g.*, *Hodes & Nauser*, 309 Kan. at 623-25. And Section 2's text focuses explicitly on *political* equality: it recognizes that "[a]ll political power is inherent in the people" and that "all free governments are founded on their authority, and are instituted for their equal protection." *Cf. Stephens v. Snyder Clinic Ass'n*, 230 Kan. 115, 128, 631 P.2d 222 (1981) ("Section 2 of the Kansas Bill of Rights has been construed as referring solely to political privileges and not to those relating to property rights."). The goal of partisan gerrymandering is to eliminate the people's authority over government by giving different voters vastly *unequal* political power. *See, e.g.*, *Adams*, 2022 WL 129092, at *1. Section 2, with its textual focus on political equality, thus proscribes partisan gerrymandering.

425. Decisions from sister states buttress this conclusion. North Carolina's equal protection clause similarly "provides greater protection . . . than the federal Constitution." *Harper*,

868 S.E.2d at 543. In a recent ruling concerning that state's congressional and state legislative maps, the North Carolina Supreme Court concluded that the state's equal protection right included a right to "substantially equal voting power." *Id*. (quoting *Stephenson v. Bartlett*, 355 N.C. 354, 379, 562 S.E.2d 377 (2002)) When the state engages in partisan gerrymandering, the court explained, it infringes on that right. *Id*. at 544. This is because the right to an equal voting power "necessarily encompasses the opportunity to aggregate one's vote with likeminded citizens to elect a governing majority of elected officials who reflect those citizens' views." *Id.* Partisan gerrymandering diminishes and dilutes citizens' "votes on the basis of party affiliation" and thereby "deprives voters in the disfavored party of the opportunity to aggregate their votes to elect such a governing majority." *Id.* The court concluded that this interpretation "is most consistent with the fundamental principles in our Declaration of Rights of equality and popular sovereignty—together, political equality." *Id.*

426. The Court finds that reasoning persuasive for a number of reasons.

427. First, the constitutions of Kansas and North Carolina share a common ancestor: Both trace their lineage back to the English Bill of Rights. *See* Redmond & Miller, *supra* note 19, at 20; *Harper*, 868 S.E.2d at 540.

428. Second, as in North Carolina, the right to vote is fundamental under the Kansas Constitution. As the Kansas Supreme Court has held:

> The right to vote in any election is a personal and individual right, to be exercised in a free and unimpaired manner, in accordance with our Constitution and laws. The right is [preservative] of other basic civil and political rights, and is the bed-rock of our free political system. Likewise, it is the right of every elector to vote on amendments to our Constitution in accordance with its provisions. This right is a right, not of force, but of sovereignty. It is every elector's portion of sovereign power to vote on questions submitted. Since the right of suffrage is a fundamental matter, any alleged restriction or infringement of that right strikes at the heart of orderly constitutional government and must be carefully and meticulously scrutinized.

Moore v. Shanahan, 207 Kan. 645, 649, 486 P.2d 506 (1971); *see also Harris v. Anderson*, 194 Kan. 302, 303, 400 P.2d 25 (1965) ("[T]he right to vote for the candidate of one's choice is of the essence of the [representative] form of government, and . . . 'the right of suffrage can be denied by a debasement or dilution of the weight of a citizen's vote just as effectively as by wholly prohibiting the free exercise of the franchise.'" (quoting *Reynolds v. Sims*, 377 U.S. 533, 555 (1964))).

429. Third, the North Carolina Constitution contains analogous provisions to Sections 1 and 2 of the Kansas Bill of Rights, which, read in conjunction, guarantee political equality—and the opinion described above use that guarantee as a basis for their conclusions. *See Harper*, 868 S.E.2d at 544 (citing N.C. Const. art. I, §§ 1-2) ("Our reading of the equal protection clause is most consistent with the fundamental principles in our Declaration of Rights of equality and popular sovereignty—together, political equality.").

430. This Court agrees with the reasoning of *Harper* and concludes that the equal protection guarantee of the Kansas Bill of Rights secures the right to substantially equal voting power. *See Gannon*, 298 Kan. at 1135, 1149-55 (looking to constitutions of sister states as aids in interpreting Kansas Constitution).

431. The Court also holds that partisan gerrymandering—the drawing of district lines to dilute the votes of those likely to vote for a disfavored party—deprives voters of substantially equal voting power. This is because voters cannot be said to enjoy an equal vote when they live in districts that the State has drawn in such a manner that negates voters' "representational influence." *Harper*, 868 S.E.2d at 544. Instead, the State has created classes of favored and disfavored voters, allowing voters of one party to elect their candidates of choice while denying that same right to

voters of another. The Kansas Constitution, which recognizes citizens' right to political equality, stands as a bulwark against such legislative misconduct.

B. The Kansas Constitution guarantees the right to vote, and partisan gerrymandering infringes on this right.

432. For similar reasons, partisan gerrymandering violates the Kansas Constitution's protection of the right to vote.

433. The right to vote is secured by Sections 1 and 2 of the Kansas Bill of Rights and by Article 5, Section 1 of the Kansas Constitution, the latter of which provides that "[e]very citizen of the United States who has attained the age of eighteen years and who resides in the voting area in which he or she seeks to vote shall be deemed a qualified elector." The Kansas Supreme Court has recognized that the right to vote is "fundamental" under the Kansas Constitution, and "any alleged restriction or infringement of that right strikes at the heart of orderly constitutional government, and must be carefully and meticulously scrutinized." *Moore*, 207 Kan. at 649. Additionally, the Kansas Supreme Court has recognized that the Kansas Bill of Rights secures natural rights that go beyond what is guaranteed by the United States Constitution. *See Hodes & Nauser*, 309 Kan. at 624-27.

434. This fundamental right to vote encompasses the right to "substantially equal voting power and substantially equal legislative representation." *Harper*, 868 S.E.2d at 544 (quoting *Stephenson*, 355 N.C. 354 at 382 (2002)); *see State v. Beggs*, 126 Kan. 811, 271 P. 400, 402 (1928) (holding that the Kansas Constitution prohibits legislation that will "directly or indirectly, deny or abridge . . . or unnecessarily impede the exercise of th[e] right" to vote (citation omitted)).

435. When voters of one class have their votes diluted for the benefit of another, voters do not enjoy substantially equal voting power. Accordingly, partisan gerrymandering offends

Kansans' right to vote, secured to them by Sections 1 and 2 of the Bill of Rights and Article 5, Section 1 of the Kansas Constitution.

C. The Kansas Constitution guarantees the right to Free Speech and Assembly, and partisan gerrymandering infringes on this right.

436. This Court also concludes that partisan gerrymandering violates the rights to free speech and assembly, secured by Sections 3 and 11 of the Kansas Bill of Rights.

437. Section 11 provides that "all persons may freely speak, write or publish their sentiments on all subjects, being responsible for the abuse of such rights." Section 3 states that "[t]he people have the right to assemble, in a peaceable manner, to consult for their common good, to instruct their representatives, and to petition the government, or any department thereof, for the redress of grievances."

438. These provisions offer broad protection for free speech and association. Indeed, the provisions' text demonstrates that they offer broader protections than does the federal First Amendment. *See, e.g.*, *Hodes & Nauser*, 309 Kan. at 623-25 (comparing constitutional texts and concluding from comparison that Kansas Constitution confers broader individual rights). Section 3, for example, expressly grants individuals the rights "to consult for their common good" and "to instruct their representatives." The First Amendment does not contain this language; an earlier draft of the provision included a right to "consult for the common good," but that language was removed before enactment. *Jones v. City of Opelika*, 319 U.S. 105, 124 n.6 (1943) (Reed, J., dissenting). In other words, the Kansas Constitution includes a unique textual focus on collective speech about matters of public concern (consultation "for the common good") and political speech (the right of the people to "instruct their representatives"). These unique features underscore the Constitution's protection against partisan gerrymandering.

439. The Court concludes that partisan gerrymandering violates this protection in at least three related, but independent, ways. First, partisan gerrymandering unconstitutionally discriminates against members of the disfavored party based on viewpoint. Second, partisan gerrymandering unlawfully burdens disfavored-party members' freedom of association. Third, partisan gerrymandering unlawfully retaliates against disfavored-party members for engaging in protected political speech and association.

440. As the Kansas Supreme Court has recognized, the right to free speech is "among the most fundamental personal rights and liberties of the people." *Unified Sch. Dist. No. 503 v. McKinney*, 236 Kan. 224, 234, 689 P.2d 860 (1984). Discrimination on the basis of viewpoint is the very antithesis of free speech, and as a result "[d]iscrimination against speech based on its message is presumptively unconstitutional." *Roeder v. Kan. Dep't of Corr.*, No. 113,239, 2016 WL 556281, at *3 (Kan. App. 2016) (per curiam) (unpublished opinion); *see also Harper*, 868 S.E.2d at 546 ("[V]iewpoint discrimination . . . triggers strict scrutiny."); *State v. Smith*, 57 Kan. App. 2d 312, 318, 452 P.3d 382 (2019) ("It is well-established that content-based speech restrictions are presumptively invalid.").

441. Partisan gerrymandering constitutes viewpoint discrimination in violation of Section 11. When map-drawers craft gerrymandered districts, they single out a specific class of voters for disfavored treatment based simply on the viewpoints those voters express. Thus, when the legislature "systemically diminishes or dilutes the power of votes on the basis of party affiliation," it engages in the very type of viewpoint discrimination that Section 11 prohibits. *Harper*, 868 S.E.2d at 546.

442. Likewise, partisan gerrymandering violates the right to freedom of association, which is secured by the right to free speech under Section 11 and to free assembly under Section

3. The Kansas Bill of Rights describes associational rights that are even broader than those recognized under the U.S. Constitution: While the First Amendment to the U.S. Constitution recognizes the right "peaceably to assemble, and to petition the Government for a redress of grievances," the Kansas Constitution goes still further, with text that goes right to the heart of partisan gerrymandering: "The people have the right to . . . instruct their representatives." Kan. Const. Bill of Rights, § 3; *see also Harper*, 868 S.E.2d at 544 (finding that partisan gerrymandering violated state constitutional provision protecting right of citizens to "instruct their representatives" (quoting N.C. Const. art. I, § 12)). This right sits at the core of Kansans' associational freedom: Section 2 makes clear that the government derives its power from the people, and Section 3 grants the people the right to hold it accountable. Partisan gerrymandering throws this structure into disarray by wresting power from the people and erecting structures that impede the accountability of their representatives.

443. It is of no moment that citizens living in gerrymandered districts may nonetheless vote for candidates of their choice or coordinate across siloed jurisdictions, because the cracking of Democratic communities across districts creates a significant associational burden. In our democracy, "citizens form parties to express their political beliefs and to assist others in casting votes in alignment with those beliefs." *Harper*, 868 S.E.2d at 545 (quoting *Libertarian Party of N.C. v. State*, 365 N.C. 41, 49, 707 S.E.2d 199 (2011)). When the state engages in gerrymandering to negate that party's power, it has the effect of "debilitat[ing]" the disfavored party and "weaken[ing] its ability to carry out its core functions and purposes." *Common Cause v. Lewis*, No. 18 CVS 014001, 2019 WL 4569584, at *122 (N.C. Super. Ct. Sept. 3, 2019) (alterations in original) (quoting *Gill v. Whitford*, 138 S. Ct. 1916, 1939 (2018) (Kagan, J., concurring)). In other words, partisan gerrymandering renders political association an exercise in futility. This leads to

more voters feeling demoralized, which in turn entrenches the favored party, making the associational harms still worse. *See generally* Daniel P. Tokaji, *Gerrymandering and Association*, 59 Wm. & Mary L. Rev. 2159 (2018).

444. Finally, partisan gerrymandering constitutes unconstitutional retaliation against members of a disfavored party for their engagement in protected political activity. The State engages in impermissible retaliation when plaintiffs can establish that (1) they were engaged in a constitutionally protected activity; (2) the State's actions adversely affected the protected activity; and (3) the State's adverse action was substantially motivated by plaintiffs' exercise of their constitutional rights. *See, e.g.*, *Grammer v. Kan. Dep't of Corr.*, 57 Kan. App. 2d 533, 538, 455 P.3d 819 (2019); *Rebarchek v. Farmers Coop. Elevator & Mercantile Ass'n*, 272 Kan. 546, 553, 35 P.3d 892 (2001) (discussing burden-shifting approach in retaliatory discharge context).

445. Partisan gerrymandering satisfies all three of these elements. First, as described above, voters seek to engage in protected activities, including exercising their right to free speech and assembly by forming political parties, voicing support for their candidates of choice, and casting votes for those candidates. Second, partisan gerrymandering burdens these rights by reducing the voting power of members of the disfavored party, discriminating against members of that party on the basis of their viewpoints, and burdening their ability to associate by obstructing their political organizations. Third, the State's actions are motivated by voters' exercise of their constitutional rights: Partisan gerrymanderers move voters for the disfavored party into different districts precisely because those voters are likely to engage in protected conduct.

446. For the foregoing reasons, the Court concludes that partisan gerrymandering violates Kansans' rights to free speech and free association and constitutes retaliation against

protected activity. Each of these three grounds constitutes a separate and independent basis under which partisan gerrymandering violates the Kansas Constitution.

D. Ad Astra 2 is a partisan gerrymander that violates the foregoing constitutional rights.

447. Having concluded that partisan gerrymandering violates the Kansas Constitution, the Court now turns to what standard should be applied to adjudicate the case at bar.

448. The Court draws from opinions of the highest courts in other states—including Pennsylvania and North Carolina—to determine how it may adjudicate claims of partisan gerrymandering.

449. Consider first the Pennsylvania Supreme Court's 2018 decision under that state's Free Elections Clause. That court held that plaintiffs may successfully prove a partisan gerrymander by showing that the map subordinates traditional redistricting criteria (for instance, , compactness and preservation of political subdivisions) "to the pursuit of partisan political advantage." *League of Women Voters of Pa.*, 645 Pa. at 122-23. Nevertheless, it made clear that this was not "the exclusive means by which" a constitutional violation could be shown. *Id.* at 122. As advances in map-drawing continue apace, the court recognized, mapmakers may be able to "engineer congressional districting maps, which, although minimally comporting with these neutral 'floor' criteria, nevertheless operate to unfairly dilute the power of a particular group's vote for a congressional representative." *Id.*; *cf. Reynolds*, 377 U.S. at 578 ("What is marginally permissible in one State may be unsatisfactory in another, depending on the particular circumstances of the case. Developing a body of doctrine on a case-by-case basis appears to us to provide the most satisfactory means of arriving at detailed constitutional requirements in the area of state legislative apportionment.").

450. The North Carolina Supreme Court held that the State engages in impermissible partisan gerrymandering when plaintiffs can show that the challenged map makes it "systematically more difficult for a voter to aggregate his or her vote with other likeminded voters, thus diminishing or diluting the power of that person's vote on the basis of his or her views." *Harper*, 868 S.E.2d at 552. This can be shown

> using a variety of direct and circumstantial evidence, including but not limited to: median-mean difference analysis; efficiency gap analysis; close-votes-close seats analysis, partisan symmetry analysis; comparing the number of representatives that a group of voters of one partisan affiliation can plausibly elect with the number of representatives that a group of voters of the same size of another partisan affiliation can plausibly elect; and comparing the relative chances of groups of voters of equal size who support each party of electing a supermajority or majority of representatives under various possible electoral conditions.

Id. at 552-53. The court emphasized that "[e]vidence that traditional neutral redistricting criteria were subordinated to considerations of partisan advantage" is particularly weighty evidence that a districting plan has been gerrymandered. *Id.* at 553. Like the Pennsylvania Supreme Court, the *Harper* court found it unnecessary and inadvisable to "identify an exhaustive set of metrics or precise mathematical thresholds which conclusively demonstrate or disprove the existence of an unconstitutional partisan gerrymander." *Id.* at 547.

451. The Court agrees with the North Carolina and Pennsylvania Supreme Courts that articulating a bright-line standard for adjudicating all partisan gerrymandering claims is neither necessary nor prudent. As the U.S. Supreme Court has stated in a different—but related—context, the Constitution "nullifies sophisticated as well as simple-minded modes of discrimination." *Gomillion v. Lightfoot*, 364 U.S. 339, 342 (1960) (quoting *Lane v. Wilson*, 307 U.S. 268, 275 (1939)). If courts are to successfully protect citizens against unconstitutional redistricting practices, they must fashion a doctrine capable of adapting to new and inventive methods as they

arise. It therefore suffices for the Court's purposes that a standard exists by which such claims can be adjudicated in the present case.

452. That said, the Court will apply the standards articulated by the North Carolina Supreme Court in *Harper* and by the Pennsylvania Supreme Court in *League of Women Voters of Pennsylvania*.

453. Accordingly, in adjudicating partisan gerrymandering claims, this Court asks whether the challenged map makes it "systematically more difficult for a voter to aggregate his or her vote with other likeminded voters, thus diminishing or diluting the power of that person's vote on the basis of his or her views." *Harper*, 868 S.E.2d at 552. In making this determination, the Court will look to partisan fairness metrics, including the efficiency gap analysis. The Court will also consider whether "neutral criteria," including those enumerated in the Guidelines, "have been subordinated, in whole or in part, to extraneous considerations such as gerrymandering for unfair partisan political advantage." *League of Women Voters of Pa.*, 645 Pa. at 122; *see also Harper*, 868 S.E.2d at 547 (noting that examining "whether [a] mapmaker adhered to traditional neutral districting criteria" is "reliable way[] of demonstrating the existence of an unconstitutional partisan gerrymander"); *cf. Clarno v. Fagan*, No. 21CV40180, 2021 WL 5632371, at *7 (Or. Special Jud. Panel Nov. 24, 2021) (denying partisan gerrymandering claim where "enacted map . . . resulted from a robust deliberative process and careful application of neutral criteria").

454. Applying these standards to Ad Astra 2, the map displays clear signs that it dilutes the votes of Democratic Kansans. Ad Astra 2 achieves this by cracking communities of Democratic voters, drawing unnaturally shaped districts that run roughshod over communities of interest, and pairing far-flung communities throughout the state. The result is a map heavily biased in favor of Republican candidates and incumbents.

455. Ad Astra 2 complies with almost no traditional redistricting principles, including those in the Guidelines, with the exception of obtaining population equality across the four districts.

456. **Racial Vote Dilution.** The Guidelines state that "Redistricting plans will have neither the purpose nor effect of diluting minority voting strength." PX 137 at 2 (Guideline No. 3). As discussed in Section IV below, Ad Astra 2 has both the purpose and effect of diluting minority voting strength. It therefore plainly does not comply with this Guideline.

457. **Compactness and Contiguousness.** The Guidelines also require that districts be "as compact as possible and contiguous." PX 137 at 2 (Guideline No. 4.a). As described above, Dr. Rodden found that Ad Astra 2 had the lowest plan-wide compactness score across all plans he analyzed on every measure of compactness he considered. *See supra* FOF § II.B. Dr. Chen found that every one of his 1,000 simulated maps was significantly more compact than Ad Astra 2. *See supra* FOF § II.A. A simple lay examination of the map is in accord with this conclusion: CDs 1 and 2 in particular appear sprawling and misshapen, and given the previously compact structure of CD 3—which, due to population growth, should have shrunk in size, not grown—the district's new, more sprawling shape evinces malintent. Ad Astra 2 does not comply with this Guideline.

458. **Communities of Interest.** The Guidelines next provide that "[t]here should be recognition of communities of interest. Social, cultural, racial, ethnic, and economic interests common to the population of the area, which are probable subjects of legislation should be considered." PX 137 at 2 (Guideline No. 4.b). The evidence presented at trial similarly demonstrates a remarkable failure to comply with this Guideline. Expert and lay witnesses detailed how Ad Astra 2 needlessly splits the Kansas City metro area and extracts Lawrence from Douglas County. *See, e.g.*, *supra* FOF § II.F. In so doing, Ad Astra 2 pairs urban communities with far-

flung rural communities, thereby pairing Kansans who share little in common beyond being Kansans. It is therefore equally clear that the drafters of Ad Astra 2 paid no heed to this principle.

459. **Core Retention**. The Guidelines next state that "[t]he core of existing congressional districts should be preserved when considering the communities of interest to the extent possible." PX 137 at 2 (Guideline No. 4.c). Dr. Rodden found that only 86% of Kansas residents remain in their previous districts, despite the fact that Dr. Rodden was able to draw a map that retained 97% of people in their former districts. *See supra* FOF § II.B. Additionally, Ad Astra 2 relocates more Black, Hispanic, and Native American Kansans than any of the comparator plans. *See supra* FOF § II.B. Dr. Chen found that CD 3 in Ad Astra 2 does worse on core retention than 64% of his simulated maps even though the simulations were not drawn with core retention in mind. *See supra* FOF § II.A. Ad Astra 2 does not retain the cores of previous congressional districts.

460. **Subdivision Splits.** Finally, the Guidelines provide:

> Whole counties should be in the same congressional district to the extent possible while still meeting [the equal population requirement]. County lines are meaningful in Kansas and Kansas counties historically have been significant political units. Many officials are elected on a countywide basis, and political parties have been organized in county units. Election of the Kansas members of Congress is a political process requiring political organizations which in Kansas are developed in county units. To a considerable degree most counties in Kansas are economic, social, and cultural units, or parts of a larger socioeconomic unit. These communities of interest should be considered during the creation of congressional districts.

PX 137 at 2 (Guideline No. 4.d).

461. As Dr. Rodden and Dr. Chen found, Ad Astra 2 splits more counties than any comparator plan or any simulated map. Among these counties are Wyandotte and Douglas

Counties, two of the largest and most diverse in the state. Ad Astra 2 also creates other subdivision splits that, especially when viewed in reference to comparator plans, appear harmful and unnecessary. For example, Dr. Rodden found that Ad Astra splits 14-15 more voting tabulation districts than other plans, and 5 additional cities and towns, including Kansas City and Lawrence. *See supra* FOF § II.B. Dr. Chen also found that Ad Astra 2 splits far more VTDs than is necessary. *See supra* FOF § II.A. Ad Astra 2 does not keep subdivisions whole to the extent possible.[21]

462. Deviation from these neutral criteria is evidence of the Legislature's partisan intent. Drs. Warshaw, Miller, and Rodden all concluded in their analyses that as a result of these decisions, Republicans are more likely to win a higher number of seats in Ad Astra 2 than in any comparator plan. *See supra* FOF § II.B-D. For example, Dr. Warshaw found that despite Democrats receiving on average 41% of the votes statewide, Democrats are likely to receive *only 9%* of the seats over the next 10 years. *See supra* FOF § II.C. None of the other plans submitted to the Legislature during the latest round of redistricting—nor, for that matter, the state's previous congressional plan—exhibits this level of Republican bias. *See supra* FOF § II.C.

463. Indeed, the extreme pro-Republican bias of the map was confirmed through several different expert methodologies. Dr. Chen's simulations demonstrated that Ad Astra 2's least Republican district, CD 3, is more heavily Republican than the least Republican district in 99.6% of Dr. Chen's 1,000 simulated plans that adhere to the Guidelines. *See supra* FOF § II.A. Ad Astra 2 is also one of only 2.2% of plans that do not contain a single district that leans Democratic. *See supra* FOF § II.A.

[21]The only remaining Guidelines require maps to be based on the 2020 census and achieve population equality. Ad Astra 2 complies with these—and *only* these—requirements.

464. And applying the efficiency gap to Ad Astra 2, Dr. Warshaw found that the map's Republican bias stood out against not only other maps submitted to the Legislature, but also the previous congressional plan and an array of historical plans. *See supra* FOF § II.C. Dr. Chen's simulations put Ad Astra 2's outlier status into even starker relief: In the 1,000 simulations Dr. Chen ran, only 1.2% of simulations had an efficiency gap greater than or equal to Ad Astra 2's. *See supra* FOF § II.A. The overwhelming majority of plans fell between 2% and 12%; Ad Astra 2 scored 33.9%. *See supra* FOF § II.A.

465. Documentary and lay evidence further supports that the partisan effects of Ad Astra 2 were the consequence of intentional gerrymandering. Beginning with Senator Wagle's late-2020 comments about creating four Republican congressional districts, the record leading up to Ad Astra 2's passage reflects a single-minded desire to maximize Republican advantage. Most notable among these pieces of evidence is the rushed and opaque process that led to Ad Astra 2's passage. *See supra* FOF §§ I, II.G. As courts adjudicating partisan gerrymandering claims have recognized, "[a] map-drawing process may support an inference of predominant partisan intent." *League of Women Voters of Ohio*, 2022 WL 110261, at *24; *see also Detzner*, 172 So. 3d at 374 ("[I]f evidence exists to demonstrate that there was an entirely different, separate process that was undertaken contrary to the transparent effort in an attempt to favor a political party or an incumbent in violation of the Florida Constitution, clearly that would be important evidence in support of the claim that the Legislature thwarted the constitutional mandate." (citation omitted)).

466. Participants in the legislative process leading up to Ad Astra 2's passage testified that it was a process in which the public was given little notice of meetings and little time to testify; Republicans unilaterally scheduled meetings without redistricting guidelines in place or census data to guide mapmaking; and maps were rushed through at considerable speed with no input from

or consultation with the minority party. *See supra* FOF § I. Senator Corson testified that the only instance in which he saw legislation move through the Senate at such speed was following the 2021 cold snap when it became necessary to get emergency funds to Kansas cities in order for them to pay utility bills. Hr'g Tr. Day 1 Vol. 2 at 222:2-25. No such exigency existed here. The process that led to Ad Astra 2's passage leads to a strong inference of partisan intent.

467. The Court has no difficulty finding, as a factual matter, that Ad Astra 2 is an intentional, effective pro-Republican gerrymander that systemically dilutes the votes of Democratic Kansans. *See supra* FOF § II. The Court notes that its conclusions in this regard are based on evidence similar to that relied on by other state courts adjudicating partisan gerrymandering claims, including expert testimony about the plan's extreme partisan bias, *e.g.*, *League of Women Voters of Pa.*, 645 Pa. at 126-28; *Harper*, 868 S.E.2d at 547-49; *Adams*, 2022 WL 129092 at *14; expert testimony about the plan's deviations from neutral redistricting criteria, *e.g.*, *League of Women Voters of Pa.*, 645 Pa. at 124; *Harper*, 868 S.E.2d at 548; *Adams*, 2022 WL 129092 at *10–11; expert examination of district features, *e.g.*, *League of Women Voters of Pa.*, 645 Pa. at 126; and lay witness testimony about irregularities in the process leading to the plan's adoption, *e.g.*, *League of Women Voters of Ohio*, 2022 WL 110261, at *24-25.

468. Accordingly, the Court reviews Ad Astra 2 under strict scrutiny. *Harper*, 868 S.E.2d at 554–55. Defendants have not shown that Ad Astra 2 is narrowly tailored to a compelling governmental interest, and therefore the map fails strict scrutiny. Partisan advantage is neither a compelling nor a legitimate governmental interest. Rather, given an infringement of Plaintiffs' fundamental right to substantially equal voting power, Defendants must show that the map is narrowly tailored to meet traditional neutral districting criteria, including those expressed in the legislative committees' own Guidelines or other neutral principles. Here, Defendants failed to

make that showing or a showing that Ad Astra 2 is narrowly tailored to advance some compelling nonpartisan goal. Accordingly, Ad Astra 2 fails strict scrutiny.

469. In light of the foregoing, the Court concludes that Ad Astra 2 constitutes an intentional and effective partisan gerrymander in violation of Sections 1, 2, 3, 11, and 20 of the Kansas Bill of Rights, as well as Article V, Section 1 of the Kansas Constitution.

IV. The intentional, effective racial vote dilution in Ad Astra 2 violates the Kansas Constitution.

470. Ad Astra 2 is also unconstitutional on the independent and distinct ground that it dilutes minority votes in violation of the Kansas Constitution's equal rights and political power clauses. Kan. Const. Bill of Rights, §§ 1, 2. Kansas's guarantee of equal benefit "affords separate, adequate, and greater rights than the federal Constitution." *Farley*, 241 Kan. at 671; *see also Hodes & Nauser*, 309 Kan. at 638. The Court therefore clearly and expressly decides Plaintiffs' racial vote dilution claims exclusively under Sections 1 and 2 of the Kansas Bill of Rights. *See Michigan v. Long*, 463 U.S. 1032, 1041 (1983).

471. While the Kansas Constitution's broader solicitude against racial discrimination likely means that a showing of intent is not required to establish a violation of Sections 1 and 2 of the Bill of Rights, the Court need not resolve this issue of first impression. The parties agree that *intentional* racial discrimination is unlawful under the Kansas Constitution, and the Court concludes that Ad Astra 2 *intentionally* and effectively dilutes minority votes.

472. Intentional racial vote dilution violates the Kansas Constitution's guarantee of equal rights and equal benefit of political power. For a districting plan to constitute unlawful, intentional racial vote dilution, racial discrimination need not be the sole motivating factor, or even the primary motivation behind the law. Rather, it suffices to invalidate the plan if racial vote dilution was *a* purpose behind the plan, even if there were other motivating factors, such as

partisanship. *Cf. Robinson v. United States*, 878 A.2d 1273, 1284 (D.C. 2005) (noting that racial discrimination need not be sole motive and is improper if it was an influence in the decision-making process even if other nonracial considerations also played a role).

473. While discriminatory effect alone does not prove intent, "discriminatory impact can support an inference of discriminatory intent or purpose." *Holmes v. Moore*, 840 S.E.2d 244, 256 (N.C. Ct. App. 2020) (emphasis in original); *see also Jones v. Kansas State Univ.*, 279 Kan. 128, 145, 106 P.3d 10 (2005). Indeed, direct evidence of intent is not required. *See Jones*, 279 Kan. at 145; *Holmes*, 840 S.E.2d at 255 (noting that outright admissions of discriminatory intent are now rare and other circumstantial evidence must be assessed). This Court instead considers the totality of the circumstances to determine the Legislature's intent. *See Jones*, 279 Kan at 145 (noting that historical background, circumstances surrounding passage, and the purpose to be accomplished are among considerations in legislative intent); *see also Holmes*, 840 S.E.2d at 254-55 (noting that discriminatory effect, the historical background, procedural departures from the norm, and the events surrounding the enactment are relevant to ascertaining whether legislation was infected by intentional racial discrimination).

474. Moreover, racial animus or *racist* sentiments are not required showings in an intentional racial discrimination claim. *See, e.g.*, *Garza v. County of Los Angeles*, 918 F.2d 763, 778 n.1 (9th Cir. 1990) (Kozinski, J., concurring) (noting that a white homeowner in an all-white neighborhood who harbors no racial animus still intentionally discriminates if he agrees not to sell his home to minorities in order to maintain higher property values in the neighborhood); *id.* ("Your personal feelings toward minorities don't matter; what matters is that you intentionally took actions calculated to keep them out of your neighborhood.").

475. Thus, vote dilution is intentional and unlawful if the Legislature had as one objective the dilution of minority voters' ability to elect their preferred candidates, even in the absence of actual racial prejudice.

476. The Court identities five non-exclusive factors that are particularly relevant to determining intent: (1) whether the redistricting plan has a more negative effect on minority voters than white voters, (2) whether there were departures from the normal legislative process, (3) the events leading up to the enactment, including whether aspects of the legislative process impacted minority voters' participation, (4) whether the plan substantively departed from prior plans as it relates to minority voters, and (5) any historical evidence of discrimination that bears on the determination of intent. *See Jones*, 279 Kan. at 145. The Court holds that in this case, consideration of these factors compels the conclusion that the Legislature acted with discriminatory intent.

A. Ad Astra 2 has a more negative effect on minority voters than white voters in CD 2 and CD 3.

477. First, Ad Astra 2 treats minority votes significantly less favorably than white voters. Minority voters' preference for Democratic candidates does not mean that the redistricting plan's treatment of Democratic voters is synonymous with its treatment of minority voters. On the contrary, Dr. Collingwood testified that Ad Astra 2 treats minority Democrats even less favorably than it treats white Democrats. Hr'g Tr. Day 3 Vol. 1 at 142:23-143:14 (Collingwood). Although under the prior plan CD 3 had a minority voting age population ("VAP") of 29%, the portion of Wyandotte County the new plan exports to CD 2 is two-thirds minority by voting age—meaning Ad Astra 2 disproportionately removes minority voters from CD 3 at a rate of 2 to 1. PX 122 at 10, 14 (Collingwood Rep.). These minority voters now have virtually no opportunity of ever electing their preferred candidate. Hr'g Tr. Day 3 Vol. 1 at 100:17-21 (Collingwood); PX 122 at 7-8 (Collingwood Rep.). Ad Astra 2 also reduces the chances white Democratic voters in CD 3

have of electing their preferred candidate, but these white voters, by contrast, at least retain an *occasional* possibility of doing so. PX 122 at 8 (Collingwood Rep.). In this way, by shifting minority Democrats into CD 2, but leaving white Democrats in CD 3, Ad Astra 2 disfavors minority voters even when controlling for partisan affiliation. Hr'g Tr. Day 3 Vol. 1 at 143:11-144:7 (Collingwood). And it is beyond dispute that the map treats these voters less favorably than white Republicans, who are now likely to elect their preferred candidates in all four congressional districts.

478. Ad Astra 2's dilutive effect is most evident from the performance analysis Dr. Collingwood conducted. CD 3 performed as a crossover district for minority voters under the prior plan. PX 122 at 7-8 (Collingwood Rep.); Hr'g Tr. Day 3 Vol. 1 at 99:5-8 (Collingwood). As Dr. Collingwood demonstrated, minority voters in CD 3 successfully elected their candidate of choice in 75% of the elections in which RPV existed under the prior plan. PX 122 at 7-8 (Collingwood Rep.); Hr'g Tr. Day 3 Vol. 1 at 99:5-8 (Collingwood). But Ad Astra 2 moves over 45,000 minority voters out of CD 3 into CD 2. PX 122 at 10 (Collingwood Rep.). In CD 2, these voters cannot elect their candidate of choice in *any* of the elections in which RPV is present—Ad Astra 2 completely dilutes their votes. PX 122 at 7-8 (Collingwood Rep.). Similarly, the 120,000 minority voters who remain in CD 3 are now able to elect their candidate of choice in only 25% of the elections in which RPV is present—a performance rate 200% lower than the prior CD 3. PX 122 at 7-8, 10 (Collingwood Rep.). This movement of minority votes into CD 2 ensures that minority votes are diluted in *both* CD 2 and CD 3 under Ad Astra 2.

479. Dr. Collingwood's demographic analysis illustrates the surgical manner in which Ad Astra 2 achieves this result. In Figure 8 of his report, depicted below, Dr. Collingwood illustrates that although CD 2 and CD 3 now have minority VAPs of 26.7% and 22.1%

respectively, PX 122 at 10 (Collingwood Rep.), the portion of Wyandotte County separated from CD 3 into CD 2 is 66.21% minority—over three times the total minority VAP in CD 3, PX 122 at 14-15 (Collingwood Rep.). To replace these voters, Ad Astra 2 adds counties to the southwest of Johnson County that are 90.3% white. PX 122 at 14 (Collingwood Rep.). Dr. Collingwood testified that this makes Ad Astra 2 among the starkest cuts along racial lines that he has "ever seen" in his professional work. Hr'g Tr. Day 3 Vol. 1 at 104:8-11 (Collingwood).

B. Ad Astra 2 was enacted under an abnormal legislative process.

480. Second, the process of enacting Ad Astra 2 was characterized by multiple departures from the ordinary legislative process. The Legislature conducted a listening tour, but announced it only a week in advance, completed 14 stops within just five days, and held ten of the fourteen sessions during working hours. Hr'g Tr. Day 1 Vol. 2 at 206:21-207:5, 209:8-10 (Corson). For comparison, the 2012 tour lasted for four months. Hr'g Tr. Day 1 Vol. 2 at 209:1-4 (Corson). The 2022 tour also took place *before* the release of U.S. Census data, depriving the public of a full opportunity to provide meaningful input and adding to the appearance that the tour was merely a box-checking exercise. Hr'g Tr. Day 1 Vol. 2 at 210:22-24 (Corson); Hr'g Tr. Day 2 Vol. 1 at 9:14-15 (Burroughs). Critically, at this point the public could not yet have known that Wyandotte and Johnson Counties could no longer fit within a single congressional district. Hr'g Tr. Day 2 Vol. 1 at 9:20-23 (Burroughs). Moreover, in the more populous communities, members of the public were limited to providing two minutes of testimony, a constraint Senator Corson could not recall having occurred previously in the legislative process. Hr'g Tr. Day 1 Vol. 2 at 267:3-14 (Corson).

481. The procedural irregularities persisted once the legislative session began. The Senate and House Redistricting Committees simultaneously introduced Ad Astra 2 on Tuesday,

January 18. Hr'g Tr. Day 1 Vol. 2 at 220:14-19 (Corson); Hr'g Tr. Day 2 Vol. 1 at 12:24-13:4 (Burroughs). They each held hearings on the bills just two days later, before the data underlying the maps was publicly available, and at the same time, which prevented members of the public from attending both hearings. Hr'g Tr. Day 1 Vol. 2 at 220:19-221:2 (Corson); Hr'g Tr. Day 2 Vol. 1 at 13:18-25 (Burroughs). At the hearings, all but one witness testified against the plan. Hr'g Tr. Day 1 Vol. 2 at 221:3-6 (Corson). Nevertheless, the Senate passed the map in an emergency session and on a largely party-line vote 72 hours after it was introduced. Hr'g Tr. Day 1 Vol. 2 at 221:9-11 (Corson); DX 1007-11. The House followed suit just days later. Hr'g Tr. Day 2 Vol. 1 at 20:212-17 (Burroughs); DX 1007-5. Senator Corson testified that he was aware of only one other instance in which important legislation was passed on such a hurried timeline—an actual emergency related to municipal funding following the cold snap of February 2021. Hr'g Tr. Day 1 Vol. 2 at 221:25-222:9 (Corson).

482. This hurried and publicly opaque process continued even after Governor Kelly vetoed the bill. After an initial attempt to override the veto failed in the Senate, Republican leadership confined Senators to their seats for nearly three hours while they whipped votes. *See* PX 162 at 54:00-3:24:55 (recording of Feb. 7, 2022 Senate veto override session). Ultimately, leadership was forced to hold a failed vote, but Senator Masterson joined the "no" votes as a means of preserving his ability to call for reconsideration. DX 1007-4; PX 162. The next day, Republicans successfully flipped the remaining holdouts, after a "thuggish," Hr'g Tr. Day 1 Vol. 2 at 231:20-22 (Corson), series of "backroom deals," PX 760 at 7. The House passed the bill the next day. *See* PX 174 at 18 (noting vote changes); PX 163 at 43:00-1:45:00 (recording of February 9, 2022 House veto override session) (showing hour-long delay from calling of override vote to conclusion

of vote, during which Representatives were confined to their seats). The series of procedural departures attendant to the passage of Ad Astra 2 point to a discriminatory intent in its adoption.

C. Several aspects of the legislative process that led to Ad Astra 2 impacted minority voters' participation.

483. Third, the legislative process excluded minority voters in particular. As discussed, the 2020 U.S. Census data revealed that for the first time that Wyandotte County—home to Kansas's largest concentration of minority voters—and Johnson County could no longer remain in a single congressional district. This made it particularly important for Wyandotte County residents to provide input on the redistricting cycle. But the legislature foreclosed this opportunity. Instead, the body conducted its listening tour before this information became public, and then offered no meaningful opportunity for further public participation in the process. *See* Hr'g Tr. Day 1 Vol. 2 at 210:22-24, 220:19-221:2 (Corson); Hr'g Tr. Day 2 Vol. 1 at 9:14-15, 13:18-25 (Burroughs).

484. The scheduling of the listening tour sessions—all during the work day—made it particularly difficult for minority voters to testify. The Court notes that Stacy Noel, executive director of the Kansas African American Affairs Commission, a state-level agency, said in her testimony at the listening session in Kansas City on August 12, 2021 that even she had to request approval from her boss to leave work to testify at the hearing at 1:30 p.m.[22]

485. Moreover, Republican leadership scheduled each listening tour stop for 75 minutes, regardless of the stop's location within the state, meaning that minority residents near Kansas City were afforded less time to speak than white, rural voters at the listening tour stops in the western

[22] Redistricting Committee Listening Tour Recording at 6:45:00 (Kansas City, Aug. 12, 2021), http://sg001-harmony.sliq.net/00287/Harmony/en/PowerBrowser/PowerBrowserV2/20210812/-1/11587.

part of the state. Hr'g Tr. Day 1 Vol. 2 at 209:11-210:13 (Corson). Northeast Kansas voters, including minority voters from Wyandotte County, were given only two minutes to testify, which according to Senator Corson was "not nearly enough time . . . to adequately explain" their views and is "at the far, far short end" of time allotments for witnesses at a legislative hearing. Hr'g Tr. Day 1 Vol. 2 at 209:25-210:13, 267:3-14 (Corson).

486. Significantly, when the public did voice its support for preserving Wyandotte County during the legislative session, its input was resoundingly ignored. Hr'g Tr. Day 1 Vol. 2 at 221:3-6 (Corson). Ultimately, the bill was "greased to go," and the minority communities most impacted had no chance to stop it. Hr'g Tr. Day 2 Vol. 1 at 17:14-24 (Burroughs).

D. Ad Astra 2 substantively departed from prior plans as it relates to minority voters.

487. Fourth, the plan is an unprecedented departure from prior plans in its treatment of minority voters. Indeed, "Wyandotte and Johnson Counties have been in the same district in their entirety for ninety of the last one hundred years," preserving the Kansas City Metropolitan Area and its large minority population in a single congressional district for generations. PX 58 at 3, 31 (P. Miller Rep.).

488. Courts in previous redistricting cycles have explicitly recognized the need to keep Wyandotte County in a single district to avoid unlawful dilution of its minority voting strength. *See O'Sullivan v. Brier*, 540 F. Supp. 1200, 1204 (D. Kan. 1982) (three-judge court) ("[S]plitting the large minority population of Wyandotte County between two districts is undesirable unless compelled by some significant reason. Minorities find it difficult to make their views count in a political system in which majorities rule; being able to maintain block voting strength in areas where they live closely together, as in Wyandotte County, helps them make their voices felt."); *Essex v. Kobach*, 874 F. Supp. 2d 1069, 1086 (D. Kan. 2012) (per curiam) (three-judge court)

("The Court also agrees with *O'Sullivan* that Wyandotte County should be placed in a single district so that the voting power of its large minority population may not be diluted.").

489. Under Ad Astra 2, however, the district lines are carefully tailored to split the heart of metro Kansas City—and with it nearly a century of tradition—along its most densely minority neighborhoods. PX 122 at 14-15 (Collingwood Rep.). The map transplants over 45,000 minority voters in metro Kansas City from CD 3 to CD 2, cracking apart a performing crossover district so that minority voters on both sides of the line can no longer elect their candidate of choice. PX 122 at 10 (Collingwood Rep.). CD 3, previously home to the state's largest minority population, now has the smallest minority population of any congressional district in the state. Hr'g Tr. Day 3 Vol. 1 at 104:22-25 (Collingwood). Not only is the one of the starkest divides along racial lines that Dr. Collingwood testified he had ever seen, it is a stark departure from the state's historic treatment of minority voters. Hr'g Tr. Day 3 Vol. 1 at 104:8-11 (Collingwood).

E. The history of socioeconomic disparities along racial lines, particularly along the I-70 divide in Wyandotte County, bears on the Court's assessment of the proffered rationale for Ad Astra 2's stark racial divide.

490. Dr. Edwards testified to the socioeconomic disparities and inequities experienced by Wyandotte County's minority residents. She explained that "[t]he northern part of Wyandotte County"—where the county's minority population is concentrated—"is an area that historically has been disinvested." Hr'g Tr. Day 2 Vol. 1 at 42:7-14 (Edwards). The residents in that area "have about a $15,000 difference in median income," and "the northeast side of Wyandotte" contains "a lot of poverty" and "a lot of aging in terms of the infrastructure as well as our population." Hr'g Tr. Day 2 Vol. 1 at 42:14-43:1 (Edwards); *accord* Hr'g Tr. Day 2 Vol. 1 at 49:2-7 (Edwards) ("[A]bove Highway 70, again, that is the community that is the most disinvested[,] that has the $35,000 median income, that has the highest number of people of color, and it has the greatest

need identified.”). The southern area of Wyandotte County, by contrast, features “higher income levels” and better access to healthcare and amenities. Hr’g Tr. Day 2 Vol. 1 at 43:2-13, 44:1-10 (Edwards). Consequently, residents of northern Wyandotte County must rely on the southern part of the county for basic resources like grocery stores. Hr’g Tr. Day 2 Vol. 1 at 47:12-48:3 (Edwards).

491. Defendants contend that the stark racial divide between CDs 2 and 3 in Wyandotte County under Ad Astra 2 is explained by the location of I- 70. But the Court concludes, based upon the totality of the evidence and the testimony, that attempts to justify the stark racial divide in Ad Astra 2 based upon neutral explanations are pretext. Indeed, I-70 has itself long been known as racially divisive—literally and figuratively. The highway “separated the more White southern part of Wyandotte from the less White northern part” and “further divided minority-heavy neighborhoods in northern and southern Wyandotte from each other by running through the center of eastern Wyandotte . . . .” PX 58 at 20. The choice to locate I-70 in this manner built on “decades [of] maintaining residential segregation through violence and discriminatory housing policies [which] forged many hyper-White or hyper-Black neighborhoods, and limited the number of racially mixed neighborhoods” in the area. PX 58 at 20. This was a deliberate choice. The highway could have continued due east from Lawrence, a more logical choice, through Johnson County, which was less developed at the time, or further south in Wyandotte County. PX 58 at 20. Instead, its architects deliberately imposed a racial barrier between white and minority communities.

492. While the motivations behind the location and construction of I-70 does not on its own establish that the Legislature had invidious intent in drawing Ad Astra 2, it is noteworthy because the racial divide along the highway is widely known in Kansas, and would have been an obvious implication to those developing and enacting the plan. Any number of highways—or other

natural or manmade features—that do not so closely divide Kansas on the basis of race could have formed a barrier along which to divide a county. In light of all the other direct and circumstantial evidence the Court has weighed, the Court concludes that the proffer of I-70 as the explanation for why Ad Astra 2 splits Wyandotte County starkly along racial lines is a pretextual explanation

F. Plaintiffs presented other meaningful, circumstantial evidence of racially discriminatory intent.

493. Other experts and lay testimony provide further evidence that the Legislature intended, at least in part, to dilute the voices of minority voters in its drawing of the Ad Astra 2 plan. For example, Dr. Collingwood's analysis showed that voting in Kansas is racially polarized with minority voters favoring Democratic candidates. Dr. Chen's simulations evince a legislative design that intentionally submerges these voters in districts that will not perform for the minority-preferred candidate. Dr. Chen generated a set of 1,000 race-blind plans. His results shows that 94.9% of the neutral plans had a higher minority population share than the most Democratic district in Ad Astra 2. *See supra* FOF § III.C. Dr. Rodden demonstrated that minority voters were moved between districts at a much higher rate than non-minority voters and that Ad Astra 2 cracked minority voters in Wyandotte County, placing them in districts that have much lower minority populations than would have occurred under neutral redistricting criteria. *See supra* FOF §§ II.B, III.A. Dr. Collingwood's minority POC map showing *where* the line separating CDs 2 and 3 was drawn is further compelling evidence of intentional classification on the basis of race, since the map shows that the line surgically targets the most heavily minority areas. *See supra* FOF § III.B. Dr. Miller's race maps demonstrate clear cracking of racially polarized minority groups in Wyandotte County. *See supra* FOF § III.D. In other words, Ad Astra 2 does not dilute minority votes by mistake.

494. Remarks during the legislative debate on the map also demonstrate that the Legislature was keenly aware of how the map affected minority voters, yet decided to enact it anyway. *See, e.g.*, *supra* FOF § I. In fact, Senator Corson prompted an extensive discussion of how the map would dilute minority votes while pushing back against Ad Astra 2 on the Senate floor, and members of the majority party acknowledged the effects on minority voters that Senator Corson described. *See, e.g.*, PX 168 at 65:25-81:17.

495. These factors together all point to the conclusion that the Legislature intended the result it achieved—districts drawn sharply along racial lines. All of this evidence—the serious and unique negative treatment of minority Democrats versus white Democrats and white Republicans, the stark racial divide evident in the map, the procedural and substantive deviations in the adoption of the plan, the Legislature's awareness of the map's effect on minority voters, and the statistical unlikelihood that Ad Astra 2's distribution of minority voters would have occurred absent intent—persuade the Court that the totality of the testimony and evidence, as well as the inferences fairly drawn therefrom, establish that Ad Astra 2 was motivated at least in part by an intent to dilute minority voting strength.

496. The Court therefore concludes that Ad Astra 2 intentionally and effectively dilutes minority votes in violation of the Kansas Constitution's guarantee of equal protection. Kan. Const. Bill of Rights, §§ 1, 2.

In conclusion, let us return to where we began. The future of Kansas democracy rests securely in the wise, competent, strong hands of the citizens. It is not the province of the court to tell Kansans what their choice should be. Choose wisely and always remember the words of one of our greatest judges. Judge Learned Hand said:

> "Liberty lies in the hearts of men and women; when it dies there, no constitution, no law, no court can save it; no constitution, no law, no court can even do much to

help it. While it lies there, it needs no constitution, no law, no court to save it. And what is this liberty which must lie in the hearts of men and women? It is not the ruthless, the unbridled will; it is not freedom to do as one likes. That is the denial of liberty, and leads straight to its overthrow. A society in which men recognize no check upon their freedom soon becomes a society where freedom is the possession of only a … few…"[23]

[23] The "Spirit of Liberty" Speech – Judge Learned Hand – Presented in 1944 during "I AM an American Day"

The court finds and orders as follows:

1. Ad Astra 2 unconstitutionally violates Plaintiffs' rights as protected by Sections 1, 2, 3, and 11 of the Kansas Bill of Rights and Article V, Section 1 of the Kansas Constitution.
2. Defendants and their respective agents, officers, and employees are permanently enjoined from preparing for or administering any primary or general congressional election under Ad Astra 2.
3. The Legislature shall enact a remedial plan in conformity with this opinion as expeditiously as possible considering the time necessary for the Secretary of State and local election officers to prepare appropriate ballots and related documents. The remedial plan must be prepared in time for all Kansas voters to know in which congressional district they reside.
4. The Court shall retain jurisdiction over the matter to ensure compliance with this order.
5. This Order shall remain in effect until completed or modified by the Kansas Supreme Court.

April 25, 2022
Date

Bill Klapper
District Court Judge

CERTIFICATE OF SERVICE

I hereby certify that on this 25th day of April, 2022, I filed the foregoing in hard copy with the Clerk of the District Court and a copy was also served by email to counsel.

Barry R. Grissom barry@grissommiller.com
Jake Miller jake@grissommiller.com
Abha Khanna akhanna@elias.law
Lalitha D. Madduri lmadduri@elias.law
Rick Rehorn rick@tomasicrehorn.com
Sharon Brett sbrett@aclukansas.org
Josh Pierson jpierson@aclukansas.org
Kayla DeLoach kdeloach@aclukansas.org
Mark P. Gaber mgaber@campaignlegalcenter.org
Kevin Hancock khancock@campaignlegalcenter.org
Sam Horan shoran@campaignlegalcenter.org
Orion de Nevers odenevers@campaignlegalcenter.org
Elisabeth S. Theodore elisabeth.theodore@arnoldporter.com
R. Stanton Jones stanton.jones@arnoldporter.com
John A. Freedman john.freedman@arnoldporter.com
Erica B. McCabe erica.mccabe@arnoldporter.com
Mark P. Johnson mark.johnson@dentons.com
Stephen R. McAllister stephen.mccallister@dentons.com
Curtis E. Woods curtis.woods@dentons.com
Brant M. Laue brant.laue@ag.ks.gov
Anthony F. Rupp trupp@foulston.com
Dwight Carswell dwight.carswell@ag.ks.gov
Shannon Grammel shannon.grammel@ag.ks.gov
Kurtis Wiard kurtis.Wiard@ag.ks.gov
Gary Ayers gayers@foulston.com
Clayton Kaiser ckaiser@foulston.com
J. Eric Weslander eweslander@stevensbrand.com
John T. Bullock jbullock@stevensbrand.com

/s/Karen Coulter
Karen Coulter
Administrative Assistant for
Honorable Bill Klapper
District Court Judge