Exhibit C

Exhibit
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UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF LOUISIANA

PRESS ROBINSON, et al., *Plaintiffs,* v. KYLE ARDOIN, in his official capacity as Secretary of State for Louisiana, *Defendant.*	Civil Action No. 3:22-cv-00211-SDD-SDJ
EDWARD GALMON, SR., et al., *Plaintiffs,* v. R. KYLE ARDOIN, in his official capacity as Secretary of State for Louisiana, *Defendant.*	Consolidated with Civil Action No. 3:22-cv-00214-SDD-SDJ

EXPERT REPORT
OF
CHRISTOPHER C. BLUNT, PH.D.

April 29, 2022

I. INTRODUCTION AND SCOPE OF WORK

1. My name is Christopher C. Blunt, Ph.D. I am a professional political scientist and President of Overbrook Research. I specialize in providing data analytic services for a wide variety of clients, including those in politics, public policy, and consumer marketing. I am particularly experienced in turnout modeling on behalf of political campaigns, and also have substantial expertise in public opinion research.

2. I have been asked by counsel representing Defendant-Intervenors, Speaker of the Louisiana House of Representatives Clay Schexnayder and President of the Louisiana Senate, Patrick Page Cortez, in this lawsuit to analyze and determine whether a race-blind redistricting process, following traditional districting criteria, would or would not be likely to produce a Plan with two majority-minority districts (MMDs), such as those submitted by Anthony Fairfax and William Cooper, the expert witnesses for the Plaintiffs. To do so, I simulated a set of 10,000 possible Louisiana congressional districting plans that adhere as closely as possible to traditional redistricting criteria, but my simulations did not take race or partisanship into account. The simulations allow me to determine the number of MMDs which would be likely to emerge from a mapdrawing process that followed traditional criteria but did not draw districts predominantly on the basis of race.

II. SUMMARY OF OPINIONS

3. In none of the simulated plans does the Black voting age population[1] (BVAP) exceed 45.47 percent in one district, and never does the district with the second highest BVAP exceed 42.24 percent. In only 75 simulated plans does the BVAP reach 40 percent in two districts.

[1] Throughout this report, BVAP is defined percentage of the 2020 Census Voting Age Population (18+) identifying as Black alone or in combination with any other race.

In the simulated plan with the two districts having the highest average combined BVAP (42.55 percent), those two districts are 42.91 percent and 42.19 percent Black, respectively.

4. Given the extreme unlikelihood that a plan including two majority-minority districts would emerge absent the active consideration of race, this simulation analysis provides evidence that race (or a proxy) would need to be a substantial consideration in drawing a plan which does include a pair of such districts.

III. QUALIFICATIONS, EXPERIENCE, AND COMPENSATION

5. I am trained as a political scientist, and have a Ph.D. in that field from the University of California at Los Angeles (2002). I also hold Bachelor and Master of Arts degrees in political science from Northwestern University; I won admission to an accelerated program of study, and was awarded both degrees simultaneously in 1991.

6. I began my career with Market Strategies, Inc., a national political polling firm in Michigan. The firm's clients included U.S. Senators, governors, members of congress, and the re-election campaign of the sitting U.S. President. Over my first two election cycles, I worked on a wide variety of studies and learned a great deal about the practical design and execution of effective public opinion research.

7. I began a Ph.D. program in political science at U.C.L.A following the 1994 election. My work focused primarily on American politics, elections, and the role of campaigns in shaping public opinion. I returned to work with Market Strategies, both remotely and occasionally on location, as I progressed further in my graduate studies. This arrangement provided not only additional practical experience, but also invaluable data for use in academic research. I grew to become an expert in data analysis, and came to particularly enjoy better understanding why voters believe and behave as they do.

8. I was the principal or sole author of seven scholarly papers, presented at political science conferences, while a graduate student. All involved significant original research and in-depth analysis, often with novel or complex data sources. My first, analyzing hundreds of thousands of ballot images from a recent general election, won a departmental prize for the year's best conference paper by a graduate student. Another, written the next year using an extension of those ballot data, was nominated for an award for best paper presented at the conference.

9. My doctoral dissertation, filed in 2002, synthesized the professional and academic research I conducted over the previous decade. Much of the previous campaign effects academic research had been limited to presidential elections, where such effects can be difficult to detect. My dissertation focused on subpresidential (statewide and local) contests, and found this sort of political campaign activity does indeed provide information which moves voters to candidates whose positions are more in accord with their own underlying values.

10. As the owner and President of Overbrook Research, a public opinion consulting practice, I was among the core team of analysts who collaborated to develop a new methodological approach to voter microtargeting leading up to the 2004 general election. I became a specialist in turnout modeling, and have provided countless such models in the years since.

11. I have conducted hundreds of data analyses on behalf of many other clients, covering a broad range of topics. Many of my clients are other research firms, ranging in size from the global to the boutique, who entrust me with the analysis of their data. I have produced consumer segmentations and attribute driver models that have helped guide national and international product marketing campaigns. My work has helped shape communication campaigns nationally and in many individual states. In addition, my research has helped guide nonprofit organizations,

trade associations, large and small corporations, public and private utilities, colleges and universities, and advocacy campaigns.

12. A copy of my resume is attached as Exhibit A.

13. I am being compensated at a rate of $250 per hour. My compensation does not depend in any way on the outcome of the case or on the opinions I provide. I have not previously testified as an expert at trial or by deposition.

IV. METHODOLOGY

14. I conducted a simulation analysis to create a large number of possible Louisiana congressional district plans.[2] Redistricting simulation algorithms generate a representative sample of all possible plans that satisfy a specified set of criteria. In Louisiana, that means drawing reasonably compact districts, limiting the number of split parish boundaries, ensuring the districts are contiguous, and ensuring population equality between the districts in the plan. The simulated plans that emerge from this analysis represent a set of plans that could have been drawn while being compliant with the specified criteria. By examining this representative set of plans, we can determine the likelihood that any given plan would emerge from a mapmaking process that followed traditional redistricting criteria and did not also consider, to a significant degree, race (or a proxy for race).

15. For the purposes of this analysis, I set all the simulated plans to adhere to the following guidelines: a total of six geographically contiguous districts; the districts as a whole are at least as compact as proposed alternative plans; the district boundaries result in the smallest possible number of parish boundary splits; and the districts in any given plan do not deviate by

[2] Redistricting simulation algorithms have played an increasingly important role in legal cases. Simulation analyses using the REDIST software I utilized in this case have been credited by the Pennsylvania Reapportionment Commission, the Ohio Supreme Court, and the New York State Supreme Court. In addition, Dr. Kosuke Imai submitted an expert report in the recent *Merrill v. Milligan* case in Alabama using the REDIST software.

more than +/- 0.25 percent from the ideal population distribution. None of the simulated plans take account of race, partisanship, or existing district boundaries.

16. The foregoing traditional districting criteria I employed were also districting criteria that Plaintiffs' Experts, Anthony Fairfax and William Cooper, asserted that they followed in the construction of their illustrative districting plans, as detailed in the Expert Reports of Anthony Fairfax (Doc. 41-2) (the "Fairfax Report") and of William Cooper (Doc. 43) (the "Cooper Report"). See Fairfax Report at pp. 13-15, and Cooper Report at pp. 20-21.

17. My simulations are generated using REDIST, an open-source software package for redistricting analysis.[3] The software includes several different redistricting simulation algorithms, and a variety of methods to evaluate the simulated plans it generates. I rely on the Sequential Monte Carlo (SMC) algorithm, which is most appropriate for the current application.[4]

18. SMC generates nearly independent samples, which produces a diverse set of simulated plans that meet the specified constraints. The SMC algorithm also avoids splitting parish boundaries where possible.

19. In addition to the evaluation tools built into REDIST, I used IBM's SPSS statistical software to conduct further analysis of the results.

V. RESULTS

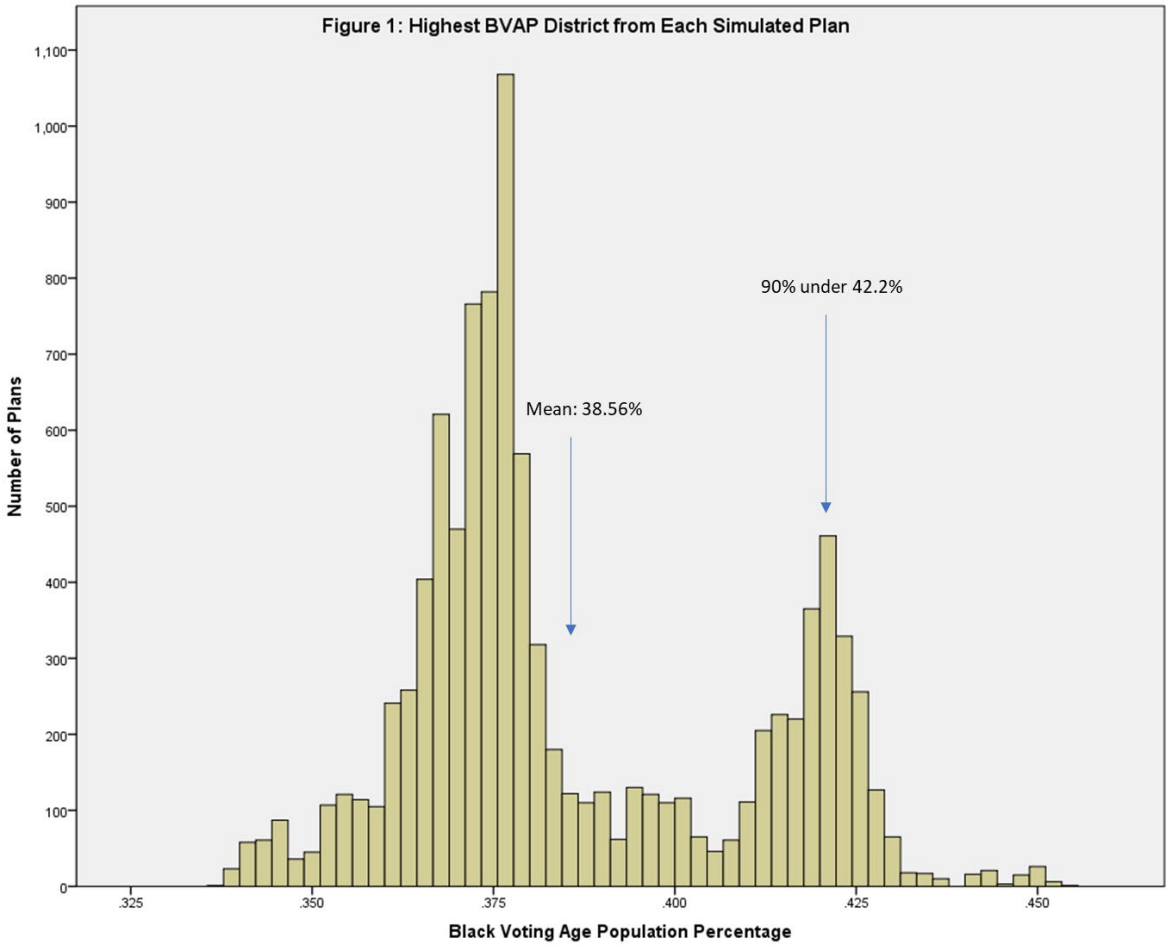
20. I used the REDIST software to produce 10,000 simulated redistricting plans following the guidelines outlined above. This number of simulated plans easily provides a large enough sample to ensure statistical precision. (Indeed, I experimented with producing additional

[3] REDIST runs on the R statistical software platform, and full documentation is available at https://CRAN.R-project.org/package=redist.

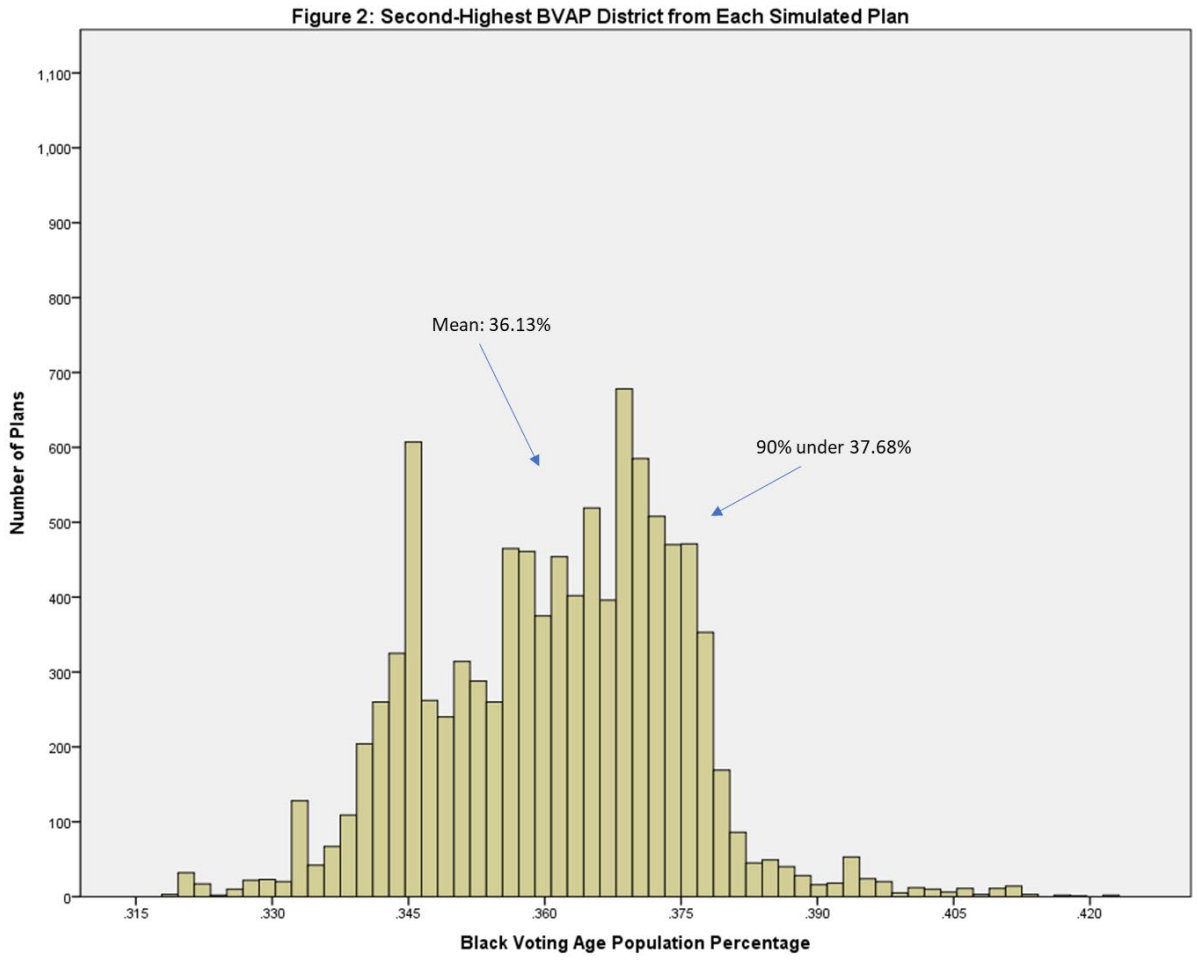
[4] "Sequential Monte Carlo for sampling balanced and compact redistricting plans," a forthcoming piece by Cory McCartan and Kosuke Imai, provides more theoretical background about SMC. The article is currently available at https://arxiv.org/abs/2008.06131.

plans, but the results were virtually identical to what I obtained with 10,000.) I then computed the Black Voting Age Population (BVAP) percentage for each of the six districts in each of the 10,000 simulated plans. Because the districts are built without reference to existing districts, the resulting simulated district number labels are arbitrary and do not readily correspond to the current district numbering arrangement. However, it is easy to identify the district in each plan with the highest BVAP. These 10,000 individual districts can then be examined as a set.

21. None of the simulated plans produces even one majority-minority congressional district (MMD). The average BVAP across these "Highest BVAP" districts is 38.56 percent, with a median BVAP of 37.70 percent. The simulated district with the highest total BVAP is 45.47 percent, but 90 percent of the plans top out with a BVAP of less than 42.2 percent.



22. Among the districts with the *second* highest BVAP in each plan, half have a BVAP of 36.25 percent or less, and only about 10 percent of those districts have a BVAP of 37.68 percent or above. The simulated district in this group with the highest BVAP is 42.24 percent.

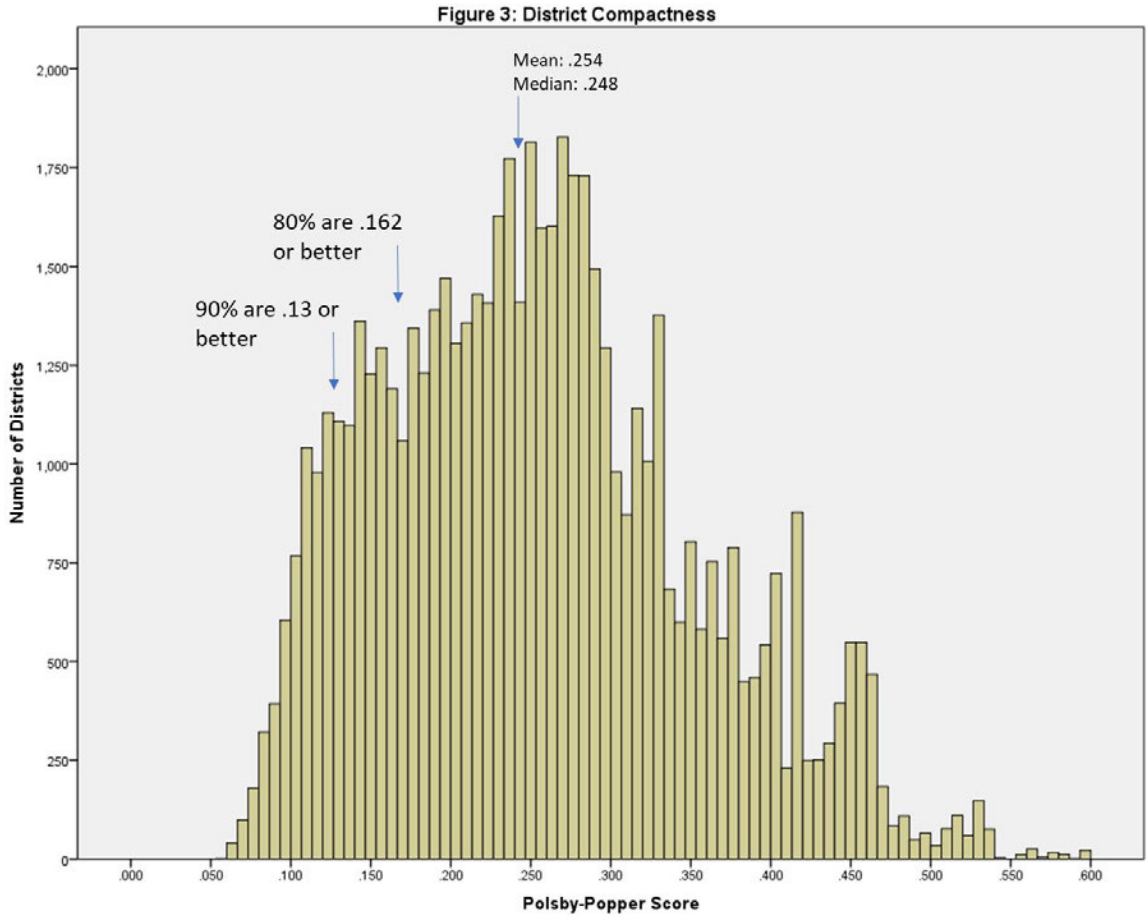


23. It is rare for two districts in the same plan to have large BVAP shares. In only 75 plans out of the 10,000 simulations (0.80 percent) do two districts reach 40 percent BVAP. In 203 plans (2 percent), two districts reach 39 percent BVAP. Reducing the level to 38 percent VBAP, 501 plans (5 percent) include two districts reaching that threshold.

24. Based on the foregoing results, I conclude that it would be extremely unlikely for a Louisiana redistricting plan that included two MMDs to emerge from a process following only the traditional redistricting criteria I employed. Rather, these results provide evidence that a plan

including two MMDs would have likely only been drawn using a process that considered, to a substantial degree, the racial composition of the underlying geography (or a proxy for it).

25. I next used the Polsby-Popper test to examine district compactness. First proposed by lawyers Daniel Polsby and Robert Popper[5], the score is a popular metric in the academic literature to evaluate the geographic compactness of a given district.[6] The 60,000 individual simulated districts have an average Polsby-Popper score of .254, with 90 percent of the districts scoring at least .13. Eighty percent of the districts have a score of at least .162.



[5] "The Third Criterion: Compactness as a Procedural Safeguard Against Partisan Gerrymandering," Polsby, Daniel D and Robert D. Popper, *Yale Law & Policy Review* 9 (2): 301-353

[6] The formula is 4π times the area of a district, divided by the squared perimeter of the district. Scores will always fall between 0 and 1, with higher scores indicating greater compactness.

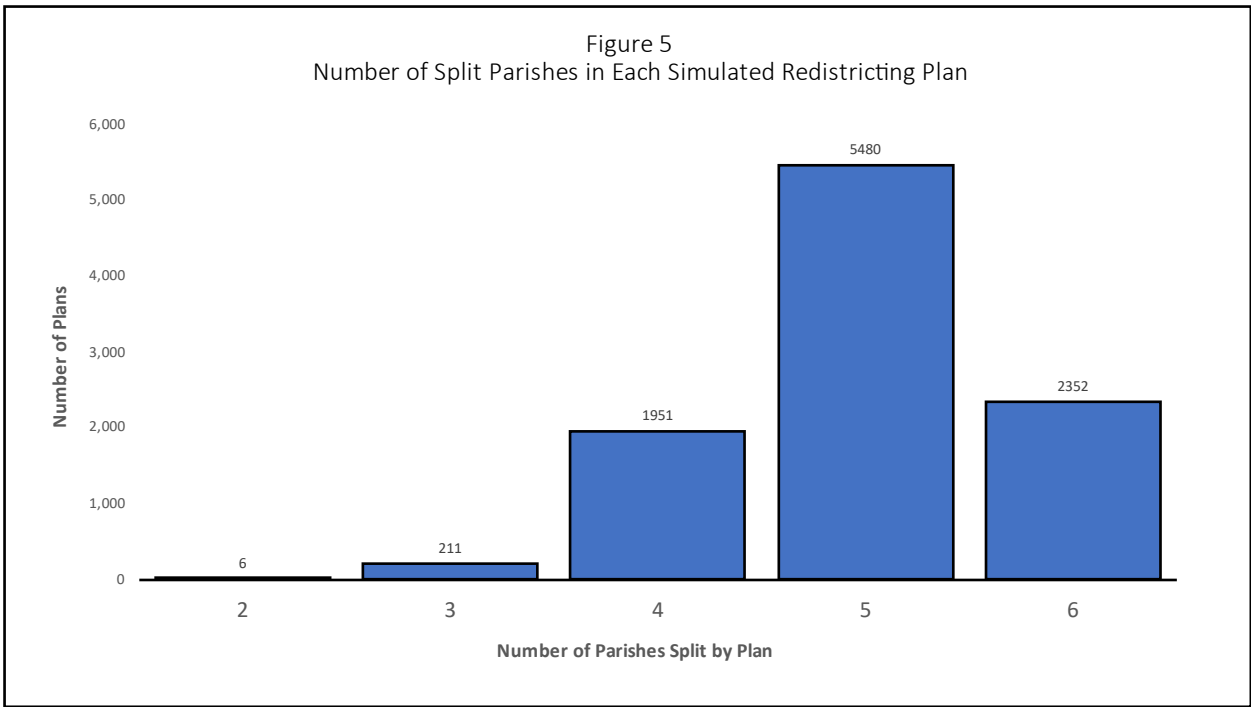
26. Compactness in the simulated districts compares favorably to districts in proposed illustrative plans. Figure 4 shows the Polsby-Popper measures reported by Mr. Cooper for his three plans (Cooper Rep. at 31, Fig. 18), and the Polsby-Popper scores Mr. Fairfax reports for his plan (Fairfax Rep. at 31, Tbl. 9). The simulated plan districts are more compact, on average, than any of these four competing plans. Mr. Cooper's most compact district has a Polsby-Popper score of .31; more than one-fourth (26.4 percent) of the simulated districts are at least this compact. Mr. Fairfax reports his best district has a Polsby-Popper score of .28; more than one-third (36.3 percent) of the simulated districts are as compact as this or better.

Figure 4

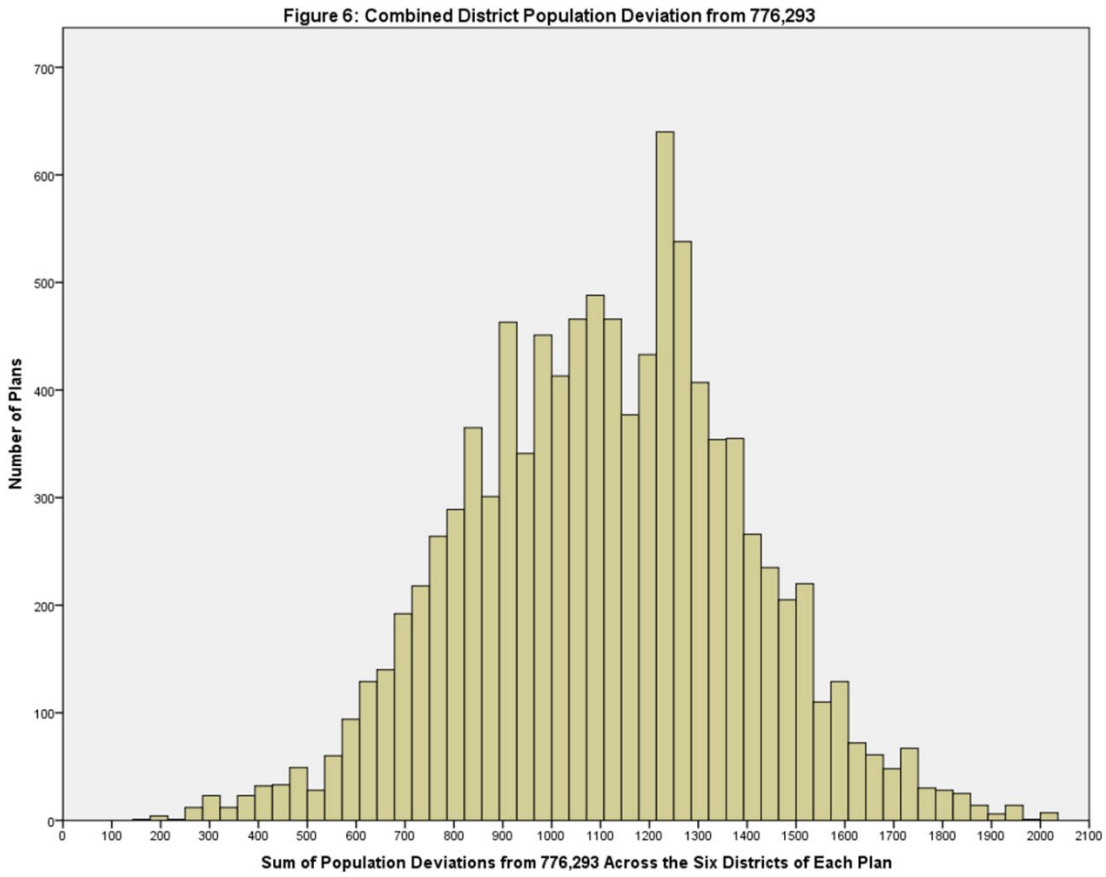
Polsby-Popper Measure of Compactness

	Mean	Low	High
60,000 Simulated Districts	.25	.06	.60
Illustrative Plan #1 (Cooper)	.19	.09	.29
Illustrative Plan #2 (Cooper)	.19	.09	.27
Illustrative Plan #3 (Cooper)	.18	.08	.31
Illustrative Plan (Fairfax)	.18	.10	.28

27. In addition, the simulated plan districts split considerably fewer parish boundary lines than the illustrative plans of Messrs. Fairfax and Cooper. The average simulated plan splits five parishes, and a sizable majority of simulated plans (76 percent) split five parishes or fewer. The remaining simulated plans split six parishes. By contrast, Mr. Cooper reports his illustrative plans 1 and 3 split ten parishes, and his plan 2 splits eleven parishes. (Cooper Report at p. 30, Fig. 20.) Mr. Fairfax's illustrative plan is reported to split fourteen parishes. (Fairfax Report at p. 23, Tbl 6.)



28. The simulated districts in each plan come very close to equality of total population. Because the simulations rely on voting districts as the smallest geographical unit, achieving perfect equality would be very difficult. In running the simulations, I set the population deviation threshold at +/- 0.25 percent (i.e. around 1,940 people). For each plan, the six individual district population deviations from 776,293 (which would be perfect equality) should sum to around 1,940 or less. The simulations performed well in this regard; the mean (1,110) and median (1,115) total population deviations are well below the upper limit. Although population is not perfectly equalized across districts, this level of population deviation is too small to change the conclusions of the analysis. Shifting the district assignments of a few thousand people around the boundaries, to arrive at perfect population equality, would not alter the structural configuration of those districts.



VI. CONCLUSION

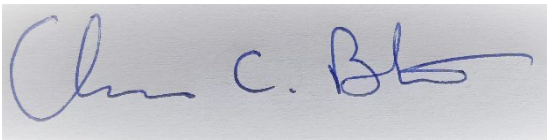
29. This analysis had a specific but limited objective: explore the range of Louisiana congressional districts which would emerge if a large number of simulated plans were drawn from scratch, following criteria for contiguity, equal population, compactness, and respecting parish boundaries – but without reference to the racial or partisan makeup of the geographic units, or to previous district lines.

30. Following these criteria, producing districts which are at least as compact as alternative plans and split fewer parish boundaries, I find that a district plan drawn using only the foregoing traditional districting criteria would be extremely unlikely to contain two MMDs. Drawing a plan in Louisiana with two such districts, like the illustrative plans submitted by Messrs.

Fairfax and Cooper, would almost certainly require the prioritization of racial considerations (or proxies for them) over the traditional criteria.

All of the foregoing opinions in this report are given to a reasonable degree of scientific certainty, and the statements and opinions provided in this report are true and accurate to the best of my knowledge, information, and belief.

Dated this 29th day of April, 2022.



Christopher C. Blunt, Ph.D.

EXHIBIT A

CHRISTOPHER C. BLUNT
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Leslie, Michigan 49251
CCBlunt@OverbrookResearch.com
217/390-8006

EXPERIENCE

2003-Present **OVERBROOK RESEARCH**
President

- Provide marketing research firms, policy foundations, political pollsters, jury consultants, and other clients with complete analysis of qualitative and quantitative research data.
- Extensive experience in turnout modeling, segmentation, regression, analysis of variance, data mining, cluster analysis, and factor analysis.
- Member of the American Association for Public Opinion Research (AAPOR).
- Partial client list: Deep Root Analytics, TargetPoint Consulting, Hill and Knowlton, Edelman, Koch Industries, AmericanPublic, Chicago Urban League, Whitman Insight Strategies, Communications Consortium Media Center, National Media, Western Corporate Credit Union (WesCorp), and Howard Varinsky Associates.

1996-2003 **MARKET STRATEGIES, INC.**
1991-1994 *Study Director*

- Managed hundreds of quantitative and qualitative research projects through all stages of completion, from design to presentation of findings. Excelled at client management, study and questionnaire design, coordinating internal operations and outside contractors, data analysis, and presentation.
- Strategic recommendations contributed to dozens of primary and general election victories for presidential, senatorial, gubernatorial and other candidates.
- Conducted and analyzed hundreds of focus groups identifying critical campaign and social marketing themes. Prepared full written and multimedia reports, with recommendations for the enactment of these strategies.
- Wide experience conducting focus groups using Perception Analyzer™ instant-response system.

EDUCATION

1995-2002 **UNIVERSITY OF CALIFORNIA - LOS ANGELES**
Doctor of Philosophy in political science

- Doctoral Dissertation filed Spring, 2002. *Producing Responsibility: The Role of Campaigns in Sub-presidential Elections.*
- Committee Chair: David O. Sears. Other committee members: John R. Petrocik, Joel Aberbach, Jim Sidanius, James Q. Wilson, and Thomas Schwartz.

1987-1991 **NORTHWESTERN UNIVERSITY**
Master and Bachelor of Arts in political science

- Accelerated BA/MA degree program. Concentrations in American government, political participation, and voting behavior.

TEACHING EXPERIENCE

- Deliver guest lectures to university courses about voter microtargeting, political polling, and the role of strategic information in political campaigns.
- Teaching Assistant for several UCLA courses. Responsibilities included leading three weekly discussion sections of 20 students each, grading exams, evaluating written papers, holding office hours, and delivering guest lectures on behalf of the professor.
  - ✓ Public Opinion and Voting Behavior, upper division (junior/senior) course.
  - ✓ Mass Media and Elections, upper division (junior/senior) course.
  - ✓ Political Parties, upper division (junior/senior) course.
  - ✓ Introduction to American Politics, freshman/sophomore survey course.

HONORS

- UCLA Dissertation Year Fellowship, 2001-2002.
- UCLA departmental prize for best 1997-1998 conference paper by a graduate student.
- Dean's List.
- *Pi Sigma Alpha,* national political science honor society.

PUBLICATIONS

- "Testing Overall and Synergistic Campaign Effects in a Partisan Statewide Election," Political Research Quarterly, Vol. 71, No. 2 (June 2018), pp. 361-379. Co-authored with Daron Shaw and Brent Seaborn.
- "The Campaign." Chapter in *Public Opinion and Polling Around the World: A Historical Encyclopedia.* John G. Geer, editor. ABC-CLIO. 2004.
- "Survey Finds Americans Support Early Learning." *News & Issues,* publication of Columbia University National Center for Children in Poverty. Winter 2003. Vol 13:1.
- "Who Will Reconnect with the People: Republicans, Democrats, or None of the Above?" *Americans Talk Issues Foundation,* August, 1995. Co-authored with Fred Steeper, Alan Kay, Stan Greenberg, and Hazel Henderson.
- "Steps for Democracy: The Many Versus the Few," analysis of the American electorate and five major public policy reform proposals. *Americans Talk Issues Foundation,* March, 1994. Co-authored with Fred Steeper, Alan Kay, Stan Greenberg, Celinda Lake, and Hazel Henderson.
- "Disapproval as a Key Indicator," a multivariate analysis of the early Clinton and Bush presidencies. *The Polling Report,* 28 June 1993. Co-authored with Fred Steeper.

CONFERENCE PAPERS

- "Cooking the Goose: Candidate Unfavorable Ratings and Voting Behavior." Paper delivered at the annual meeting of the Midwest Political Science Association, April 2003.
- "Campaigns, Partisanship, and Candidate Evaluations in Subpresidential Elections." Paper delivered at the annual meeting of the Midwest Political Science Association, April 2001.
- Campaigns and Voter Rationality." Paper delivered at the annual meeting of the Western Political Science Association, March 2001.

- "Incumbency, Issues, and Split-Ticket Voting." Paper delivered at the annual meeting of the American Political Science Association, September 2000.
- "The Representativeness of Primary Electorates." Paper delivered at the annual meeting of the Western Political Science Association, March 2000.
- "Can Voters Judge? Voting Behavior at the Extreme of Low Information." Paper delivered at the annual meeting of the Western Political Science Association, March 1999. *Nominated for WPSA award for best 1999 conference paper.*
- "Priming and Issue Agendas in American Campaigns." Paper delivered at the annual meeting of the Midwest Political Science Association, April 1998. Co-authored with John Petrocik and Fred Steeper.
- "Rationality and Representation in Direct Legislation Voting." Paper delivered at the annual meeting of the Western Political Science Association, March 1998. *Winner of UCLA departmental prize for best 1997-1998 conference paper by a graduate student.*