

PRESENT: All the Justices

RIMA FORD VESILIND, ET AL.

v. Record No. 170697

OPINION BY
JUSTICE S. BERNARD GOODWYN
May 31, 2018

VIRGINIA STATE BOARD OF ELECTIONS,
ET AL.

FROM THE CIRCUIT COURT OF THE CITY OF RICHMOND
W. Reilly Marchant, Judge

In this appeal, we consider whether the circuit court erred in confirming the constitutional validity of Virginia General Assembly legislative districts that were allegedly drawn in violation of the compactness requirement expressed in Article II, § 6 of the Constitution of Virginia.

PROCEDURAL BACKGROUND

On September 14, 2015, Rima Ford Vesilind and 13 other “citizens of the Commonwealth of Virginia, who live in legislative districts that are alleged to have been drawn in violation of the compactness requirement” contained in Article II, § 6 of the Constitution of Virginia (Challengers), filed a complaint in the Circuit Court of the City of Richmond against the Virginia State Board of Elections (VSBE) and several officers of the VSBE, in their official capacities (collectively, the Board). The complaint sought a declaratory judgment that the “State House of Delegates and Senate districting plans, and specifically House of Delegates districts 13, 22, 48, 72, and 88, and Senate districts 19, 21, 28, 29, 30, and 37 [(the Challenged Districts)] violate the Constitution of the Commonwealth of Virginia,” as those districts were drawn in the 2011 redistricting plan (Enacted Plan or 2011 Plan) adopted by the General Assembly. The districts in the 2011 Plan were established in H.B. 5005, Va. Gen. Assem. (Spec. Sess. 2011), which was codified in Code § 24.2-303.3 (Senate districts) and Code § 24.2-304.03 (House districts).

In their complaint, the Challengers state that legislative districts must be drawn so as to comport with certain mandatory requirements. The requirements include those in Article II, § 6 of the Constitution of Virginia, which provides that legislative districts “shall be composed of contiguous and compact territory and shall be so constituted as to give, as nearly as is practicable, representation in proportion to the population of the district,” as well as federal requirements of “one person, one vote” and the Voting Rights Act, 52 U.S.C. § 10101 *et seq.* (VRA).¹ The complaint asserts that “[w]hile the legislature may consider other rational public policy considerations, the mandates of the United States and Virginia Constitutions can never be subordinated to those considerations.”

The Challengers allege that the General Assembly “subordinated” the mandatory compactness requirement to other public policy considerations, and ignored compactness in favor of “nonconstitutional considerations,” such as “favor[ing] partisan interests” and “protect[ing] particular incumbent[s],” “with the result that the Challenged Districts are not within any acceptable objective measures of compactness.” They claim that “when the General Assembly drew the 2011 House and Senate district plans . . . it did not make a good-faith effort to draw compact districts and . . . numerous districts in the adopted plans are not in fact compact as required by the Virginia Constitution.”

In their complaint, the Challengers contend that “[a]s measured by quantitative and qualitative tests, objective and reasonable persons could not reach any conclusion but that the Challenged Districts do not meet the Virginia Constitution’s compactness requirement.”

¹ After the 2011 redistricting, the Supreme Court of the United States ruled that preclearance by the Department of Justice under Section 5 of the VRA is no longer determined by the coverage formula in Section 4(b) of the VRA. *Shelby County v. Holder*, 570 U.S. 529, 556-57 (2013).

Accordingly, they request a judgment declaring the Challenged Districts, and thus the 2011 Plan, in violation of the Constitution of Virginia.

On October 21, 2015, the circuit court entered a consent order permitting the Virginia House of Delegates and the Honorable William J. Howell, then the Speaker of the House of Delegates (the House), to intervene as defendants.² The Board and the House filed answers and defenses, denying that the Challenged Districts were constitutionally infirm.

The case subsequently proceeded to a three-day bench trial beginning on March 13, 2017. The Challengers, the Board, and the House presented evidence.

On March 31, 2017, the circuit court issued its final order and opinion. Weighing the evidence on both sides, the circuit court concluded that the evidence would “lead reasonable and objective people to differ,” as to whether the Challenged Districts were compact, and so it was “fairly debatable” whether the Challenged Districts violated the compactness requirement expressed in Article II, § 6. Therefore, the circuit court denied the Challengers’ request that the Challenged Districts be declared to be in violation of the Constitution of Virginia.

The Challengers appeal, asserting that the circuit court erred by finding that the evidence produced at trial sufficed to make the constitutionality of the General Assembly’s redistricting decision, regarding the compactness of the Challenged Districts, fairly debatable.

² By order dated March 23, 2018, the Hon. M. Kirkland Cox, current Speaker of the Virginia House of Delegates, was substituted for the Hon. William J. Howell as an appellee in this appeal.

TRIAL

A. *Evidence Provided by the Challengers*

The Challengers presented two witnesses, Nicholas Mueller (Mueller) and Dr. Michael McDonald (Dr. McDonald). First, Mueller testified that he used software called Maptitude “under [Dr. McDonald’s] direction to draw [the] alternate [Virginia legislative district] maps” to compare against the 2011 Plan and the Challenged Districts.

Mueller stated that the goal of the “Alternative Plan 1” House and Senate maps he created was to “make the [alternative legislative] districts as compact as possible,” while “preserv[ing] the majority/minority [VRA] districts exactly as they are in the current plan,” and also meeting the continuity and “same equal population” criteria mandated by federal and state law.

Mueller also created “Alternative Plan 2” House and Senate maps at Dr. McDonald’s direction. Alternative Plan 2 kept the VRA districts unchanged and has contiguous districts with the same equal population criteria, but it also incorporates two discretionary criteria: (1) refraining from splitting political subdivisions and voting districts, and (2) refraining from pairing incumbents to the extent possible. Mueller authenticated the materials he produced.

Thereafter, Dr. McDonald was presented as an expert in redistricting. He testified that he has been consulting for political redistricting matters in 14 states since the 1980s. Dr. McDonald testified that he was asked to determine if priority was given to the constitutional requirement of compactness in the Challenged Districts or whether other discretionary criteria, not mandated by federal or state law, predominated over compactness. He explained that “Required Criteria” means those criteria required by the federal Constitution, Constitution of Virginia, or the VRA,

and “Discretionary Criteria” refers to all other criteria that the legislature could conceivably have considered in drawing the districts.

Dr. McDonald testified about his methodology for measuring constitutional compactness and his conclusions. He explained that he chose the Reock, Polsby-Popper, and Schwartzberg scores to measure compactness of the legislative districts because Virginia measures compactness based on spatial parameters, rather than population-based parameters, and because the Office of the Attorney General of Virginia used all three measures in its report to the Department of Justice under Section 5 of the VRA.³ He stated that he directed Mueller to produce compactness scores for the alternative map districts so that those scores could be compared to the compactness scores of the districts in the 2011 Plan maps.

Dr. McDonald stated that in contemplating how to approach this case, he “struck upon this idea that we could use predominance” to demonstrate how compactness had been subordinated to discretionary criteria. He theorized that predominance could be proven by determining if the compactness of an ideally compact district (such as in Alternative Plan 1) was

³ The Reock, Polsby-Popper and Schwartzberg tests are three different statistical calculations used by the social science community to measure the compactness of legislative districts. According to Dr. McDonald, the Polsby-Popper score “is a perimeter measure that compares the area of a district to the area of a circle with the same perimeter.” The Reock score “is an area or dispersion measure that compares the area of a district to the area of the small circle that can be drawn around the district.” The Schwartzberg measure “is a perimeter-based measure that uses a simplified version of the district’s perimeter that is designed to smooth [out] the jaggedness in the perimeter of a district that may be caused by natural geography such as rivers or coast lines or sometimes the map drawer’s choices.” The Schwartzberg measure “then compares the simplified perimeter of the district to the perimeter of the circle with the same area as the original district.” The Reock and Polsby-Popper measures range from 0 to 1, with 1 being the most compact. The Schwartzberg measure initially results in scores that increase from 1, but Dr. McDonald converted those scores to result in scores that are in the same range of 0 to 1, with 1 representing the most compact form. Dr. McDonald acknowledged that there are approximately 50 such measures developed and used by social scientists.

reduced by more than 50 percent when discretionary criteria were considered in redrawing that ideally compact district. He concluded that if the compactness score was reduced more than 50 percent when discretionary criteria were considered, then it “must be that [the] discretionary criteria had predominated over the state constitutional requirement of compactness.”

Dr. McDonald’s Alternative Plan 1 did not simply maximize compactness in the Challenged Districts, but tried “to maximize the compactness of all the districts,” because changing the borders of one district has a “ripple effect” for other districts. Alternative Plan 2 was developed to “show how the legislature could pursue other discretionary goals . . . without failing that predominance test,” and Dr. McDonald selected the two discretionary criteria of not splitting counties, cities, and voting districts and pairing incumbents because they “were easily measurable.”

Dr. McDonald testified regarding each of the Challenged Districts that the degradation in compactness between the Enacted Plan and Alternative Plan 1 compactness scores was more than 50 percent, and so he opined that “discretionary criteria predominated over the constitutional requirement of compactness” in each of the Challenged Districts.

For example, he compared maps of House District (HD) 72 as enacted and as designated in Alternative Plan 1, and compared the composite average of the Reock, Polsby-Popper, and Schwartzberg measures for the enacted version of HD 72 and for the HD 72 in Alternative Plan 1. Based on his comparisons, he explained:

the degradation is the composite score [of the alternative plan], .71, minus the composite score of .21 [of the enacted district], that difference, and then it’s divided through by the composite score, .71. It tells us what percentage decrease that we had in the composite score from Alternative Plan 1 to the current plan. And here we see that the degradation was 70.42 percent, and that’s above 50

percent. And so my opinion, then, is that for this district, that discretionary criteria predominated over the state constitutional requirement of compactness.⁴

Dr. McDonald found that there was “only a degradation of 19.72 percent . . . in terms of compactness” for HD 72 between Alternative Plan 1 and Alternative Plan 2, which showed “an attempt to draw districts that are going to conform to local political boundaries that will respect voting precincts and will attempt to minimize the pairing of incumbents.”

Dr. McDonald did not apply his predominance test to VRA districts, because “[t]hose are districts where there are other considerations that are at play, and the test that we have devised is one that can only be applied to nonvoting rights districts.” He stated that those considerations “are not present in any of the [C]hallenged [D]istricts except for House District 72,” which shares a small border with a VRA district in the Enacted Plan, but not in Alternative Plan 1.

Dr. McDonald acknowledged that there was “no universal measure of what constitutes the best measure for compact districts,” and that “[i]n the social science community, there’s no threshold for when a district is compact or noncompact” using these measures. He stated that a difference of 0.01 or 0.02 in compactness scores, and even a difference of 0.03, was not “a large difference.” On cross-examination, he conceded that he had not previously used or published the predominance test, and was not aware of another expert, court opinion, or state using the “predominance test” that he used to develop degradation percentages regarding compactness of the legislative districts.

⁴ Dr. McDonald initially used a composite score of all three measures, but later he focused on composite scores based only on the Reock and Polsby-Popper measures, because those were the measures used by the legislature.

B. *Stipulations*

The parties stipulated to the number of counties, cities, and precincts split in the 2001 and 2011 redistricting plans, as well as in Alternative Plans 1 and 2 developed by Dr. McDonald. They stipulated to the compactness scores for the 2001 and 2011 redistricting plans, as well as the scores for the districts in Dr. McDonald's Alternative Plans 1 and 2. They also stipulated to the Reock, Polsby-Popper, and Schwartzberg compactness scores of the districts challenged in *Jamerson v. Womack*, 244 Va. 506, 423 S.E.2d 180 (1992), and *Wilkins v. West*, 264 Va. 447, 571 S.E.2d 100 (2002), because the scores were not reported in those opinions. Based on these scores as stipulated, the lowest Reock score in the relevant legislative districts was 0.12 in *Jamerson* and 0.16 in *Wilkins*, and the lowest Polsby-Popper score in both cases was 0.10. For the Challenged Districts, the lowest Reock score was 0.15 (SD 28), and the lowest Polsby-Popper score was 0.08 (SD 28 and HD 72). The Reock scores of all of the Challenged Districts exceeded the minimum score in *Jamerson*, and the Polsby-Popper scores of nine of the eleven Challenged Districts exceeded the minimum score in *Jamerson* and *Wilkins*.

The parties also stipulated to documents submitted by the Attorney General of Virginia to the Department of Justice for preclearance under the VRA, which used the Reock, Polsby-Popper, and Schwartzberg measures, and to the Criteria Resolutions adopted by the House and the Senate of Virginia (Senate) (collectively, General Assembly or legislature) Privileges and Elections Committees regarding the 2011 redistricting. The Criteria Resolutions listed six criteria used to draw the districts in the 2011 Plan.⁵

⁵ Criteria I was that the “population of each district shall be as nearly equal to the population of every other district as practicable,” within “plus-or-minus two percent” for the Senate and “plus-or-minus one percent” for the House, and Criteria II was to draw the districts in accordance with the VRA.

Additionally, the parties stipulated to letters from Governor Robert F. McDonnell regarding his veto of the original 2011 redistricting plan, H.B. 5001, and his signing of H.B. 5005, Va. Gen. Assem. (Spec. Sess. 2011), which established the 2011 Plan.⁶

C. Motion to Strike

At the conclusion of the Challengers' evidence, the Board and the House moved to strike, on the grounds that the Challengers failed to present evidence to support their claims that

Criteria III stated, in relevant part: "Districts shall be contiguous and compact in accordance with the Constitution of Virginia as interpreted by the Virginia Supreme Court in the cases of [Jamerson] and [Wilkins]." Criteria IV required that "[a]ll districts shall be single-member districts," and Criteria V stated: "Districts shall be based on legislative consideration of the varied factors that can create or contribute to communities of interest," which "may include . . . economic factors, social factors, cultural factors, geographic features, governmental jurisdictions and service delivery areas, political beliefs, voting trends, and incumbency considerations." Criteria VI stated the rules of priority:

All of the foregoing criteria shall be considered in the [redistricting] process, but population equality among districts and compliance with federal and state constitutional requirements and the Voting Rights Act of 1965 *shall be given priority* in the event of conflict among the criteria. Where the application of any of the foregoing criteria may cause a violation of applicable federal or state law, there may be such deviation from the criteria as is necessary, but no more than is necessary, to avoid such violation.

(Emphasis added.)

⁶ Governor McDonnell vetoed H.B. 5001, noting, among other concerns, that "it is apparent that districts proposed in the Senate plan are not compact, as required in the Constitution of Virginia," and that "[u]sing the most commonly recognized tools of compactness scoring, the Reock and Polsby-Popper methods, the plan adopted by the Senate has less compact districts than the existing House or Senate districts or other plans that have been proposed." In a statement marking his signature of H.B. 5005, the Governor noted that the revised "plan retains more geographic and municipal boundaries, contains districts that are somewhat more compact, and passed the Senate on a strong bipartisan vote." The Governor acknowledged that "[w]hile additional improvements in measures of compactness and preservation of communities of interest would have been ideal, and no plan is perfect, the Constitution of Virginia tasks the General Assembly with drawing lines"

compactness was ignored and that the Challenged Districts were not compact. Instead, the Challengers only presented “their new compactness test and the alternative maps that it’s based on.” They argued that the Challengers’ evidence showed that compactness was considered, and that the “legislature’s value judgment of the relative degree of compactness required, when reconciling multiple concerns of apportionment, is fairly debatable.” The Challengers responded that their evidence showed that the districts were not constitutionally compact because discretionary factors predominated over the constitutional requirement of compactness. The court denied the motions to strike.

D. Evidence Presented by the Board and the House

The Board presented evidence concerning the Senate districts from the 2011 Plan, and the House presented evidence concerning the House districts from the 2011 Plan. The Board moved into evidence floor speeches from several Senators during the 2011 redistricting process. The Senators stated that H.B. 5001 “meets all federal and state legal requirements,” and that “all districts are contiguous and compact in accordance with the constitution of Virginia as interpreted by the Virginia Supreme Court in the cases of *Jamerson v. Womack* and *Wilkins v. West*.” Senators also made similar comments regarding H.B. 5005 and the Enacted Plan. Senator Jeremy S. McPike (Senator McPike) of the 29th Senate District testified that it was not hard for him to travel around his district, and that, during the campaign, the “shape or geographic extent of [his] district” did not cause any problem in communicating with constituents because “[m]ost of it’s social media now.”

Dr. M.V. “Trey” Hood, III (Dr. Hood) testified as an expert for the Board. He stated that there was no consensus on the best measure of compactness or a threshold for when a district was not compact, and that the different scores “measure compactness in different ways,” but he

does not average different types of compactness scores. Dr. Hood stated that there was a decrease in the average compactness scores overall from the 2001 plan to the 2011 Plan, but the decline in compactness did not “on its face, mean that these districts are necessarily uncompact.”

Dr. Hood listed among his “criticisms” of Dr. McDonald’s approach that he should have compared the whole redistricting plan to other plans, rather than compare district-to-district, because the districts “are not drawn in isolation from one another” and because the districts in the alternative plans and the 2011 Plan did not exactly overlap geographically, so “sometimes it’s not easy to compare one district from one plan to another district from another plan.” His “criticisms” also included that Dr. McDonald should not have averaged compactness scores, and that there “could be” another Alternative Plan 1, although neither he nor anyone else had proposed such a plan.⁷ Dr. Hood also had “questions about how this [the predominance test] would actually be implemented if it was ever put in place,” because there would be “a fight” in the legislature over drawing alternative plans, because there is “no best way” to “completely maximiz[e] compactness.” Also, he claimed Dr. McDonald did not account for how the legislature would attempt to balance all of the factors involved in redistricting.

The House then presented its evidence. Delegate Chris Jones (Delegate Jones) testified that he was the chief patron of the 2011 redistricting legislation in the House, and he was also an architect of the 2001 redistricting plan. He stated that there was a “very similar” increase in population in both the 2000 census that informed the 2001 plan (a “13 or 14 percent population increase”) and the 2010 census that informed the 2011 Plan (“about a 13 percent increase in population”). He explained that he thought the districts in the 2011 Plan were more compact

⁷ Dr. McDonald acknowledged that he could not say that Alternative Plan 1 was “the most compact map,” and agreed that “Alternative Plan 1 is an ideal, not the ideal compactness plan for all purposes and all possibilities.”

than those in the 2001 plan. For example, even though the compactness scores showed that HD 13 was less compact in 2011 than it was in 2001, he explained that, “[f]rom [my] perspective,” it was more compact in 2011, because both the population and geographic area of the district were reduced, and “because of the ease of going back and forth between the districts.”

Delegate Jones stated that the House hired John Morgan (Morgan) and Dale Oldham (Oldham) to assist in the 2011 redistricting, and explained the criteria he used in the map drawing process, including equal population, the VRA, and communities of interest. He stated that he did not believe that the VRA districts could be treated differently in terms of being compact and contiguous as required by the Constitution of Virginia.

Delegate Jones testified that he believed that the 2011 Plan complied with the Criteria Resolutions regarding priority of constitutional considerations over discretionary factors. He stated that priority was given to state constitutional criteria, and that, “if there was an actual conflict between compactness and [discretionary criteria],” compactness prevailed.

On cross examination, Delegate Jones testified that, during the 2011 redistricting process, he would draw a map, and Oldham and Morgan “would look at the compactness and contiguity scores” with Reock and Polsby-Popper measures. He said that he “was confident that the map that I had drawn, the districts that were there that were contained within, met the criteria for compactness and contiguity per” *Wilkins* and *Jamerson*.

Delegate Jones asserted that the criteria of compactness was “never subordinated,” because the “top three criteria [the federal Constitution, Constitution of Virginia, and the VRA] always were met within the range established by *Wilkins*.” He stated that “my assumption is that when we ran the plans, that if a score was better than [the score] that was affirmed by the Supreme Court [in *Jamerson* and *Wilkins*], then we would . . . be in a good state,” but he “did not

bother myself with that information. I was more drawing the districts.” The court clarified that Delegate Jones was “assuming there was some numerical score from those compactness tests, and you just relied on counsel to tell you that you were meeting them.”

Morgan testified that he worked with Delegate Jones in the 2011 redistricting using the House Criteria Resolution. He stated that compactness was “implemented” in the 2011 Plan because they ran “compactness reports” using the Reock and Polsby-Popper measures, and the compactness scores “were within the acceptable range as defined by the *Jamerson* and *Wilkins* cases.” He stated that compactness was not ignored or given pro forma consideration, but that it was “looked at during the process” in 2011.

Dr. Thomas B. Hofeller (Dr. Hofeller) testified as an expert in redistricting who had been in the fields of redistricting and census information for nearly 50 years, and had drawn or advised the drawing of hundreds of redistricting maps in “almost all the states.” He compiled the minimum and maximum compactness scores for all of the districts in Virginia’s 1991, 2001, and 2011 plans, and stated that “*Jamerson* and *Wilkins* spoke to . . . the minimum scores of the districts that [] complied with the compactness criteria in the state constitution. So it forms a floor. You can characterize it as a floor.”

Dr. Hofeller stated that he did not think that Dr. McDonald’s test is “a proper and useful way to determine compliance” with the compactness requirement. He stated that Dr. McDonald’s test was done six years after the redistricting, so his report “could have never related to the processes of one [redistricting] unfolding.” He also opined that Dr. McDonald “kind of snatched complexity out of the jaws of simplicity here with regard to what the General Assembly was trying to do,” which was to “pick[] out a standard by which they felt they were compliant with the constitutional requirement for compactness, and that was the floor that was established

in *Jamerson* and *Wilkins*.” He noted that Dr. McDonald’s test was not peer reviewed. He also stated: “I think that the elimination of the minority districts is inappropriate,” because there was a “rather subjective treatment” by Dr. McDonald to draw the alternative districts around the existing VRA districts.

On cross examination, Dr. Hofeller acknowledged that Alternative Plans 1 and 2 were not presented as plans that the legislature should adopt. He acknowledged that Dr. McDonald did not purport to create a bright line test, and that neither Dr. McDonald nor anyone else had created a bright line score for compactness. He agreed that the constitutions trump “[w]hatever else the legislature . . . chooses to add to that [which] is within its discretion.”

After the close of the evidence, the court overruled a previously filed motion *in limine* regarding Dr. McDonald’s testimony.⁸ The circuit court stated that it would consider the predominance test and Dr. McDonald’s conclusions. The court noted that it disagreed with Dr. Hofeller’s assertion “that the Supreme Court of Virginia has ever established a constitutionally required minimum compactness score for measuring the priority given to compactness in drawing legislative districts.” The court also stated that the standard expressed in *Wilkins* and *Jamerson* “requires that if the evidence offered by both sides of the case would lead reasonable and objective persons to reach different conclusions, then the legislative determination is ‘fairly debatable’ and must be upheld.” The circuit court determined that the legislative determination regarding the compactness of the Challenged Districts was fairly debatable and upheld the constitutional validity of the Challenged Districts.

⁸ The ruling of the circuit court on the motion *in limine* to exclude Dr. McDonald’s testimony is the subject of an assignment of cross-error filed in this appeal. However, we need not address that assignment of cross-error in resolving this case.

ANALYSIS

The Challengers assert that the circuit court erred in finding that the evidence presented to it was sufficient to support its conclusion that the constitutionality of the General Assembly's redistricting decision regarding each of the Challenged Districts was fairly debatable. In other words, the Challengers claim that the evidence they presented to the circuit court established that the General Assembly subordinated the required criterion of compactness to discretionary criteria, and that such evidence proved that no objective and reasonable person could conclude that the Challenged Districts were not in violation of the compactness requirement of Article II, § 6 of the Constitution of Virginia. We disagree.

Article II, § 6 of the Constitution of Virginia provides that electoral districts are "established by the General Assembly." The exercise of that power clearly encompasses the drawing of legislative districts. As recited above, the districts in the General Assembly's 2011 Plan were codified in Code § 24.2-303.3 and Code § 24.2-304.03.

Established principles govern our determination whether the General Assembly has adhered to the Constitution in exercising its legislative power. Redistricting legislation is subject to "the principles applicable to our review of legislative determinations." *Wilkins*, 264 Va. at 462, 571 S.E.2d at 108. The first such principle is that every law enacted by the General Assembly "is entitled to a strong presumption of validity and will be invalidated by the courts only if it clearly violates a constitutional provision." *Id.* (citation and internal quotation marks omitted); *City of Newport News v. Elizabeth City Cty.*, 189 Va. 825, 839, 55 S.E.2d 56, 64 (1949).

The party challenging an enactment has the burden of proving that the statute is unconstitutional, and every reasonable doubt regarding the constitutionality of a legislative

enactment must be resolved in favor of its validity. *Marshall v. Northern Va. Transp. Authority*, 275 Va. 419, 428, 657 S.E.2d 71, 75 (2008); *Hess v. Snyder Hunt Corp.*, 240 Va. 49, 53, 392 S.E.2d 817, 820 (1990). See *Blue Cross of Virginia v. Commonwealth*, 221 Va. 349, 358-59, 269 S.E.2d 827, 832-33 (1980); see also *In re Phillips*, 265 Va. 81, 85-86, 574 S.E.2d 270, 272 (2003). Further, in determining the constitutionality of a General Assembly enactment, we must give the Constitution a liberal construction in favor of sustaining the enactment in question, if practicable. *Marshall*, 275 Va. at 428, 657 S.E.2d at 75; *Heublein, Inc. v. Department of Alcoholic Beverage Control*, 237 Va. 192, 195, 376 S.E.2d 77, 78 (1989).

Here, we are only concerned with the compactness requirement stated in Article II, § 6 of the Constitution of Virginia. Article II, § 6 of the Constitution of Virginia provides that legislative districts “shall be composed of contiguous and compact territory.” The Challengers allege that the Challenged Districts were clearly drawn in violation of the compactness requirement in Article II, § 6.

Compactness is a somewhat abstract concept. Determining compactness does not admit to a bright line approach in determining whether a legislative district is, in fact, compact. As attested to by the Challengers’ expert, Dr. McDonald, social scientists have developed at least 50 different methods of measuring compactness. The proliferation of measures does not provide clarity. It does exactly the opposite. In the social science community, there is no universal definition or consensus as to what constitutes the best measure for compact districts.

In addition to statistical compactness measures, the record demonstrates that policymakers and citizens define compactness in a variety of ways. Delegate Jones testified to his spatial and political assessment of compactness, which included consideration of geographic size, ease of travel and representation, and communities of interest. Also, in vetoing the initial

redistricting bill (H.B. 5001), Governor McDonnell linked compactness not only to statistical compactness scores but also to the number of localities split between districts and to “a plain visual examination of the districts.”

In *Wilkins* and *Jamerson*, we have held that courts must “give proper deference to the wide discretion accorded the General Assembly in its value judgment of the relative degree of compactness required when reconciling the multiple concerns of [redistricting].” *Jamerson*, 244 Va. at 517, 423 S.E.2d at 186. We have stated that redistricting is, in a sense, political. *Id.* at 510, 423 S.E.2d at 182. Thus, giving the General Assembly the opportunity to determine the relative level of compactness in the first instance places the decision, of what degree of compactness best serves local needs, with the institution best informed to make that decision.

Although whether a voting district is “compact” is justiciable, it is a question of “fact” triggering the “fairly debatable” standard. See *Jamerson*, 244 Va. at 509-10, 423 S.E.2d at 182.

When the constitutionality of a statute depends on facts, the determination of those facts by the legislature can be set aside if it is clearly erroneous, arbitrary, or wholly unwarranted. If the *evidence offered in support of the facts in issue would lead objective and reasonable persons to reach different conclusions, the legislative determination is considered fairly debatable* and such a determination must be upheld by the courts.

Wilkins, 264 Va. at 462, 571 S.E.2d at 108 (emphasis added).

Specifically,

if the validity of the legislature’s reconciliation of various criteria is fairly debatable and not clearly erroneous, arbitrary, or wholly unwarranted, neither the court below nor this Court can conclude that the resulting electoral district fails to comply with the compactness and contiguous requirements of Article II, § 6.

Id. at 463, 571 S.E.2d at 108.

Accordingly, our decisions in *Jamerson* and *Wilkins* do not vest the judiciary with authority to establish a standard of compactness in the first instance; rather, our role is to “review

legislative determinations of fact” regarding compactness to ensure that they are not “clearly erroneous, arbitrary, or wholly unwarranted.” *Jamerson*, 244 Va. at 510, 423 S.E.2d at 182. Thus, our precedent requires our courts to give the General Assembly deference and wide discretion in determining compactness of legislative districts. However, the judiciary has the authority and obligation to intervene when an abuse of that discretion is shown by a grave, palpable, and unreasonable deviation from the principles fixed by the Constitution. *Id.* at 510, 423 S.E.2d at 182. In considering the validity of a redistricting statute, we have said that “when fair-minded men[,] from an examination of the [redistricting,] can entertain no reasonable doubt that there is a grave, unnecessary, and unreasonable [error], the Constitution has been violated and it is the duty of the court to so declare.” *Id.* (citation, alteration and internal quotation marks omitted).

In addition, as an appellate court, we also “must give proper deference” to a circuit court’s resolution of disputed facts, if supported by credible evidence. We must consider the evidence and all reasonable inferences that can be drawn therefrom in the light most favorable to the parties who prevailed before the circuit court. *Jamerson*, 244 Va. at 517, 423 S.E.2d at 186.

The Challengers had the initial burden to show “probative evidence of unreasonableness,” and the legislature could respond to that showing with evidence that its actions were reasonable. *See Board of Supervisors v. Jackson*, 221 Va. 328, 333, 269 S.E.2d 381, 384-85 (1980). At that point, “[i]f such evidence of reasonableness is sufficient to make the issue fairly debatable, the legislative action must be sustained.” *Id.* at 333, 269 S.E.2d at 385. Thus, the key question that must be answered in resolving this appeal is simply whether the legislature’s determination, that the Challenged Districts are in fact compact, is fairly debatable. If so, the circuit court’s judgment must be affirmed.

In support of their claim, the Challengers presented Dr. McDonald's expert testimony. He testified about a predominance test that he devised for this litigation. Applying his test, Dr. McDonald concluded that the composite district compactness scores (using the Reock and Polsby-Popper measures) of each of the Challenged Districts had been "degraded" by more than 50 percent from the compactness score of an alternative district drawn to be as compact as possible, without consideration of any discretionary criteria. Based upon the results of his test, he opined that the General Assembly subordinated the constitutional requirement that the districts be compact to other discretionary considerations in drawing the Challenged Districts. The Challengers rely upon that opinion as their evidence that the Challenged Districts are clearly in violation of the compactness requirement expressed in Article II, § 6.

The Challengers' theory that Dr. McDonald's testimony clearly proves there was a violation of the compactness requirement in Article II, § 6 faces several challenges. Notably, it is based upon the measure of a requirement, predominance, that is not found in our Constitution, and it does not account for the discretionary factors the legislature balances when drawing districts; it relies on measurements (statistical scores) that do not have a universally accepted meaning; and the test devised by Dr. McDonald is novel and unproven.

First, Dr. McDonald's approach assumes that evaluating compactness involves considering whether discretionary factors predominated over other factors. This assumption has no support in the text of the Constitution nor from precedents in Virginia law. To the contrary, our Court has previously stated that "any purpose that may underlie the design of an electoral district, while relevant to challenges under other portions of the Constitution of Virginia . . . is not determinative in a challenge based on Article II, § 6." *Wilkins*, 264 Va. at 462, 571 S.E.2d at 108. Instead, "[d]eterminations of contiguity and compactness, as we said in *Jamerson*, are

limited to consideration of the district from a spatial perspective, taking into consideration the other facts that a legislative body must balance in designing a district.” *Wilkins*, 264 Va. at 462, 571 S.E.2d at 108. The proper inquiry is whether the resultant district is, in fact, compact. In making that determination, our precedent has recognized that “traditional [discretionary] redistricting elements not contained in the statute . . . are also legitimate legislative considerations.” *Id.* at 464, 571 S.E.2d at 109. Where there is evidence that the General Assembly considered the constitutional requirement of compactness in reconciling the different demands upon it in drawing legislative districts, deference is given to the General Assembly in its value judgment as to the relative degree of compactness required. *Jamerson*, 244 Va. at 517, 423 S.E.2d at 186.

It is also important to note that, contrary to a core premise in Dr. McDonald’s test, the Constitution of Virginia does not require districts to be as compact as possible.⁹ Article II, § 6 simply requires that districts “shall be . . . compact.” *See, e.g., Wilkins*, 264 Va. at 466, 571 S.E.2d at 110 (observing that “nothing in this record indicates that the District is repugnant to the constitutional principles of compact and contiguous electoral districts,” even though the district was “far from the most compact district”). As the Board observed, the compactness requirement is not based on the same type of objective comparative inquiry as the equal population requirement.

⁹ Unlike Virginia’s general requirement that districts be “compact,” other states provide specific standards for compactness, either by controlling the process of redistricting or the maps drawn as a result. For example, in Arizona, an independent redistricting commission begins the mapping process by creating “districts of equal population in a grid-like pattern across the state,” and then making adjustments “as necessary to accommodate” enumerated goals, including that districts “shall be geographically compact and contiguous to the extent practicable.” Ariz. Const. art. IV, pt. 2, § 1. Colorado requires that “[e]ach district shall be as compact in area as possible and the aggregate linear distance of all district boundaries shall be as short as possible.” Colo. Const. art. V, § 47.

Second, Dr. McDonald’s approach depended solely on calculations of relative compactness using several common compactness score measures. It is undisputed that there is no accepted bright-line test or score in the social sciences for when a district can no longer be considered “compact.” Dr. McDonald acknowledged that there is “no universal definition of what constitutes the best measure for compact districts,” and that “[i]n the social science community, there’s no threshold for when a district is compact or noncompact.” Our decisions in *Jamerson* and *Wilkins* do not purport to adopt a bright-line standard; indeed, those opinions do not even recount the compactness scores of the districts upheld therein. However, the record indicates that the districts challenged in this case all have Reock scores exceeding the lowest score for a district upheld in *Jamerson* and within 0.01 of the lowest score upheld in *Wilkins*. Nine of the Challenged Districts have Polsby-Popper scores greater than or equal to the lowest score for districts upheld in *Jamerson* and *Wilkins*. Two of the Challenged Districts (HD 72 and SD 28) have Polsby-Popper scores which are 0.02 below the lowest score for a district upheld in those cases. However, Dr. McDonald agreed that a 0.02 difference is not “a large difference” and generally is not meaningful. Thus, compactness scores for the Challenged Districts were at least approximately the same or greater than the scores of districts previously found to be constitutionally compact.

Third, Dr. McDonald’s predominance test was admittedly novel and created for this case. He conceded that the predominance test had not previously been used or published, and he was not aware of any other expert, court opinion or state using the “predominance test” that he used to develop degradation percentages regarding compactness of the legislative districts. Dr. McDonald admitted that the entire question the new test purports to answer—whether other redistricting criteria predominated over compactness—“is not a question that I’ve ever seen in

any legal or scholarly writings that are out there.” Consequently, the predominance test has no supporting basis in social science scholarship or redistricting case law.

As noted above, the standard applicable at trial is highly deferential to the government, even after a challenger meets his *prima facie* burden.¹⁰ The government need only present “some evidence of reasonableness,” and the evidence need not establish the government’s position by a “preponderance of the evidence;” it is enough if “the evidence offered in support of the opposing views would lead objective and reasonable persons to reach different conclusions.” *Ames v. Town of Painter*, 239 Va. 343, 348, 389 S.E.2d 702, 704 (1990) (citation and internal quotation marks omitted).

The Board and the House countered the Challengers’ case with extensive evidence that the Challenged Districts were reasonable, including testimony and statements from the individuals who crafted the 2011 Plan and experts who disagreed with and challenged Dr. McDonald’s opinions regarding compactness. For purposes of this appeal, that evidence is viewed in the light most favorable to the Board and the House, the prevailing parties at trial.

The evidence produced by the House and the Board showed that compactness was considered by the General Assembly during the redistricting. Both the House and the Senate adopted criteria for the 2011 redistricting that included “compact and contiguous” districts under

¹⁰ The Challengers assert that the circuit court found their *prima facie* burden of proof was met based upon the court’s denial of the House and Board’s motions to strike. However, at that stage of the trial, the Challengers enjoyed “all reasonable inferences drawn from the evidence in the light most favorable” to them. *Izadpanah v. Boeing Joint Venture*, 243 Va. 81, 82, 412 S.E.2d 708, 709 (1992). The presumption in the Challengers’ favor, however, does not carry beyond that procedural stage, and they bore the burden at trial with no benefit of the doubt. Thus, prevailing on the motions to strike did not mean that the Challengers carried any burden relevant to the court’s decision after trial on the merits. See *Kiddell v. Labowitz*, 284 Va. 611, 621 n.3, 733 S.E.2d 622, 627 n.3 (2012) (explaining that denial of a motion to strike was not a finding that the non-moving party met its substantive burden).

Article II, § 6 and consistent with *Wilkins* and *Jamerson*. Several of the floor speeches and other exhibits introduced into the record mentioned compactness. Morgan and Delegate Jones testified that they checked the compactness scores of districts as they were creating the 2011 Plan against scores of the districts approved in *Wilkins* and *Jamerson*. At trial, the defense presented testimony from two experts about the 2011 redistricting and compactness—Dr. Hood regarding the Senate districts, and Dr. Hofeller regarding the House districts. Both experts agreed that all of the Challenged Districts were sufficiently compact.

Both experts also cast doubt upon the validity of Dr. McDonald’s predominance test. Dr. Hofeller testified that the predominance test was not a proper and useful way to assess compliance with the compactness requirement. He faulted the test’s lack of foundation, noting that it lacked peer review, exposure, supporting research, and use during an actual redistricting. Dr. Hofeller also testified that the low level of overlap between the enacted and alternative districts meant the new test compared apples to oranges. He questioned the complexity added by the new test and whether it could be applied within Virginia’s compressed redistricting timeframe. Lastly, he opined that excluding VRA districts from its application cast doubt on the validity of the predominance test, because there “needs to be one redistricting standard for all the districts.”

Dr. Hood opined that any compactness test should be able to be applied to all the districts in a plan, and noted that the Challengers’ new test admittedly could not be applied to approximately 50 percent of the Senate districts, because those districts were either governed by the VRA or bordered VRA districts. Dr. Hood also opined that the new test’s averaging of

different compactness scores for a district was not a typical or recommended practice. Indeed, Dr. McDonald admitted that he could not recall having averaged a district's compactness scores before, and admitted that averaging could mask results on particular scores.

The circuit court accepted all the evidence from both sides and, after weighing it, concluded that reasonable minds would disagree as to whether the Challenged Districts are sufficiently compact. Taken together, the evidence presented by the Challengers and that presented on behalf of the House and the Board was sufficient to establish that the constitutional validity of the Challenged Districts under the compactness requirement was fairly debatable.

The circuit court was not required to accept the opinion of Dr. McDonald as being true or accurate. Also, even if the circuit court accepted the correctness of Dr. McDonald's opinion that his test measured the effect of discretionary criteria upon compactness, the circuit court was not bound to accept the Challengers' theory that proof that the General Assembly subordinated the criterion of compactness to discretionary criteria *per se* resulted in a clear violation of the compactness requirement expressed in Article II, § 6.

The test that Dr. McDonald based his opinion upon was created for the purpose of this litigation and had never been used by anyone before to measure "predominance" and "degradation." It is based upon measures of compactness and creates a rule regarding it although the creator of the test concedes that there is no consensus on how to measure compactness and there is no bright line demonstrating when a district is compact and when it is not. Further, it is undisputed that the compactness of the Challenged Districts is approximately equivalent to or better than that of districts upheld in the past, as measured by widely used compactness scores. Moreover, the Challengers offered no direct evidence that the legislature ignored compactness,

or any other evidence, other than Dr. McDonald’s opinion based upon statistical compactness scores, as a basis for their assertion that the Challenged Districts violated the compactness requirement.

Further, there was evidence that the legislature attempted to reconcile discretionary considerations with the acknowledged requirement in Article II, § 6 that the districts be compact. The legislature’s efforts to ensure that the compactness scores of the districts in the 2011 Plan remained largely at or above the scores of the districts approved by this Court in *Jamerson* and *Wilkins*, while not dispositive, are evidence that could lead reasonable people to find that the Challenged Districts were constitutionally compact. Even if the districts in the 2011 Plan were not as compact as they could have been, as we have explained above, that is not what our Constitution requires. Our Constitution speaks to the result of the redistricting process, and mandates that districts be compact in the end. It does not attempt to curtail the legislative process that creates the end result. Nor does it require that compactness be given priority over other considerations, much less establish a standard to determine whether the legislature gave proper priority to compactness. Thus, there is evidence to support the ruling that the determination of the General Assembly regarding compactness of the Challenged Districts is fairly debatable, and not clearly erroneous, arbitrary, or wholly unwarranted, and we must uphold the legislature’s decision to draw the Challenged Districts as it did.

CONCLUSION

The circuit court did not err in concluding that evidence was presented at trial that would “lead reasonable and objective people to differ” regarding the compactness of the Challenged Districts, and declaring the constitutional validity of the Challenged Districts under the fairly

debatable standard applied to determinations made by the legislature. Accordingly, we will affirm the judgment of the circuit court.

Affirmed.