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IN THE

SUPREME COURT OF VIRGINIA

RECORD NO. 170697

RIMA FORD VESILIND, *et al.*,

Appellants,

v.

VA. STATE BOARD OF ELECTIONS, *et al.*,

Appellees.

BRIEF OF DEFENDANTS-APPELLEES

Mark R. Herring
Attorney General of Virginia

Cynthia E. Hudson
Chief Deputy Attorney General

John W. Daniel, II
Deputy Attorney General

Heather Hays Lockerman
Senior Assistant Attorney General

Anna T. Birkenheier (VSB # 86035)
Assistant Attorney General

Matthew R. McGuire (VSB # 84194)
Acting Deputy Solicitor General

Trevor S. Cox (VSB # 78396)
Acting Solicitor General

Joshua D. Heslinga (VSB # 73036)
Assistant Attorney General

OFFICE OF THE
ATTORNEY GENERAL

202 North Ninth Street
Richmond, Virginia 23219
(804) 786-7773
mmcguire@oag.state.va.us

Counsel for Defendants-Appellees

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The big winner on Nov. 7? Redistricting reform, GoDanRiver.com (Nov. 19, 2017), http://www.godanriver.com/opinion/the-big-winner-on-nov-redistricting-reform/article_b2aa179a-cbdc-11e7-a123-7764bbf1bca7.html 37

Graham Moomaw, *With redistricting process looming, Northam and Gillespie strike different tones on need for nonpartisan electoral maps*, Richmond Times-Dispatch (Oct. 5, 2017), at 1A, available at http://www.richmond.com/news/virginia/government-politics/with-redistricting-process-looming-northam-and-gillespie-strike-different-tones/article_689067f4-6cef-5678-9f0e-547b2ff37575.html 37

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INTRODUCTION

Plaintiffs' opening brief paints an inaccurate picture of the issue presented in this case.[1] Article II, § 6 of the Constitution of Virginia requires, among other things, that districts be "composed of . . . compact territory." The issue litigated in this case is whether certain House and Senate districts enacted in the 2011 redistricting are in fact "compact."

This Court has decided challenges based on Article II, § 6's compactness requirement after each of the last two redistricting cycles. *See Wilkins v. West*, 264 Va. 447, 571 S.E.2d 100 (2002); *Jamerson v. Womack*, 244 Va. 506, 423 S.E.2d 180 (1992). Plaintiffs do not accept the standard established in those controlling authorities, which the trial court correctly applied. Instead, Plaintiffs urge the Court to adopt a burden-shifting approach in furtherance of their novel legal theory that the judiciary should attempt to divine what the General Assembly's priorities

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[1] This brief refers to the parties by "the designations used in the lower court" (Rule 5:26(f)): Plaintiffs (now the Appellants) on the one hand, and Defendants and Defendant-Intervenors (now the two groups of Appellees) on the other.

Plaintiffs' references to Defendants as the "Senate" or with the collective "Legislature" require clarification. Defendants are the executive branch bodies and officials who administer elections; the record does not show any role of Defendants in the legislature's 2011 redistricting. Defense counsel did split presentation of the evidence, with the Office of the Attorney General (OAG), Defendants' counsel, taking the lead on Senate evidence. But the OAG has defended the constitutionality of all challenged districts, both House and Senate. JA 677; *see* JA 1443.

were in 2011 and dictate how redistricting factors must be balanced in the future. Deciding whether the 2011 redistricting clearly violates Article II, § 6 does not require—and should not entail—eliminating consideration of legislative judgment and discretion, which the Court has firmly accepted in its compactness case law.

Plaintiffs' case rests entirely on a novel "predominance" test that they have custom-created to support their claims. Plaintiffs' new test has never appeared in decades of social sciences scholarship on compactness; has never been offered, much less accepted, in any prior case; and has never been applied during an actual redistricting. Nevertheless, the trial court admitted Plaintiffs' new test, failing to apply the requirement that scientific evidence be reliable to be admissible. Correcting that error would provide an alternative basis to affirm.

In the end, unless this Court intends to abandon its case law concerning compactness, and to gut legislative discretion with respect to the balancing and policy choices inherent in redistricting, this Court should affirm the judgment below as to all districts.

ASSIGNMENTS OF ERROR

1. After Challengers presented a *prima facie* case, the trial court erroneously failed to shift to the House and Senate the burden to produce evidence sufficient to show reasonableness.

2. Assuming the trial court shifted the burden, it erroneously found without analysis that the evidence produced by the House and Senate sufficed to make the redistricting decision fairly debatable for each Challenged District.

ASSIGNMENTS OF CROSS-ERROR

1. The trial court erred by admitting testimony and other evidence of Plaintiffs' new compactness test without applying the reliability requirement that is a prerequisite for the admission of scientific evidence.[2]

2. The Circuit Court erred in admitting the expert testimony of Dr. Michael McDonald, which is unreliable, unscientific, not peer reviewed, contains legal opinion, fails to account for all variables, relies on improper methodology, and depends on a racially discriminatory alternative plan that was not created by an expert.[3]

3. The Circuit Court erred to the extent—if at all—that it adopted Plaintiffs' intent-based "predominance" test.[4]

STATEMENT OF THE CASE AND FACTS

Although Plaintiffs are generally accurate in their description of the procedural posture of the case, they disregard that the governing standard of review: this Court "review[s] the evidence in the light most favorable to the prevailing parties and accept[s] as true any reasonable inferences that could be drawn from the evidence before the factfinder." *Forest Lakes Cmty. Ass'n v. United Land Corp. of Am.*, 293 Va. 113, 117, 795 S.E.2d 875, 877 (2017). A

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[2] Preserved: JA 102-16 (motion in limine); JA 618-38 & 652-55 (Mar. 2, 2017, Hr'g Tr.); JA 690-91, 709-10, 721, 722, 729, 814, 833 (objections at trial).

[3] Preserved: Br. ISO Limine Mot. (filed Feb. 21, 2017); Hr'g Tr. (Mar. 2, 2017); Trial Tr. 33-34, 52-53, 64, 65, 72, 157, 176.

[4] Preserved: Br. ISO SJ Mot. (filed Jan. 26, 2017) at 8-14; Trial Tr. 290-91.

detailed recitation of the facts under the correct standard is therefore necessary.

A. The General Assembly considered compactness during the 2011 redistricting and stated that it would prioritize redistricting factors appropriately in the event of conflict among them.

The General Assembly identified compactness as one of the criteria to be used in the 2011 redistricting process. Indeed, the record includes the criteria resolutions adopted by the House and Senate Privileges and Elections Committees, which expressly reference compactness and the controlling decisions of this Court in prior redistricting cases. *See* JA 1685-86 (Senate) & 1688-89 (House). Those resolutions also provide that "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." JA 1686, 1689.

The 2011 redistricting criteria reflect that the General Assembly followed the same path it had in the 2001 redistricting. As Senator Howell noted at the time,[5] the 2011 Senate Committee criteria were essentially identical to the 2001 criteria. The only changes were updating the census year in section I (Population Equality) and adding in section III (Contiguity and Compactness) a reference to

[5] *See* JA 1990-91 (part of the meeting notes debating and adopting Senate Committee criteria); JA 971 (transcribing DX-44, a video of Sen. Howell's April 7, 2011 floor debate speech).

this Court's decision *Wilkins*. The 2011 House Committee reduced the maximum population deviation from 2% to 1%, but otherwise the House Committee used the same criteria in 2011 as in 2001, including with respect to compactness.[6]

Other evidence also shows that the General Assembly considered compactness in 2011. Delegate Chris Jones testified to the House's consideration and prioritization of compactness, as did map-drawer John Morgan. *See* JA 1133-35, 1199. No Senator involved in the 2011 redistricting chose to waive legislative privilege and testify at trial,[7] but the record shows that the Senate debates in committee and on the floor referenced compactness.[8] The lack of extensive debate on compactness indicates that compactness was a non-controversial part of the process.

B. The evidence presented at trial shows that compactness is an amorphous quality.

The consensus about compactness is that there is no consensus about how to

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[6] *Compare* JA 1685-86 & JA 1688-89, *with West v. Gilmore*, No. CL01-84, 2002 Va. Cir. LEXIS 37, at *3-6 (City of Salem Mar. 10, 2002); *see also* JA 1181 (Morgan testimony regarding criteria similarity).

[7] This Court clarified the broad scope of legislative privilege in an earlier appeal. *See Edwards v. Vesilind*, 292 Va. 510, 790 S.E.2d 469 (2016).

[8] *See* JA 2038 (Senator Howell, April 5, 2011 committee meeting); JA 2041 (Senator Howell, April 7 floor debate summary); JA 971 (transcribing DX-44, Senator Howell's April 7 floor speech). Public statements upon passage of both the initial and revised bills also reference compactness. *See* JA 2054, 2071.

measure and define it. As attested to by Plaintiffs' expert, Dr. Michael McDonald, social scientists have developed at least 50 different methods of measuring compactness. JA 868-69.[9] "[T]he proliferation of measures does not provide clarity. It does exactly the opposite." JA 869. In the social science community, there's an ongoing debate about the best approach to measuring compactness. *Id.* There is no universal definition or consensus as to what constitutes the best measure for compact districts. *Id.*; *accord* JA 1006 (Dr. Hood). Which measures to use in assessing compactness is "a policy choice." JA 870 (Dr. McDonald). States can enact laws specifying which measure to use, but Virginia has not enacted such a law.[10] And while there are "widely used" compactness measures developed decades ago, JA 823 (describing "Reock"[11] and "Polsby-Popper"[12]),

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[9] *See also* JA 1256-57 (Maptitude redistricting software includes 8 tests of compactness), 1257-59 (the Schwartzberg measure), 1262-65 (the "population polygon" measure).

[10] For example, Colorado's Constitution, Article V, § 47, provides 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." And Iowa prescribes specific standards by statute. *See* Iowa Code § 42.4(4) (LexisNexis through 2017 Sess.). Approximately 37 States require compactness for legislative districts. *See Redistricting Law 2010*, Nat'l Conf. of State Legislatures, at 106-08 (Dec. 1, 2009), http://www.ncsl.org/research/redistricting/redistricting-law-2010.aspx; *Redistricting Criteria*, Nat'l Conf. of State Legislatures, (Dec. 15, 2017), http://www.ncsl.org/research/redistricting/redistricting-criteria.aspx.

[11] The Reock measure, named for the author of a 1961 publication, "is an area or dispersion measure that compares the area of a district to the area of the small[est]

(footnote continued on next page…)

there is no agreed threshold for when a district becomes compact, even under those established measures. JA 870-71 (Dr. McDonald); *accord* JA 1009 (Dr. Hood).

In addition to scientific compactness measures, the record demonstrates that policymakers and citizens define compactness in a variety of ways. Delegate Chris Jones, a leader in the House redistricting in 2001 and 2011, *see* JA 1109 & 1122, testified to his spatial and political assessment of compactness, which included consideration of geographic size, ease of travel and representation, and communities of interest. *See* JA 1136-37, 1140-44. In vetoing the initial redistricting bill (HB 5001), Governor McDonnell linked compactness not only to Reock and Polsby-Popper scores but also to the number of localities split between districts and to "a plain visual examination of the districts."[13] Governor McDonnell's statement when signing the revised bill (HB 5005), which split fewer

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circle that can be drawn around the district." JA 819; *accord* JA 1008; *see* Ernest C. Reock, Jr., *Measuring Compactness as a Requirement of Legislative Apportionment*, 5 MIDWEST J. POL. SCI. 70, 71 (1961). Reock penalizes (or scores more negatively) elongated districts, JA 1007, 1254-55, as illustrated on JA 2412.

[12] The Polsby-Popper measure, named for the authors of a 1991 publication, "is a perimeter measure that compares the area of a district to the area of a circle with the same perimeter." JA 818; *see* Daniel D. Polsby & Robert D. Popper, *The Third Criterion: Compactness as a Procedural Safeguard Against Partisan Gerrymandering*, 9 YALE L. & POL'Y REV. 301, 348-51 (1991). Polsby-Popper penalizes districts with irregular borders – "squiggles, indentations and arms that come out" (JA 1254-55), as illustrated on JA 2413.

[13] JA 1694 (one of the stipulated exhibits, *see* JA 1483 ¶ 7).

localities between districts, hailed the "great improvement" that had addressed "potential legal issues."[14] In hearings held by the Privileges and Elections Committees, many citizens addressed compactness in connection with redistricting reform.[15] They associated compactness with avoiding split localities, preserving communities of interests, and district shapes.[16]

Given the numerous ways to assess compactness, it has aptly been described as being "like beauty; in the eye of the beholder." JA 871.

C. The districts challenged in this case generally have scientific compactness scores equivalent to or better than districts upheld in previous cases.

The parties stipulated to compactness scores for the districts challenged in this case and for the districts challenged and upheld in the litigation involving the 1991 redistricting plan (*Jamerson*) and the litigation involving the 2001 redistricting plan (*Wilkins*). JA 1545-47; *see also* JA 1472-73 (¶ 5).

The districts challenged in this case all have Reock scores of 0.15 or higher, exceeding the lowest score for a district upheld in *Jamerson*—which had a Reock

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[14] JA 1703 (another stipulated exhibit, *see* JA 1484 ¶ 8).

[15] *See, e.g.*, JA 1953-54 (Olga Hernandez, president of the League of Women Voters of Virginia); JA 1959-60 (John Stone); JA 1961 (Melanie Perez-Lopez); JA 2017 (Olga Hernandez).

[16] *See, e.g.*, JA 1991 (Lisa Guthrie); JA 2003 (Randy Minchew); JA 2008 (Ron Adkins); JA 2009-10 (Judge Pattisall); JA 2010 (Brown Burton); JA 2010-11 (Kristin Peckman); JA 2014 (Andrew Clem); JA 2016 (Rob Jackson).

score of 0.12[17]—and within .01 of the lowest score upheld in *Wilkins*. *See* JA 1545-47. And nine of the 11 challenged districts have Polsby-Popper scores greater than or equal to the lowest score for districts upheld in *Jamerson* and in *Wilkins*, which had Polsby-Popper scores of 0.10. *See id.* Two of the challenged districts (HD 72 and SD 28)[18] do have a Polsby-Popper score of 0.08, which is below the lowest score for a district upheld in those cases. *See id.* But the experts agreed that a 0.02 difference "isn't a big difference" and generally is not meaningful. JA 873-74 (Dr. McDonald); *accord* JA 1019-20 (Dr. Hood).

D. Expert testimony demonstrates that the challenged districts are sufficiently compact.

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 districts were sufficiently compact. The key parts of their testimony are recounted below.

1. Dr. Hood testifies that the challenged Senate districts are compact.

Dr. Hood testified that districts should be reviewed in context. He compared the 2011 Senate redistricting plan to the "benchmark" or "baseline" plan—*i.e.*, the

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[17] A higher Reock score corresponds to a more compact district.

[18] This brief refers to House of Delegates districts as "HD __" and Senate districts as "SD __."

plan in effect from 2001 to 2011—with respect to compactness and other factors. JA 1009-10. Such a comparison is a common and preferred practice because legislatures generally do not start with a blank slate; they start with the benchmark plan and make adjustments, which is what they did in 2011. *See* JA 1010-11.

Although Dr. Hood examined the challenged districts, he explained that assessing the plan as a whole is important because "districts are not drawn in isolation from one another, and how you draw a particular district affects the districts surrounding that district," producing a "ripple effect." JA 1012. Dr. Hood testified that the 2011 Senate redistricting plan was less compact than the benchmark plan, JA 1014, but that the compactness of the 2011 redistricting plan was not "unusual or concerning." JA 1018. The same was true for the challenged districts—there was some decline in compactness, but that decline was not significant enough to make them not compact. JA 1019. Dr. Hood explained that the compactness of the challenged districts was not meaningfully different from the compactness of many other enacted districts. JA 1023-24; *see also* JA 1020-28 (referencing JA 1892 [Reock], JA 1893 [Polsby-Popper], and JA 1894 [adjusted Schwartzberg]). And Dr. Hood stated that the ability to draw a more compact district or set of districts does not necessarily mean that the 2011 redistricting plan lacks the requisite compactness. JA 1049.

Dr. Hood also compared the challenged districts' compactness to districts

upheld by this Court in prior cases, and concluded that the challenged districts were "in the same general area in terms of scores." JA 1029-30. Indeed, Plaintiffs' counsel conceded that point. *See* JA 1033 ("We know those scores are similar. So we're not arguing that they're dissimilar . . . . [T]hey're close. They're very close.").

Finally, Dr. Hood discussed other redistricting criteria reflected in the 2011 Senate redistricting plan, including population, communities of interest (particularly locality and voting district splits), pairing of incumbents, "core retention levels" (*i.e.*, the percentage of constituents who remain with the members in newly enacted districts), and compliance with the Voting Rights Act. *See* JA 1037-42. Dr. Hood explained that, because many factors are used when drawing a redistricting plan, redistricting plans should be compared on an overall basis and not based on a single factor. *See* JA 1043.

2. Dr. Hofeller testifies that the challenged House districts are compact.

Dr. Hofeller provided similar and complementary testimony to that provided by Dr. Hood. Specifically, Dr. Hofeller testified that:

- Population changes and a narrower population deviation pose problems from a compactness perspective. *See* JA 1238-39, 1241, 1252.
- Virginia's "irregular boundary geography," wide rivers, and irregular State line make compactness more difficult. JA 1252-53.

- The legislature evaluated *Jamerson* and *Wilkins* and the minimum compactness scores of the districts in those cases as a "floor" for compactness in the 2011 redistricting. JA 1271-72.

- Other factors influenced the 2011 redistricting, including "core composition"—*i.e.*, how much of an old district is in a new district—which is "[o]ne of the very primary principles of community of interest" because it retains connections built over time. *See* JA 1274, 1277; *see also Wilkins*, 264 Va. at 466, 571 S.E.2d at 110 ("[W]e think it is significant that this district's configuration has remained substantially the same for over a decade, allowing development of relationships and communities of interest relative to election of delegates").

E. Plaintiffs' case relies entirely on a new and flawed compactness test that was custom-created to support their claims.

Plaintiffs did not contest much of the evidence described above. For example, they did not dispute that (1) the challenged districts' compactness is equivalent to or better than that of districts upheld in the past, as measured by widely used compactness scores; (2) there is no consensus on how to measure compactness; and (3) there is no bright line demarcating when a district is compact or not compact. Moreover, Plaintiffs offered no direct evidence that the legislature ignored compactness.

Instead, Plaintiffs created a new compactness test for this case. JA 876 (Dr. McDonald agreeing that the new test was "created for this case by you and the

plaintiffs' attorneys"); *see also* JA 825 (after initially having "no definitive strategy" or "firm idea" of how to approach this case, Dr. McDonald and Plaintiffs' counsel developed the predominance theory). The test developed by Plaintiffs compares the average of selected compactness scores for a district enacted in 2011 to the average for a district in an alternative plan drawn for this case.[19]

Plaintiffs' new test reflects significant influence by their counsel. In fact, one of Plaintiffs' lawyers actually drew the alternative plan that is the basis for comparison in the new test. *See* JA 705-07, 709, 742-45. And Plaintiffs' counsel gave instructions restricting the compactness measures that Dr. McDonald could use. JA 872; *accord* JA 822. Specifically, counsel's instructions barred use of measures that assess a district's compactness through population distribution. Dr. McDonald admitted that population distribution matters in redistricting and may be informative in cases where his analysis is not constrained by counsel's instructions. JA 872-73.

Plaintiffs' test is so new and so custom-designed for their claims involving

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[19] JA 874; *see also* JA 256 (illustrating the new test's steps and calculations). Dr. McDonald confirmed at trial (JA 874-75) that JA 256 accurately summarizes the test. That illustration then was admitted as Defendants' trial exhibit 78. *See* JA 899-900. The illustration appears on the agreed list of admitted exhibits, *see* JA 544, and so should appear in the Joint Appendix, per the joint designation. It appears, however, that the actual admitted copy was omitted from the Joint Appendix, making it necessary here to refer to the earlier filed copy at JA 256.

the challenged districts that Dr. McDonald was unable to explain how to apply the test to all legislative districts. For example, there are 17 districts (5 in the Senate and 12 in the House) that were created for compliance with the Voting Rights Act ("voting rights districts"). JA 1484 (Stipulations of Fact ¶ 13). The voting rights districts border multiple other districts. *See* JA 1047-48 (the 5 Senate voting rights districts border 16 other districts). At trial, Dr. McDonald first testified that "the test that we have devised is one that can only be applied to nonvoting rights districts," JA 852, then later said it might be possible to apply the new test to those districts—but that he had not "contemplated how to approach doing that." JA 881. In his deposition, when asked if there should be different compactness standards for voting rights districts and for the districts bordering them, Dr. McDonald responded definitively that "[t]he standard that I am proposing with the predominance test would not be the correct standard to apply in those situations." JA 882-83.

Plaintiffs' compactness test also has no supporting basis in social science scholarship or redistricting case law. Dr. McDonald admitted that he has never used the test before and is not aware of any other expert who has. JA 875. There are no known court opinions that have used or approved the test. *Id.* And the test has never been published. JA 875-76. Indeed, 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." JA 876; *accord* JA 1044 (Dr. Hood).

Drs. Hood and Hofeller extensively criticized Plaintiffs' new test.[20] Dr. Hood noted the problems with outsiders constructing a hypothetical—after the fact and without contact with legislative map-drawers and decisionmakers—that purports to show how the legislature did, or would, balance redistricting factors. *See* JA 1044-45. He testified that the new test likely does not remove politics from the equation; the fight merely shifts to how to draw the alternative plan. JA 1045-46.[21] Dr. Hood observed that a key part of the new test's attempt to isolate compactness—freezing voting rights districts in place—could not be used during a new redistricting cycle because population changes would require redrawing the voting rights districts. JA 1047. He opined that any compactness test should be able to be applied to all the districts in a plan, and noted that Plaintiffs' new test

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[20] Appellants argue that one of Dr. Hood's comments was an admission that bolsters their new test. *See* Opening Br. at 12 ("Dr. Hood . . . even admitted that Dr. McDonald's analysis was one way to test compactness."). Claiming that Dr. Hood's remark validates the new test requires a determined blindness to context. *See* JA 1044 ("Q: Do you think this is a good approach for assessing compactness? A: Well, it's certainly one approach. I'll say that.").

[21] Dr. McDonald admitted that "I can't say with any certainty that the map that we produced is the most compact map" and that Alternative Plan 1 was "an ideal, not the ideal." JA 891-92. Dr. McDonald envisions the minority and majority parties each drawing plans for compactness comparison purposes, JA 892, so the experts agree that Plaintiffs' new test does not remove the politics from redistricting.

could not be applied to approximately 50% of Senate districts. JA 1048; *see also supra* at 14-15 (Dr. McDonald testified that, of 40 total Senate districts, the new test does not apply to the 21 districts that are voting rights districts or that border such districts). Dr. Hood noted that, if the new test is applied to scores for the plan overall, the degradation in average compactness score falls below 50%, the level that Dr. McDonald said generally marked impermissible predominance. JA 1053.[22] Finally, Dr. Hood opined that the new test's averaging of different compactness scores for a district was not a typical or recommended practice. JA 1016-17. Indeed, Dr. McDonald could not recall having averaged a district's compactness scores before, and he admitted that averaging could mask results on particular scores. JA 876-77.

Dr. Hofeller also testified that the new test was not a proper and useful way to assess compliance with the compactness requirement. JA 1285. He faulted the new test's lack of foundation, noting that it lacked peer review, exposure, supporting research, and use during an actual redistricting. JA 1287, 1289. The new test was an "interesting" but "kind of an incomplete research project" that he would not use without more support. JA 1289-90. Dr. Hofeller testified that the

[22] Dr. McDonald said more than 50% degradation may be permissible in some circumstances. JA 877-78, 880. Dr. Hofeller said that the lack of clarity about the supposedly bright line of 50% degradation was another reason the new test needs more examination before it is "ready for prime time." JA 1296.

low level of overlap between the enacted and alternative districts meant the new test compared apples to oranges. JA 1287-88, 1293. He questioned the complexity added by the new test and whether it could be applied within Virginia's compressed redistricting timeframe. JA 1286, 1290-91. And he criticized judging the 2011 redistricting by a test that did not exist at the time. *See* JA 1288-89, 1299. Lastly, he opined that excluding voting rights districts was inappropriate because there "needs to be one redistricting standard for all the districts." JA 1291-92.

F. Evidence about HB 5001 and the testimony of Senator Jeremy McPike are relevant to the issue before the Court.

Plaintiffs did not object at trial on relevance grounds to the videos (and other evidence) concerning HB 5001. *See* JA 973 (DX-44), 981 (DX-45), 984 (DX-46). Indeed, Plaintiffs themselves introduced evidence concerning HB 5001. *See* JA 689-90, 696 (admitting, on Plaintiffs' motion, the P1 binder into evidence, containing JA 1483 (¶¶ 6 & 7), JA 1691-92 (legislative history), and JA 1694-96 (Governor McDonnell's veto message)). They now assert, however, that evidence concerning HB 5001 has "no probative value" because it "did not pertain to the legislation actually enacted into law (HB5005)." Opening Br. at 10.

Plaintiffs' belated relevance argument is misplaced; the final 2011 redistricting legislation was directly informed by HB 5001. After HB 5001 was vetoed, the General Assembly revised it to reach the result embodied in HB 5005. *See* JA 2071 ("Senate Democrats and Republicans have worked together to make

modifications to the bill" that Gov. McDonnell vetoed); *see also* JA 2065 (Senator Howell summarizing the changes to the prior bill). Information about the earlier version is relevant to understanding the enacted plan. *See Jamerson*, 244 Va. at 513, 423 S.E.2d at 183-84 (discussing the legislative history of the 1991 redistricting, including a plan that was vetoed).

Plaintiffs also claim in their opening brief that the testimony of Senator Jeremy McPike "had no relevance," Opening Br. at 13, but they did not object to the testimony at trial. JA 1088-94. And in any event, arguing that Senator McPike's testimony is irrelevant ignores this Court's redistricting case law. *Jamerson* recounts "testimony of the present senator" from one of the challenged districts regarding her campaign appearances and communications with constituents. 244 Va. at 516, 423 S.E.2d at 185-86. Senator McPike provided the same type of evidence. He represents Senate District 29, JA 1088, one of the districts challenged in this case. He testified that he campaigned throughout his district, JA 1090, and that the district's shape and geography has not caused any problems in travel or communicating with constituents, either during his campaign or while in office. JA 1092-93. He also testified that constituent communications now occur mostly through social media and email, JA 1093-94, which was an observation not contradicted by any other witness. Senator McPike's testimony therefore is relevant and material.

STANDARD OF REVIEW

The standards of review provided by Plaintiffs, Opening Brief at 21, 25, are unobjectionable but incomplete. This Court "review[s] the evidence in the light most favorable to the prevailing parties and accept[s] as true any reasonable inferences that could be drawn from the evidence before the factfinder." *Forest Lakes Cmty. Ass'n*, 293 Va. at 117, 795 S.E.2d at 877. And the trial court's fact-based judgment upholding the challenged districts is reviewed for clear error. *See GEICO v. USAA*, 281 Va. 647, 655, 708 S.E.2d 877, 882 (2011).

ARGUMENT

I. The trial court correctly held that the challenged districts' compactness is fairly debatable. [Assignments of Error Nos. 1 & 2]

This Court has ruled on claims that legislative districts violate the compactness requirement of Article II, § 6 after each of the last two redistricting cycles, and it upheld the challenged districts in both cases. The same result should obtain here.

Every statute carries a "strong presumption of validity," and a statute must "'clearly' violate some constitutional provision before courts will invalidate it." *E.g.*, *Jamerson*, 244 Va. at 510, 423 S.E.2d at 182 (quoting *Caldwell v. Seaboard Sys. R.R.*, 238 Va. 148, 152, 380 S.E.2d 910, 912 (1989)). And when the constitutionality of a statute depends on facts, legislative determinations of fact "bind the courts unless clearly erroneous, arbitrary, or wholly unwarranted";

legislative determinations must be upheld if their validity is "fairly debatable." *Id.* at 509, 423 S.E.2d at 182; *accord Wilkins*, 264 Va. at 462, 571 S.E.2d at 108. An issue is fairly debatable if the evidence "would lead objective and reasonable persons to reach different conclusions." *Wilkins*, 264 Va. at 462, 571 S.E.2d at 108; *accord Jamerson*, 244 Va. at 509-10, 423 S.E.2d at 182.

A. Plaintiffs' claim that the General Assembly's balancing of the redistricting factors is unconstitutional has no support in this Court's compactness case law.

Notwithstanding the strong presumption of constitutionality and the deference owed to legislative determinations, Plaintiffs claim that courts should assess the legislature's prioritization of redistricting factors based on a new test concocted by Plaintiffs for this case long after the 2011 redistricting process concluded. According to Plaintiffs, the constitutionality of the challenged districts turns on whether there has been 49% or 51% degradation in selected compactness scores, when compared to an alternative map created by them for purposes of the litigation. *See* JA 878. Plaintiffs' proposed new approach and test have no basis in, and cannot be reconciled with, this Court's case law.

Redistricting "is, in a sense, political, and necessarily wide discretion is given to the legislative body." *Jamerson*, 244 Va. at 509-10, 423 S.E.2d at 182 (quoting *Brown v. Saunders*, 159 Va. 28, 36, 166 S.E. 105, 107 (1932)). Redistricting requires considering and satisfying a variety of constitutional,

statutory, and other factors; the General Assembly makes a "value judgment of the relative degree of compactness required when reconciling the multiple concerns of apportionment." *Id.* at 517, 423 S.E.2d at 186; *accord Wilkins*, 264 Va. at 463-64, 466, 571 S.E.2d at 109-10.

This Court has never established tiers of redistricting factors or mandated a particular order for considering them. Contrary to Plaintiffs' claim that *Wilkins* allowed balancing of discretionary criteria only after consideration of required criteria, *see* Opening Br. at 38-39, the Court's discussion in *Wilkins* of the compactness challenge to HD 74 specifically references balancing all redistricting factors. *See Wilkins*, 264 Va. at 466, 571 S.E.2d at 110 ("This record reflects a balancing by the General Assembly of population equality, incumbency, maintaining communities of interest, and avoiding retrogression in designing District 74."). This Court's description in *Wilkins* of that balancing expressly includes the factors that Plaintiffs label required (population equality and avoiding retrogression) as well as those factors that Plaintiffs label discretionary (incumbency and maintaining communities of interest).

Redistricting is not a baking recipe, where each ingredient is added in precise amounts in a particular order. As this Court has noted, redistricting is a political process that involves policy judgments and balancing of often competing criteria. This Court's case law reflects that compactness—unlike population

equality and contiguity—is relative and understood in many different ways. *See supra* at 6-9. As a result, the General Assembly must make a "value judgment of the relative degree of compactness required when reconciling the multiple concerns of apportionment." *Jamerson*, 244 Va. at 517, 423 S.E.2d at 186.

Plaintiffs' attempt to assess constitutionality by comparing enacted districts to differently drawn districts in a hypothetical redistricting map created for this litigation fails for the simple reason that this Court has made clear that constitutionality does not turn on whether districts could have been made more compact. *See Wilkins*, 264 Va. at 465-66, 571 S.E.2d at 110 (upholding HD 74 after noting that it was "far from the most compact district"); *accord Jamerson*, 244 Va. at 516-17, 423 S.E.2d at 186 (upholding districts that were "not ideal," including a district "that is longer than any other district").[23]

Plaintiffs emphasize that the districts could have been drawn differently, so as to pass muster under Plaintiffs' new test. But the existence of reasonable alternatives does not determine constitutionality. *See Wilkins*, 264 Va. at 465, 571 S.E.2d at 110 ("Even though reasonable persons may have configured the district differently in reconciling the various redistricting factors," the fairly debatable

[23] In fact, this Court noted in *Wilkins* that HD 74 "ha[d] the lowest rankings for compactness, but the expert testimony was that this district did not fall below an objective standard for compactness." 264 Va. at 465, 571 S.E.2d at 110.

standard means that "the choice of the General Assembly in reconciling these factors could not be set aside.").

Put simply, and as the trial court recognized, JA 563, *Jamerson* and *Wilkins* foreclose Plaintiffs' claim.[24]

B. The trial court must be affirmed because, at a minimum, the evidence was fairly debatable.

Even if *Jamerson* and *Wilkins* did not control as a matter of law, the defense presented evidence that compels affirmance under the "fairly debatable" standard that applies here. The defense amply demonstrated that the General Assembly considered compactness. Expert testimony established that the districts "did not fall below an objective standard for compactness." *Wilkins*, 264 Va. at 465, 571 S.E.2d at 110. The defense also presented testimony (live for the House and via video and public records for the Senate) that the 2011 redistricting involved the balancing of many redistricting factors, including compactness and other factors that this Court has held are "legitimate legislative considerations" and found "significant" in past cases. *Id.* at 464, 466, 571 S.E.2d at 109, 110; *see also*

[24] Plaintiffs' rejection of *Jamerson* and *Wilkins* extends to specific evidence too, further emphasizing how much Plaintiffs want to change this Court's approach to compactness challenges. Plaintiffs' dismiss evidence from key earlier parts of the legislative process and the testimony of Senator McPike, who represents one of the challenged districts. But this Court relied on evidence of that type in *Jamerson* and *Wilkins*. *See supra* at 18-19.

Jamerson, 244 Va. at 514, 423 S.E.2d at 184. There was no evidence that the shape of any challenged district created travel, communications, or other problems. *See Jamerson*, 244 Va. at 516, 423 S.E.2d at 185-86; *Wilkins*, 264 Va. at 466, 571 S.E.2d at 110-11. Indeed, the only evidence presented on that point was Senator McPike's testimony about "the ease of travel around his district and that communication with his constituents was mainly through social media." JA 557. In sum, the evidence showed that reasonable persons could reach different conclusions concerning the compactness of the challenged districts, so the judgment in favor of the defense should be affirmed. *See Jamerson*, 244 Va. at 510, 423 S.E.2d at 182.

Although the Opening Brief discusses a number of cases, they range from zoning to auto insurance to older redistricting cases that do not involve compactness challenges. No case cited in the Opening Brief provides a basis to avoid the analysis and standard of *Jamerson* and *Wilkins*, this Court's two recent and controlling redistricting cases, which specifically dealt with compactness challenges. What Plaintiffs seek is a wholesale change in the law and the standard governing compactness challenges.

C. The law of the case doctrine does not preclude consideration of any relevant issues or bind anyone to the trial court's interpretation of the governing case law.

Plaintiffs assert that they have presented an issue of first impression:

whether to accept their novel approach to compactness, or remain faithful to the approach applied in past cases and advanced by Defendants. *See* Opening Br. at 39-40 ("the issue of whether compactness was subordinated to Discretionary Criteria or given the mandated priority . . . was not before this Court in [*Jamerson* or *Wilkins*]. It comes now for the first time."). Yet, at the same time, Plaintiffs suggest that the issue has already been decided in their favor because the prevailing parties below did not appeal a sentence in the trial court's opinion regarding that issue. *See* Opening Br. at 18-19 (discussing JA 550). Plaintiffs double down later, arguing that the law of the case even bars considering how to interpret *Jamerson* and *Wilkins* because the trial court declined to adopt one gloss on those cases. *See* Opening Br. at 32 n.12, 35-36, 39 (discussing JA 562-63). Plaintiffs are wrong. The law of the case doctrine does not compel acceptance of Plaintiffs' novel legal theory, and it does not bar argument concerning this Court's governing redistricting case law.

First, Defendants' arguments were fully preserved below. Second, the requirement to assign error, and the law of the case doctrine, applies to rulings and actions of a trial court, not every statement a trial court makes. And third, Defendants did not argue that this Court has established a bright-line minimum compactness score (a constitutional "floor"), and Defendants cannot be bound by the trial court's rejection of a position that Defendants have not espoused.

1. Defendants have preserved the key issues and arguments for appeal.

Defendants argued the case below exactly as now:

- that there is no bright line or objective standard for whether a district is compact or not;
- that redistricting involves a legislative balancing of many factors, not a precise recipe or process mandated by the judiciary;
- that the legislature in 2011 considered compactness, used a process and criteria very similar to 2001, and enacted districts with compactness equivalent to or better than districts upheld in the past, as measured by established compactness scores; and
- that the challenged law must be upheld because objective and reasonable persons can come to different conclusions as to the compactness of the districts.

See, e.g., JA 679-81; JA 1430-35. Having presented the same issues below with the same arguments—and won judgment in their favor—Defendants were not required to do anything else to preserve those issues and arguments for appeal. *See* Va. S. Ct. R. 5:25; *Brandon v. Cox*, 284 Va. 251, 254-56, 736 S.E.2d 695, 696-97 (2012).

2. Plaintiffs would expand assignments of error and the law of the case doctrine far beyond current boundaries.

Plaintiffs' suggestion that the law of the case doctrine bars consideration of key issues is misguided. The assignments of error rule and the law of the case doctrine focus appeals on the "rulings below," Rule 5:17(c)—*i.e.*, the key actions and decisions by a trial court:

> A sufficient assignment of error puts before this Court an "alleged error" committed by the court below. That alleged error defines the focus of what this Court can address on appeal . . . . Thus, for example, Egan's and Abilene's assignments of error 1 put before this Court *the circuit court's action of excluding evidence*, and Abilene's assignment of error 3 put before this Court *the circuit court's action of denying a motion to strike*. By way of these assignments of error, we have authority to address *whether those actions were in error* and, because they were, to reverse the circuit court's actions.

Egan v. Butler, 290 Va. 62, 79-80, 772 S.E.2d 765, 775 (2015) (emphases added) (citations omitted).[25] A trial court's discussion of issues, or its interpretation of past case law, may explain why a trial court ultimately hands down a ruling and takes an action, but such statements are not a ruling or action.

Here, the trial court denied Defendants' motion in limine to exclude Plaintiffs' new compactness test, JA 1379-80—the sole evidentiary basis of Plaintiffs' case—and Defendants have assigned cross-error to that ruling. *See infra* Part II. Later, the trial court found in favor of the defense and denied Plaintiffs' challenge as to all districts, JA 563-64, and Plaintiffs have appealed that ruling. That is exactly what should have happened, and both rulings are properly before

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[25] *See also Lee v. Spoden*, 290 Va. 235, 253, 776 S.E.2d 798, 808 (2015) ("Lee and SHC did not appeal the trial court's decision to grant leave to amend. Therefore, the propriety of that decision is not before this Court; right or wrong, the trial court's ruling on the matter has become the law of the case."); *Exxon Mobil Corp. v. Minton*, 285 Va. 115, 128 n.1, 737 S.E.2d 16, 26 n.1 (2013) (noting that absent a contemporaneous objection, a trial court's action in giving a jury instruction makes that instruction the law of the case).

this Court on appeal.

What Plaintiffs propose instead would expand the law of the case doctrine radically and ensure a deluge of assigned errors, regardless of who prevailed in actual rulings below. Any disagreement with a sentence in a trial court opinion or how a trial court interprets a previous case would become an assigned error or cross-error, lest a party on appeal forfeit an issue or the ability to advance its own interpretation of a case. That would undermine, not serve, the well-established focusing purpose of the assignments of error rule and the law of the case doctrine. *See, e.g.*, *Egan*, 290 Va. at 79, 772 S.E.2d at 775 (explaining that an assignment of error "defines the focus of what this Court can address on appeal"); *Yeatts v. Murray*, 249 Va. 285, 290, 455 S.E.2d 18 (1995) ("The purpose of assignments of error is to point out the errors with reasonable certainty in order to direct this court and opposing counsel to the points on which appellant intends to ask a reversal of the judgment, and to limit discussion to these points." (quoting *Harlow v. Commonwealth*, 195 Va. 269, 271, 77 S.E.2d 851, 853 (1953))).

3. The trial court's rejection of the proposition that this Court has established a bright-line minimum compactness score for constitutionality does not restrict this appeal.

A lower court's discussion of this Court's case law does not prevent the Court, and litigants before it, from addressing the meaning of those cases. Indeed, the very point of appealing to this Court is often to secure authoritative

interpretation of this Court's case law, or a change in the law.

In any event, the defense did not argue below that this Court has established a bright-line minimum compactness score. The trial court's statement cited by Plaintiffs, *see* Opening Br. at 32 n.12, 35-36 (citing JA 562-63),[26] disagreed with Dr. Hofeller's opinion that the numerical compactness scores of districts at issue in *Jamerson* and *Wilkins* "created a 'floor,' and that any constitutional challenge to compactness should simply be measured against that floor." JA 562. That is not Defendants' position and never has been. *See* JA 680 ("As the Supreme Court has held, there is no bright line test for compactness in Virginia."); JA 1428-29, 1431-32.[27] Defendants cannot be bound by the trial court's rejection of an approach that Defendants have never advanced.

D. If the Court changed the law in the way Plaintiffs seek, the change would effectively eliminate legislative discretion.

Plaintiffs attempt to show that judgment in their favor would preserve wide legislative discretion and allow significant consideration of redistricting criteria other than equal population, contiguity, compactness, and the Voting Rights Act of

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[26] The trial court stated that "this Court does not agree 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." JA 563.

[27] Defendant-Intervenors also stated expressly that "[i]t is not our position that *Jamerson* or *Wilkins* established a floor." JA 1444.

1965 (the "Required Criteria"). *See, e.g.*, Opening Br. at 9-10. Perhaps that would be true if this Court were to draw a bright constitutional line at 50% degradation in the average of selected compactness scores, as Plaintiffs' expert suggested. *See* JA 877-78. But, as Plaintiffs' own argument shows, their novel predominance theory does not permit that line-drawing. Instead, Plaintiffs' position, if adopted, would gut legislative discretion and eliminate some redistricting criteria entirely.

Plaintiffs' fundamental position is that the Required Criteria "can never be subordinated to" other redistricting criteria. Opening Br. at 2-3. That position cannot be reconciled with the reality that the legislature has discretion to reduce the compactness of a district to accommodate redistricting factors other than the Required Criteria. Indeed, Plaintiffs later argue expressly that "as compactness was degraded in favor of Discretionary Criteria, *each change of a district boundary gave priority to whichever discretionary choice drove that decision*." Opening Br. at 35 (emphasis added). And, rather than accept that it is unclear when a "conflict among criteria" exists, Plaintiffs assert that "every change made to a district results from a 'conflict of criteria'"—such that "*every change that reduced compactness in favor of a Discretionary Criterion accorded priority to that discretionary criterion and not to compactness*." *Id.* at 46 (emphasis added).

So, here is what happens if this Court adopts Plaintiffs' position that the Required Criteria must always prevail over other redistricting factors: once

redistricting maps have been drawn that maximize compactness and that also have districts that are equal in population, contiguous, and compliant with the Voting Rights Act, any subsequent change to the districts that reduces compactness to accommodate other redistricting criteria, such as communities of interest, would be impermissible. There would be no actual room for other legislative balancing or discretion if Plaintiffs prevail, and the proper deference that this Court has shown to the General Assembly in compactness cases will no longer exist.

E. Plaintiffs' amici also seek significant change in the law governing redistricting challenges.

Perhaps recognizing that it would be extraordinary for the judiciary to make the "policy choice" of how to assess compactness (JA 870), the amicus brief filed by law professors A.E. Dick Howard, Mark E. Rush, Rebecca Green, and Carl W. Tobias (the "Professors' Brief") argues instead that this Court should "require that the General Assembly *identify and abide by* an articulated standard that gives compactness priority over discretionary criteria." Professors' Br. at 5. The professors admit that *Jamerson* and *Wilkins* do not establish a specific standard for judging whether particular districts are sufficiently compact and do not require the General Assembly to do so. *See* Professors' Br. at 5, 22-24. And the professors also note that "the nature of the compactness obligation at issue may be different from case to case (and even district to district)," so "a one-size-fits-all approach for determining compliance . . . is not suitable." Professors' Br. at 5. Notwithstanding

those admissions, the professors argue that the Court should require the General Assembly to spell out its redistricting judgment and balancing at the outset of the redistricting process and then prove that it complied with those requirements at the end of the process.

What the professors fail to do is to identify any authority that justifies upending the presumption of constitutional validity and shifting to the General Assembly the burden of identifying compactness standards and demonstrating how those standards were met. *See, e.g.*, *Wilkins*, 264 Va. at 462, 571 S.E.2d at 108 ("[L]egislation is entitled to a 'strong presumption of validity' and will be invalidated by the courts only if it clearly violates a constitutional provision." (quoting *Jamerson*, 244 Va. at 510, 423 S.E.2d at 182)). *Wilkins* made clear that the General Assembly need not identify a specific compactness requirement, rejecting a compactness challenge after noting that the evidence showed that HD 74 "has the lowest rankings for compactness, but the expert testimony was that this district did not fall below an objective standard for compactness." *Wilkins*, 264 Va. at 465, 571 S.E.2d at 110. And *Jamerson* similarly noted that "Districts 15 and 18 are not ideal in terms of compactness," but found that "evidence was introduced from which the chancellor could have concluded that the General Assembly had considered the constitutional requirement of compactness in reconciling the different demands upon it in reapportioning the Senatorial

Districts." *Jamerson*, 244 Va. at 517, 423 S.E.2d at 186.

The professors clearly believe that this Court erred both in *Jamerson* and *Wilkins*. But to justify this Court's changing course, and creating a presumption of constitutional-invalidity-absent-justification, all that the professors offer is their assertion that requiring the legislature to establish compactness standards would be "reasonable." Professors' Br. at 22. But identifying and adopting some "reasonable" improvement in the redistricting process is a decision for the policymaking branches and the voters to whom they answer—not the judiciary.

The brief filed by former Virginia Attorneys General Ken Cuccinelli, Mary Sue Terry, and Stephen Rosenthal (the "Former AGs' Brief") takes a similar but distinct tack, arguing that what this Court needs to do is impose on the General Assembly the "burden of producing objective evidence showing that the legislature made a *bona fide* effort to prioritize the constitutionally required criterion of compactness over discretionary factors." Former AGs' Br. at 3. The lack of bright lines for compactness is no problem in their view because perfection is not required, merely "as near perfection as can be." *See id.* at 11-13 (quoting and discussing *Brown v. Saunders*, 159 Va. 28, 166 S.E. 105 (1932)).[28]

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[28] The former AGs' extensive reliance on this Court's earlier equal-population cases ignores that the amorphous nature of compactness differentiates compactness cases from equal population cases. *See Jamerson*, 244 Va. at 516, 423 S.E.2d at 186 (noting that District 18 "is longer than any other district in Virginia" but

(footnote continued on next page…)

Like the professors, the former AGs want the judiciary to supplant the General Assembly's role in redistricting. As with the professors' suggestion, imposing a "bona fide effort" burden on the General Assembly to justify its judgment runs contrary to the presumption of constitutional validity. *See supra* at 20-21. Such a burden would simply inject additional uncertainty in the redistricting process, given that it is unclear what would be required for the General Assembly to show that it made a "bona fide effort." *See* Former AGs' Br. at 21 (arguing that the legislature's consideration of compactness, and its true belief that it was complying with the Constitution, is insufficient); *see also id.* at 13-14 ("Even a simple 'eyeball test'" can be enough to reveal "that the legislature did not make a genuine effort to comply with its duty to prioritize compactness."). And, like the professors, the former AGs make clear that what would be sufficient for one redistricting plan may not be sufficient for a future plan. *Id.* at 13-14.

The former AGs offer the same gloss on *Jamerson* and *Wilkins* that Plaintiffs do, and consequently, they similarly show no fidelity to those governing cases. *Compare* Former AGs' Br. at 14-16, *with Jamerson*, 244 Va. at 517, 423 S.E.2d at 186 ("[W]e must give proper deference to the wide discretion accorded

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concluding that "this is not a situation like those in *Brown* [*v. Saunders*] and *Wilkins* [*v. Davis*]," where "the evidence showed significant and obvious disparities in the populations of the various congressional districts in violation of the federal and state constitutional requirements").

the General Assembly in its value judgment of the relative degree of compactness required when reconciling the multiple concerns of apportionment."). Moreover, while the former AGs tout the importance of factual context, Former AGs' Br. at 29, they disregard such context in *Jamerson* and in this case.[29]

F. This Court is not the forum for redistricting policymaking.

It is important to note that although there are fundamental defects in Plaintiffs' case and the arguments of their amici, rejecting those arguments does not mean the Court is rejecting redistricting reform. Reforming the redistricting process may be a worthy cause, but the path to redistricting reform should not

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[29] The former AGs also claim that the Commonwealth has taken inconsistent positions: asserting in *Jamerson* that it is inappropriate to compare compactness in the prior redistricting plan to the current one, but making such a comparison in this case. Former AGs' Br. at 23 & n.8. Attention to key details shows that there is no actual inconsistency. In some redistricting cycles, a plan undergoes fundamental revisions, as in 1991, when the Senate redistricting reduced the population deviation by more than two percent and increased the number of voting rights districts from two to five. *See* Former AGs' Br. Ex. A at 22; *see also Jamerson*, 244 Va. at 513-14, 423 S.E.2d at 183-84 (describing the changes in number of voting rights districts in 1991). In those circumstances, comparison across redistricting cycles presents obvious problems, as the defense in *Jamerson* noted. By contrast, the Senate in the 2011 redistricting cycle used essentially identical criteria to 2001 (*see supra* at 4-6), including the same population deviation and the same number of voting rights districts. *See* JA 1913-15 (the section of the 2011 submission to the U.S. Department of Justice seeking preclearance after redistricting that discusses anticipated minority impact). Where a plan does not fundamentally differ from its predecessor, comparison across redistricting cycles makes sense. *See* JA 1010-11 (Dr. Hood); *see also* JA 885 (Dr. McDonald admitting that he may make a comparison to districts in a prior plan outside of the new predominance test created for this case).

entail the judiciary making policy choices, such as how best to assess compactness, *see* JA 870, adopting a flawed test invented for this litigation, and eliminating "the wide discretion accorded the General Assembly in its value judgment of the relative degree of compactness required when reconciling the multiple concerns of apportionment." *Jamerson*, 244 Va. at 517, 423 S.E.2d at 186. Redistricting reform should occur through the elected, policymaking branches. *See, e.g.*, *Howell v. McAuliffe*, 292 Va. 320, 326, 788 S.E.2d 706, 710 (2016) ("The dominant role in articulation of public policy in the Commonwealth of Virginia rests with the elected branches. The role of the judiciary is a restrained one. Ours is not to judge the advisability or wisdom of policy choices. The Executive and Legislative Branches are directly accountable to the electorate, and it is in those political venues that public policy should be shaped."); *Dionne v. Se. Foam Converting & Packaging, Inc.*, 240 Va. 297, 304, 397 S.E.2d 110, 114 (1990) ("[I]t is the responsibility of the legislature, not the judiciary, to formulate public policy, to strike the appropriate balance between competing interests, and to devise standards for implementation." (quoting *Wood v. Bd. of Supervisors of Halifax Cty.*, 236 Va. 104, 115, 372 S.E.2d 611, 618 (1988))).

There is good reason to believe that redistricting reform "may be closer to

reality than at any time in modern Virginia history,"[30] after the election of a pro-reform governor in Ralph S. Northam[31] and dramatic legislative election results that have left both the House of Delegates and the Senate of Virginia very closely divided between the parties. Indeed, OneVirginia2021, the group that funded this litigation, JA 783, has touted the Governor-elect's support.[32] There are many ways the legislature could reform the law between now and the 2021 redistricting, such as creation of a nonpartisan redistricting commission, elimination of overtly political criteria from the redistricting process, or following other States' lead in enacting into law a specific way to assess compactness.[33] Unlike the legislature,

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[30] *The big winner on Nov. 7? Redistricting reform*, GoDanRiver.com (Nov. 19, 2017), http://www.godanriver.com/opinion/the-big-winner-on-nov-redistricting-reform/article_b2aa179a-cbdc-11e7-a123-7764bbf1bca7.html.

[31] *See, e.g.*, Graham Moomaw, *With redistricting process looming, Northam and Gillespie strike different tones on need for nonpartisan electoral maps*, Richmond Times-Dispatch (Oct. 5, 2017), at 1A, available at http://www.richmond.com/news/virginia/government-politics/with-redistricting-process-looming-northam-and-gillespie-strike-different-tones/article_689067f4-6cef-5678-9f0e-547b2ff37575.html; *Lt. Governor Northam Calls On All Gubernatorial Candidates To Commit to Nonpartisan Redistricting* (Mar. 3, 2017), https://ralphnortham.com/2017/03/06/lt-governor-northam-calls-gubernatorial-candidates-commit-nonpartisan-redistricting/.

[32] *See Ralph Northam on OneVirginia2021's New Redistricting Reform Documentary*, OneVirginia2021 (Oct. 28, 2016), https://www.onevirginia2021.org/ralph-northam-on-onevirginia2021s-new-redistricting-reform-documentary/.

[33] *See, e.g.*, 2017 Session: SJ231 *Constitutional Amendment; Virginia Redistricting Commission, criteria to redraw certain districts*, LIS: Virginia's Legislative

(footnote continued on next page…)

courts lack the ability to search for and enact the best policy.[34]

II. The ruling below should be affirmed because Plaintiffs' new compactness test—the only basis for their case—lacks demonstrated reliability and so should have been excluded. [Cross-Error No. 1]

The trial court recognized that Plaintiffs' new compactness test "is novel and untested." JA 562. But the trial court erred by nevertheless admitting evidence of Plaintiffs' new compactness test, without demanding the reliability required for scientific evidence. Correction of that error provides an alternative basis to affirm.

As the Opening Brief states, whether the trial court correctly applied the legal standard is a question of law that this Court reviews de novo. Opening Br. at 21.

A. Scientific evidence must be reliable to be admissible.

A qualified expert may testify where the expert's specialized knowledge would "assist the trier of fact to understand the evidence or to determine a fact in

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Information System, http://lis.virginia.gov/cgi-bin/legp604.exe?171+sum+SJ231 (a resolution, which passed the Senate unanimously but failed in the House, that would have created a redistricting commission and prohibited consideration of incumbency and political data); *supra* note12 (describing compactness standards that are part of Iowa and Colorado law).

[34] The League of Women Voters of Virginia amicus brief ("LWV Brief") argues the evils of partisan gerrymandering, but its arguments belong in a different case. This is a case about the compactness provision in the *Virginia Constitution*, yet the LWV Brief cites exclusively federal cases and does not cite a single decision of this Court. And while the LWV Brief repeatedly cites briefs, oral argument, expert materials, and even press releases from federal litigation, it makes no effort to engage the record in this case.

issue." Va. Code Ann. § 8.01-401.3(A) (2015); *accord* Rule 2:702(a)(i). But that general standard is not the end of the inquiry; proposed expert evidence also must meet admissibility requirements, "including the requirement that the evidence be based on an adequate foundation." *John v. Im*, 263 Va. 315, 319-20, 559 S.E.2d 694, 696 (2002); *accord Holiday Motor Corp. v. Walters*, 292 Va. 461, 483, 790 S.E.2d 447, 458 (2016). Expert evidence may not be speculative, rest on assumptions that have an insufficient factual basis, or "fail[] to consider all variables bearing on the inferences to be drawn from the facts observed." *John*, 263 Va. at 320, 559 S.E.2d at 696. If a test does not have conditions "substantially similar" to the facts at issue, the test "should be excluded." *Tittsworth v. Robinson*, 252 Va. 151, 154, 475 S.E.2d 261, 263 (1996). In sum, to qualify for admission, scientific evidence must be reliable, and "the court must make a threshold finding of fact with respect to [its] reliability."[35]

B. The trial court did not apply the reliability requirements.

Before trial, Defendants filed a motion in limine seeking to exclude Plaintiffs' new compactness test. JA 102-17. The trial court denied the motion at

[35] *Spencer v. Commonwealth*, 240 Va. 78, 97, 393 S.E.2d 609, 621 (1990); *accord Billips v. Commonwealth*, 274 Va. 805, 809-10, 652 S.E.2d 99, 101-02 (2007).

trial and admitted Plaintiffs' new compactness test. JA 1379-80.[36] The trial court did not apply the reliability requirements of *Spencer* and its progeny. Instead, the trial court offered alternative explanations for admitting Plaintiffs' new test. First, the trial court stated that the reliability issue was "a matter of weight." JA 1379. Second, the trial court said that "the scientific field of redistricting" was "filled with a myriad of considerations" of "politics, law, and policy"; redistricting is "such an inexact science that I don't think the foundation for an opinion in that field would be like the foundation needed for an expert in the field of fingerprinting or DNA or breathalyzers, things of that nature where there's a more and accepted and experienced body of science." JA 1379. Third, the trial court looked to a different test concerning general acceptability in the field, rather than the reliability requirement. *See* JA 1380. None of those reasons has merit or excuses the trial court's error in not applying the reliability standard. Scientific evidence must be reliable to be admissible, and Plaintiffs' new compactness test falls far short of the requisite reliability.

C. The trial court did not provide a valid reason for accepting Plaintiffs' new compactness test.

The trial court's ruling contradicts and undermines this Court's directions

[36] The trial court did not add to its ruling after trial. Its final opinion and order expressly states that the motion was denied for the reasons stated at trial. JA 560.

regarding the reliability requirement for scientific evidence. First, the issue of reliability cannot be dismissed as a mere matter of weight. This Court has made clear that a foundation demonstrating reliability is a prerequisite for *admissibility*. *Spencer v. Commonwealth*, 238 Va. 563, 573 n.5, 385 S.E.2d 850, 856 n.5 (1989) (discussing *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923)). The trial court's ruling that "it's a matter of weight," JA 1379, therefore was clear error.

Second, the trial court's ruling opens a dangerous loophole. Many areas of scientific research involve considerations of politics, law, and policy. The risk of "uncritical acceptance of any pronouncement that appears to be 'scientific'" and the need to guard against "'junk science' in the courts" have never been more important. *Billips*, 274 Va. at 809-10, 652 S.E.2d at 102. The trial court's ruling that redistricting is not *real* science because it involves politics, law, and policy undermines the reliability requirement and the duty to examine critically scientific evidence that litigants offer. That characterization also demeans the decades of social science scholarship on redistricting, including compactness.

Finally, the trial court's reference to the *Frye* test shows that it applied the wrong standard (despite counsel's clear distinction between the standards, *see* JA 622). The federal *Frye* test requires "not only that the evidence is reliable but that it is generally accepted by the scientific community." *Spencer*, 238 Va. at 573 n.5, 385 S.E.2d at 856 n.5. Plaintiffs' new test would fail the *Frye* test too, but the

issue below and here is the separate reliability prerequisite for admission, which the trial court did not apply.

D. Plaintiffs' new compactness test is unreliable and should have been excluded.

As noted throughout, Plaintiffs' new test was created for this case. It has no history in redistricting scholarship, having never been published before. It has never been offered, much less accepted, in any prior redistricting case anywhere in the country. It has never been used during an actual redistricting by any State. By any measure, it lacks a scientific or legal foundation and so falls short of the necessary reliability. *See supra* at 13-18.

Plaintiffs' new test also lacks reliability because it does not include all relevant variables. It begins with a hypothetical alternative map that disregards all redistricting factors other than Voting Rights Act compliance, population equality, contiguity, and compactness. *See* Opening Br. at 7; JA 886. The test then compares the average compactness scores of districts in that hypothetical map with the average compactness scores of actual districts, drawing conclusions about how the legislature prioritized redistricting factors and constitutionality based on whether the average compactness score of actual districts has declined by more

than 50% from the different districts in the hypothetical map. *See* JA 877-78.[37] Plaintiffs' new test disregards variables bearing on the legislature's "value judgment of the relative degree of compactness required when reconciling the multiple concerns of apportionment"[38] and so should have been excluded.[39]

Even with respect to a factor that Plaintiffs' new test does consider—Voting Rights Act compliance—the test favors artificiality over the real world, freezing the boundaries of actual voting rights districts in the hypothetical map, even though population changes would require those districts to change in an actual redistricting. *See, e.g.*, JA 1047. Plaintiffs tout the reliability of a test with so little basis in reality that their own expert does not even know how to apply the test to many legislative districts. *See supra* at 14-15.

The new test's use of certain common compactness measures does not establish its reliability. The test purports to answer a question Dr. McDonald admits he has never seen "in any legal or scholarly writings that are out there."

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[37] Defendants' map book, DX-07, contains a set of maps showing how different the districts enacted in 2011 are from the Senate districts in Alternative Plan 1 that are the basis for the comparison in Plaintiffs' new test. *See* JA 2591 (SD 19), 2596 (SD 21), 2602 (SD 28), 2607 (SD 29), 2612 (SD 30), 2617 (SD 37).

[38] *Jamerson*, 244 Va. at 517, 423 S.E.2d at 186.

[39] *See Hyundai Motor Co. v. Duncan*, 289 Va. 147, 156, 766 S.E.2d 893, 897 (2015) (testimony that disregarded variables bearing on Hyundai's sensor-location determination was inadmissible).

JA 876. The test entails drawing alternative maps, matching alternative and actual districts, selecting which compactness scores to use, averaging them, comparing the averages, and judging constitutionality based on the percentage difference. Common compactness measures do not explain or support such analysis.

The trial court erred by admitting Plaintiffs' new test without applying the reliability requirement. Applying the correct legal standard leads inescapably to the conclusion that Plaintiffs' new test is inadmissible because it lacks reliability. Because "Plaintiffs' case is entirely dependent upon Dr. McDonald and his new compactness test," JA 562, correction of the error "is fatal to [Plaintiffs'] claim and entitles [Defendants] to judgment as a matter of law." *Duncan*, 289 Va. at 157, 766 S.E.2d at 898.

CONCLUSION

The decision below should be affirmed because the trial court, after hearing the evidence, correctly found that the compactness of the challenged districts was fairly debatable. In the alternative, the decision below should be affirmed because Plaintiffs' new compactness test—the sole evidentiary basis of their case—lacks the reliability required for scientific evidence to be admissible.

Respectfully submitted,

STATE BOARD OF ELECTIONS
JAMES B. ALCORN
CLARA BELLE WHEELER
SINGLETON MCALLISTER
DEPARTMENT OF ELECTIONS
EDGARDO CORTÉS

By: /s/ *Matthew R. McGuire*

Matthew R. McGuire (VSB # 84194)
Acting Deputy Solicitor General
Trevor S. Cox (VSB # 78396)
Acting Solicitor General
Joshua D. Heslinga (VSB # 73036)
Assistant Attorney General
Anna T. Birkenheier (VSB # 86035)
Assistant Attorney General
Office of the Attorney General
202 North Ninth Street
Richmond, Virginia 23219
Phone: (804) 786-7773
Fax: (804) 371-0200
Email: mmcguire@oag.state.va.us

Mark R. Herring
Attorney General of Virginia

Cynthia E. Hudson
Chief Deputy Attorney General

John W. Daniel, II
Deputy Attorney General

Heather Hays Lockerman
Senior Assistant Attorney General & Section Chief

CERTIFICATE OF TRANSMISSION AND SERVICE

On January 8, 2018, in compliance with Rule 5:26(a), an electronic version (in PDF) and 3 printed copies of this brief were filed with this Court, and copies were also mailed and emailed to the following counsel of record:

Wyatt B. Durrette, Jr. (wdurrette@daglawrva.com)
Christine A. Williams (cwilliams@daglawrva.com)
Durrette, Arkema & Gill PC
1111 East Main Street, 16th Floor
Richmond, VA 23219

Counsel for Plaintiffs/Appellants

E. Mark Braden (mbraden@bakerlaw.com)
Katherine L. McKnight (kmcknight@bakerlaw.com)
Richard B. Raile (rraile@bakerlaw.com)
Baker Hostetler LLP
1050 Connecticut Ave. NW, Suite 1100
Washington, DC 20036

Counsel for Defendant-Intervenors/Appellees

I also certify that this brief does not exceed 50 pages.

By: /s/ *Matthew R. McGuire*
Matthew R. McGuire