

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION

FAIR FIGHT ACTION, INC., et al.,)

Plaintiffs,)

v.)

BRAD RAFFENSPERGER, in his official)
capacity as Secretary of State of the State of)
Georgia, et al.,)

Case No.1:18-cv-05391-SCJ

Defendants.

Rebuttal Report of Janet R. Thornton, Ph.D.

I, Janet R. Thornton, being first duly sworn, depose and say that:

1. I am over 21 years old, have not been declared incompetent, and make the statements contained herein based upon facts presently known to me.

2. I am a Managing Director at Berkeley Research Group (BRG), a consulting firm specializing in the application of economic, econometric, and statistical analysis for litigation, regulatory compliance, and risk assessment matters. BRG experts have analyzed data for matters involving firms in many sectors, government entities, as well as institutions of higher education and research. My fields of special interest include computer analysis of large databases, applied econometrics and statistical analysis.

3. I received doctoral and master's degrees in economics from The Florida State University, and a bachelor's degree from the University of Central Florida in economics and political science.

4. I am a member of the American Economic Association and the National Association of Forensic Economics.

5. Prior to my employment at BRG, I was employed at ERS Group for nearly 30 years and held the title of Managing Director. Over the past 30 years, I have prepared analyses for both plaintiffs and defendants, as well as for risk assessment. In the field of labor economics, I have performed research and analyzed data in matters involving allegations of gender, race, ethnicity, religious, and age discrimination in a variety of employment practices including selection, termination, and compensation, and have prepared analyses regarding Fair Labor Standards Act compliance. I have also studied borrower characteristics as they relate to the ability to obtain credit and their effect on the terms of credit transactions.

6. With respect to matters concerning election issues and voting rights, I have compared the racial composition of voter turnout by type of election as well as with regards to provisional ballots and out-of-precinct ballots by election. I have also examined the incidence of having voter identification and the impact of changes in the number of early voting days. Further, I have provided testimony regarding simulated maps prepared in redistricting matters.

7. I have designed legally defensible sampling/survey methodologies and served as an expert witness to critique the validity of samples prepared by others including use of margins of error, sample size, and stratification methods. I have also prepared numerous estimates of economic damages.

8. I have extensive experience working with the decennial Census data to address issues raised in credit, insurance, housing, voting/election, and employment discrimination matters. My knowledge of Census data has resulted in expert testimony regarding the strengths and weaknesses of these data. I have also been asked to assess race/ethnicity predictions using different methodologies.

9. For over 30 years, I have designed and executed programming logic to match and combine data from disparate sources (i.e., data sets). In addition, I have evaluated the accuracy and reliability of the data matching performed by other experts.

10. I have provided expert testimony in arbitration hearings and before federal and state courts and regulatory agencies.

11. I testified in the matters of *North Carolina State Conference of the NAACP, et al. v. Patrick Lloyd McCrory, in his official capacity as Governor of North Carolina, et al.* (Case No. 1:13CV658, U.S. District Court, Middle District of North Carolina); *League of Women Voters of North Carolina, et al. and Louis M. Duke, et al. v. The State of North Carolina, et al.* (Case No. 1:13CV660, U.S. District Court, Middle District of North Carolina); *United States of America v. The State of North Carolina, et al.* (Case No. 1:13CV861, U.S. District Court, Middle District of North Carolina); *Barbara H. Lee, et al. v. Virginia State Board of Elections, et al.* (Case No. 3:15-CV-357, U.S. District Court, Eastern District of Virginia); *Arizona Democratic Party, et al. v. Michele Reagan, et al.* (Case No. CV-16-01065, U.S. District Court, District of Arizona); *Holmes, et al. v. Timothy K. Moore, et al.* (Case No. 18 CVS 15292, Wake County Superior Court); and *North Carolina State Conference of the NAACP, et al. v. Roy Asberry Cooper, III, in his official capacity as Governor of North Carolina, et al.* (Case No. 1:18-CV-01034). These matters involved issues related to voter turnout and/or voting precincts, among other issues.

12. In addition, I provided testimony regarding the computer simulated maps prepared in *Ohio A. Philip Randolph Institute, et al. vs. Larry Householder, et al.* (1:18-CV-00357, U.S. District Court, Southern District of Ohio); *Common Cause, et al. vs. Representative David R. Lewis, et al.* (18 CVS 014001, Superior Court, Wake County, North Carolina); and *Rebecca Harper, et al. v Representative David R. Lewis, et al.* (19-cv-012667).

13. No court has rejected me as an expert qualified to testify in my fields.

14. I have been an adjunct professor of quantitative methods and statistics at The Florida State University and am a presenter at seminars on the topics of statistical techniques, data and modeling, compensation analysis, and calculating damages. I have published articles in the *Journal of Legal Economics* and the *Journal of Forensic Economics*, and co-authored a chapter in the anthology *Developments in Litigation Economics*, which discusses equal business opportunity programs, among other topics.

15. I have been retained by Counsel for the State of Georgia to provide expert testimony in the above captioned matter. I manage a team of professionals who have assisted me with this matter and worked under my direction and supervision. All work was vetted and verified by me and my team. My time is billed at the rate of \$560 per hour for this matter. My updated curriculum vitae and list of testimony in the past four years are contained in Appendix A.

16. Appendix B lists the materials that I relied upon in preparation of this report. I also relied upon information from public sources as referenced throughout this report.¹

¹ If additional information is obtained that is relevant to this report, it may need to be modified or supplemented.

I. Findings

17. Counsel for the State of Georgia in the above captioned matter asked BRG to review the report of Plaintiffs' Expert, Dr. Herron,² to determine if his assertions regarding the "closures" and movement of polling places adversely impacted African-American voters.

18. It is my understanding that the Complaint in this matter alleges that in 2015, the Secretary of State encouraged the consolidation of precincts and closure of polling places. The Complaint further states that Georgia has "consolidated and moved precincts and closed polling places in areas with high proportions of voters of color."³

19. My key findings are as follows and are described more fully in the subsequent sections:

- Generally, Dr. Herron reported his findings across all Georgia counties thereby ignoring the individual decision-making of each county to determine the location of each polling place as dictated by Georgia Statute § 21-2-265.
- Dr. Herron fails to distinguish between polling place changes and closures that occurred between 2014 and 2016 as compared to 2018. Presumably, if a voter's polling place changed prior to the 2016 election and the individual voted in 2016 then, the voter would have known where to vote in 2018. This presumed knowledge is not addressed or considered by Dr. Herron.
- Voter turnout in Georgia increased from 50.03% during the November 2014 mid-term election to 61.44% during the November 2018 mid-term election, even with the polling place changes and closures.
- With respect to the percentage of registered voters with a closed polling place, Dr. Herron's reported outcomes are impacted by closures in particular counties. He has failed to provide real-world information regarding the closures that could occur because the site was torn down or the site no longer wished to serve as a polling place. He simply ignores information regarding the operability of locations. For example, a nursing home may wish to protect its residents from being exposed to viruses and, therefore, may no longer wish to serve as a polling place.
- A review of some of the "closures" identified by Dr. Herron shows that the facilities were not simply closed as polling places through the control of the county. Instead the facilities themselves were moved or torn down and, consequently, the county was required to move the polling place.

² Expert Report of Michael C. Herron, dated February 18, 2020 (hereafter, "Herron Report").

³ Complaint, pages 42-43.

- Dr. Herron fails to consider shifts in the manner that Georgia voters cast their ballots between 2014 and 2018. Georgia voters increased their usage of absentee ballots and early voting in 2018 and reduced their usage of election day voting. With a decline in the demand for election day voting, the need and thus the supply of polling places presumably lessened.
- In general, African-Americans are shown to move geographically at a higher rate than Caucasians. Consequently, Dr. Herron's overall statistics that include movers are misleading.
- Dr. Herron compared the closure rate of polling places that he defined as being majority African-American to non-majority African-American polling places. However, when examined by county, more counties have majority African-American polling places with a *lower* closure rate than the non-majority African-American polling places.
- When assessing polling place changes among voters without a change in address by county, there were 31 counties without any changes between 2014 and 2018. When these 31 counties are removed from Dr. Herron's reported statistics, his conclusions change.
- Dr. Herron's report shows that with regard to voting on election day, African-American registered voters were "disenfranchised" *the least* during the 2018 election by changes in the polling place.

20. To arrive at these conclusions, I relied upon the programming logic that Dr. Herron produced on March 4, 2020. His code was modified in order to generate his summary results by county as reported below.

II. Dr. Herron's Primary Reliance on Statewide Statistics Ignores the Decision-Making of Counties

21. Dr. Herron relies primarily on statewide statistics regarding polling place closure differences between African-American and Caucasian registered voters. He testified that the main questions that he addressed in his report "do not depend at all on county borders."⁴ Under Georgia Statute § 21-2-265, it is the responsibility of the county or municipality to determine the polling place within each precinct. It is at the county superintendent's discretion to make changes to polling places to, for example, place a polling place outside of a precinct to better serve the needs

⁴ Deposition of Michael C. Herron, dated February 26, 2020 (hereafter, "Herron Deposition"), page 120, line 24 to page 121, line 1.

of voters. The statute places time restrictions regarding changes to precincts; for example, the placement of a polling place outside of the precinct is not allowed within 90 days of a primary or election.⁵ As a consequence, providing statistics in aggregate across the State of Georgia, as Dr. Herron does, is contrary to the statute that dictates that it is the county and not the state that makes decisions regarding the closure and placement of polling places.

22. While Dr. Herron depicts variation from county to county, he does not provide by county the equivalent of his overall state statistics that form the basis of his conclusions. This is evident when the same overall statistics reported by Dr. Herron are prepared by county. Between 2014 and 2018, 70% of the counties did *not* have a reduction in the number of polling places. Further, between 2014 and 2018, 36% of the counties did *not* close polling places. As a consequence, Dr. Herron has mis-leadingly masked these county differences through his use of state-wide statistics.⁶

23. Dr. Herron fails to provide information for the polling location closures⁷ that could have occurred for numerous reasons, some of which are not under the control of the county Boards of Elections. While Dr. Herron testified that he does not take a position on the political intent of any of the polling place location changes,⁸ he does not consider any factor other than race/ethnicity. However, in reality, a polling place may be closed because the facility no longer wishes to serve as a polling place (a nursing home may wish to protect its residents from being exposed to viruses) and some polling places are physically closed or torn down and, therefore, are

⁵ § 21-2-265 (a) and (g). The current statute, effective April 2, 2019, added subsection (f) placing limits on the number of days that a polling place could change prior to an election.

⁶ See Georgia Statute § 21-2-265 regarding the role of county government in establishing polling locations in Georgia.

⁷ A closure, according to Dr. Herron, includes polling locations that have moved and are not truly closed. Dr. Herron states that he identified closed polling places in Georgia by “assessing the extent to which the physical addresses of polling places used in the 2014 General Election were also used in the 2018 General Election.” [Herron Report, page 27.]

⁸ Herron Deposition, page 62, lines 1-13.

no longer available to serve as a polling place. Dr. Herron fails to address the fact of reality for these types of closures and has inflated his statistics regarding closure rates due to this failure.

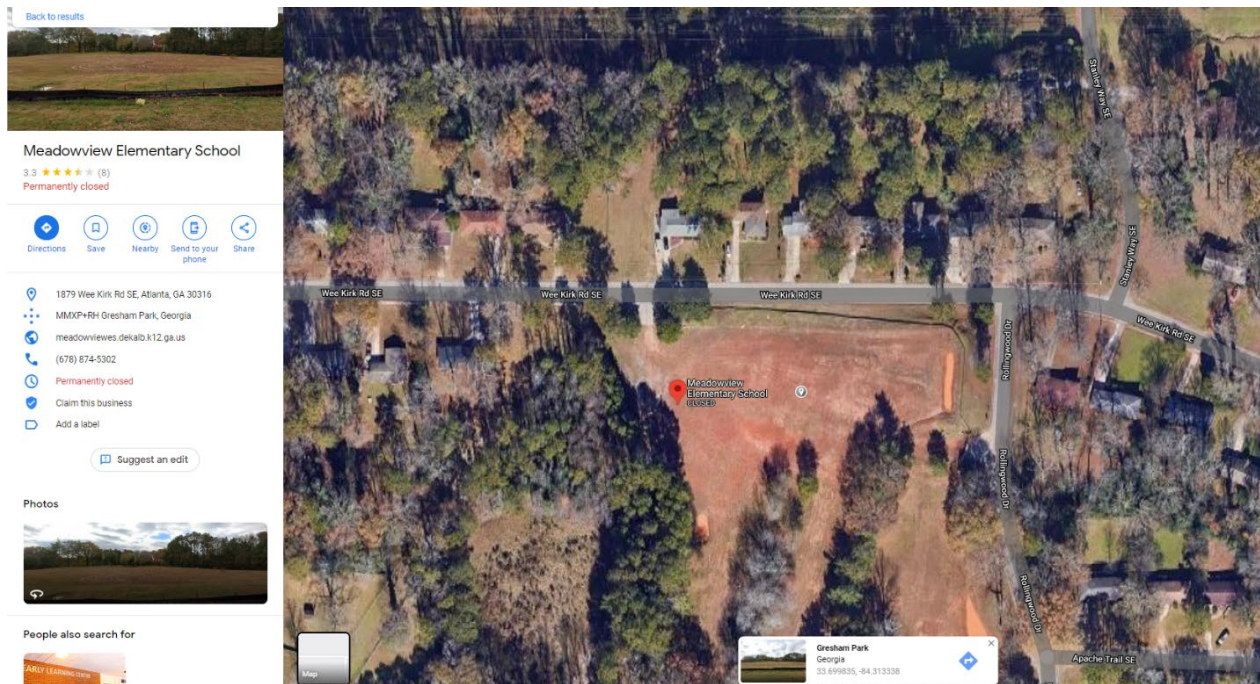
24. The following are examples of polling places that existed in 2014 but were torn down or closed and, thus, not available to serve as polling sites. The first location, Meadowview Elementary in DeKalb County, served as a polling place and was torn down after closing in 2017. This elementary school was located in a census block group that is over 94% African-American among the citizen voting age population (CVAP).⁹ A second location, Meadows Operations Center in Fulton County, also served as a polling place and was permanently closed and is slated for demolition. This location is in a census block group that is 100% African-American among the CVAP.¹⁰ A third example, Atlanta Job Corps Center in Fulton County, was also permanently closed. It was located in a census block group that is over 88% African-American among the CVAP.¹¹

⁹ Meadowview Elementary School (Lat/Lon 33.699835, -84.313338). The school closed in 2017, see: <https://www.publicschoolreview.com/meadowview-elementary-school-profile/30316>

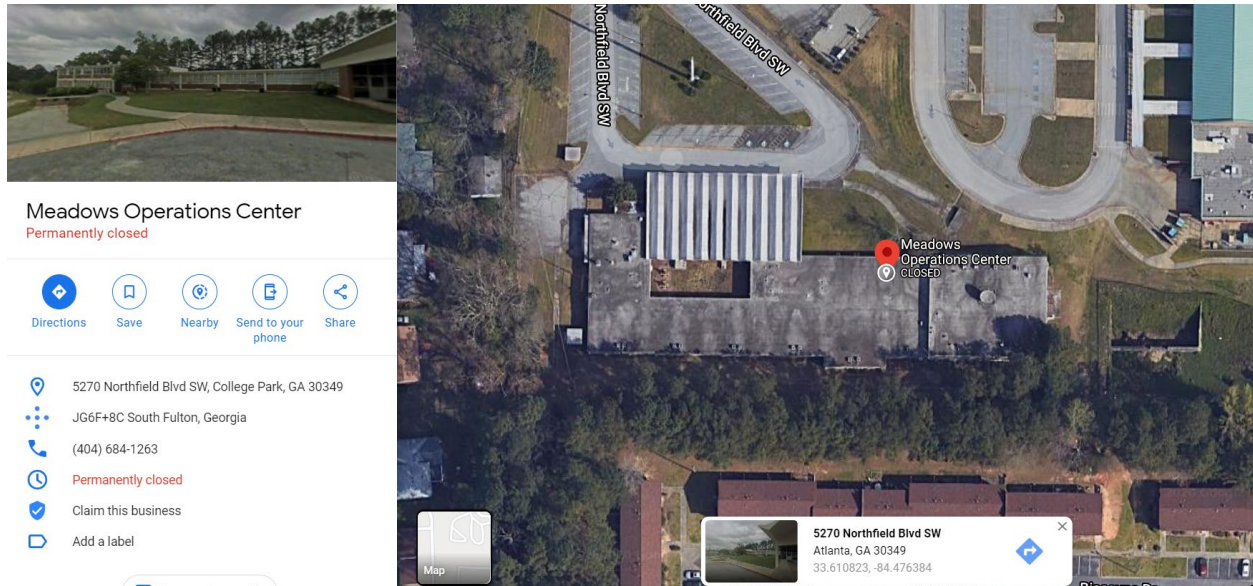
¹⁰ Meadows Operations Center (Lat/Lon 33.610823, -84.476384). The center had been closed for a long time and was slated for demolition in 2019, see: <https://www.fox5atlanta.com/news/fulton-county-schools-votes-to-demolish-meadows-operation-center>

¹¹ Atlanta Job Corps Center (Lat/Lon 33.760760, -84.442089). The center was closed in 2017 due to a new location being constructed, see: https://www.mdjonline.com/neighbor_newspapers/south_metro/business/atlanta-job-corps-center-coming-to-south-fulton/article_7612d2a0-e2f5-11e8-bb75-cffb05382543.html

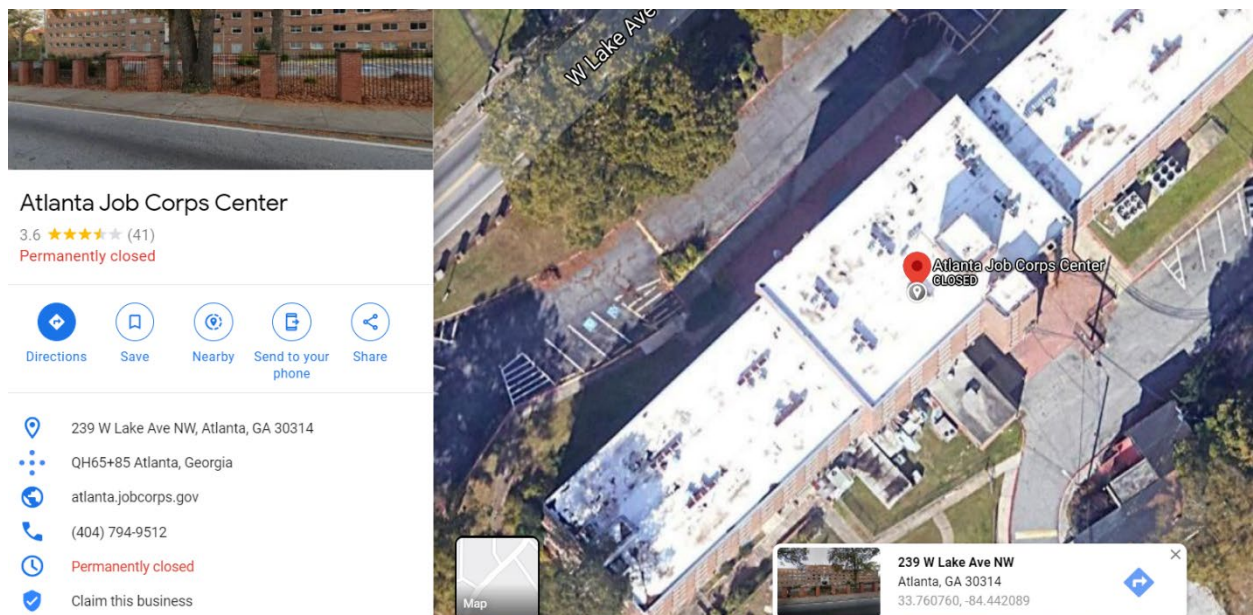
**Figure 1—Meadowview Elementary School
1879 Wee Kirk Road in Atlanta Georgia (30316)
DeKalb County**



**Figure 2—Meadows Operations Center
5270 Northfield Boulevard, Atlanta, Georgia (30349)
Fulton County**



**Figure 3—Atlanta Job Corps Center
239 West Lake Avenue NW Atlanta, Georgia (30314)
Fulton County**



26. Dr. Herron’s analyses do not consider the decisions of the facilities serving as polling places, the availability of these locations, or the decisions of the counties regarding the

selection of polling places. As an illustration, at Table 2 of his report,¹² Dr. Herron provided closure rates in racially homogeneous block groups which he defines as 100% African-American or Caucasian down through 95% African-American or Caucasian, even though, as Dr. Herron testified, most registered voters in Georgia “do not live in racially homogeneous census block groups.”¹³ For block groups that are either 95% African-American or Caucasian, Dr. Herron shows a lower African-American closure rate. It is only those block groups that are above 95% homogenous for which he reports differences between the African-American and Caucasian closure rates that range between 0.95 and 2.76 percentage points, depending on the percentage homogenous. However, as the examples above illustrate, there are numerous reasons for closures that are independent of race/ethnicity and that are not accounted for by Dr. Herron.

III. Dr. Herron’s Assessments of the Percentage of Registered Voters with Closures is Influenced by Misleading Comparisons

27. Dr. Herron attempted to determine whether the polling places of voters in the 2014 voter registration file were closed in 2018. He did not determine if the closure occurred before the 2016 election or before the 2018 election. Given that the voter participation for the 2016 presidential election was higher than the 2018 mid-term election, it is likely that voters whose polling place changed prior to the 2016 election and who then voted in 2016 would have known of their new polling place at least two years prior to the 2018 election.¹⁴ This is not addressed by Dr. Herron. According to the Georgia Secretary of State website, the voter turnout increased from 50.03% for the November 2014 general election to 76.53% for the November 2016 presidential

¹² Herron Report, page 50.

¹³ Herron Deposition, page 102 lines 16-19.

¹⁴ Dr. Herron testified that, conceivably, the change could have occurred before the 2016 election or after the 2016 election. [Herron Deposition, page 71, lines 14-18.]

election. Also, despite the closures that Dr. Herron counts, voter turnout in Georgia *increased* from 50.03% in November 2014 to 61.44% for the November 2018 general election.¹⁵

28. By not considering the reasons for closures as well as the increase in the voter turnout, Dr. Herron's examination of polling place closures is incomplete and misleading. Dr. Herron prepares two types of comparisons with regard to polling place closures. First, at Table 3,¹⁶ he reports the differences in the percentage of registered voters with a closed polling place by race/ethnicity while at Tables 4 through 6,¹⁷ he counts the number of polling places that closed, distinguishing polling places that he labelled majority African-American based on different thresholds of the percentage African-American among the registered voters associated with each polling place.

29. At Table 3, Dr. Herron presents how many of the 2014 registered voters had their polling place closed¹⁸ as of 2018. He then determines that, among these registered voters, 16.68% of Caucasian and 16.80% of African-American registered voters had closed polling places, a difference of 0.12 percentage points. However, in addition to not considering the reason for the closures as described above, this comparison included registered voters who moved and consequently, their polling place would have potentially changed regardless of a closure in their 2014 polling place. According to the Bureau of Census, for the period 2013 to 2017, while 6.5% of Caucasians moved within a county of Georgia, 9.9% of African-Americans moved within a county of Georgia, a 3.4 percentage point difference.¹⁹ This difference in the rate of movement

¹⁵ <https://results.enr.clarityelections.com/GA/54042/149045/en/summary.html> for 2014; <https://results.enr.clarityelections.com/GA/63991/184321/en/summary.html> for 2016; <https://results.enr.clarityelections.com/GA/91639/Web02-state.221451/#/> for 2018.

¹⁶ Herron Report, page 53.

¹⁷ Herron Report, page 54-56.

¹⁸ Assuming Dr. Herron's definition of a closed polling place.

¹⁹ U.S. Bureau of Census, American FactFinder, American Community Survey estimates for 2013-2017: https://factfinder.census.gov/bkmk/table/1.0/en/ACS/17_5YR/S0701/0400000US13.

between African-Americans and Caucasians more than offsets the 0.12 percentage point difference that Dr. Herron reports in Table 3.

30. In addition, there is substantial variation among the 159 Georgia counties in the rate of closure/movement of precincts.²⁰ Among the 101 counties with at least one closure, 54 (or 53.5%) had a higher proportion of Caucasian registered voters with a closure compared to the proportion of African-American registered voters. Moreover, the high variability can be illustrated by removing one relatively small county. If Bibb County is removed, the percentage of African-American registered voters in 2014 with a closure as of 2018 is reduced to 15.63% and the percentage of Caucasian registered voters increases to 16.36%, yielding an African-American-Caucasian difference of -0.74 percentage points rather than the +0.12 percentage points that Dr. Herron calculates. Thus, by removing one small county from his calculations, Dr. Herron's conclusion is reversed.

31. At Tables 4 through 6 of his report, Dr. Herron counts the number of closed polling places between 2014 and 2018. He distinguishes each polling place as being an African-American majority or not, by using the percentage African-American among the registered voters associated with the polling place. At Tables 4 and 5, he applies a 50% threshold to classify African-American polling places and at Table 6, he applies a 60% threshold.

32. Tables 4 through 6 are statewide counts and percentages that do not adjust for the variation that exists by county. Among the 101 counties with a closure between 2014 and 2018, there were 58 with at least one majority African-American polling place using the 50% threshold as measured by Dr. Herron in Tables 4 and 5. Among the 58 polling places, there were 31 (53.5%)

²⁰ Again, using Dr. Herron's definition of a closure which includes movement of precincts due to building demolitions, etc.

in which the closure rate was higher for the polling places Dr. Herron deemed were *not* majority African-American.

IV. Dr. Herron's Analysis of Non-Mover Polling Place Changes is Substantially Different by County

33. Dr. Herron also examined the extent to which registered voters had a change in their polling place. A change in the polling place could have occurred not only from a reduction in the number of polling places, but also from a county deciding to increase the number of polling places.²¹ Dr. Herron testified that he does not engage in the rationale for a change in a polling place as he stated that he compares the racial composition of those with a change in polling place and does not “offer any opinion as to why.”²² At Table 7,²³ Dr. Herron provides the racial/ethnic distribution of the registered voters present in both 2014 and 2018. This table reports that 30.43% of these registered voters are African-American. He then reports the same for the subset of these registered voters who did not move between 2014 and 2018 at Table 8.²⁴ Consistent with the higher geographic mobility among African-Americans, the percentage African-American is 28.36% among the subset.

34. Dr. Herron then compares the racial/ethnic distribution of registered voters who did not move between 2014 and 2018 distinguishing between the registered voters who had a new polling place and those who did not between 2014 and 2018. Table 9 shows relatively small differences by race.²⁵ Specifically, Dr. Herron reports that a higher proportion of Caucasian

²¹Herron Deposition, page 79, lines 17-21.

²²Herron Deposition, page 79, line 22 to page 80, line 16.

²³ Herron Report, page 58.

²⁴ Herron Report, page 59.

²⁵ Herron Report, page 61.

registered voters (+0.89 percentage points) relative to African-American registered voters (-0.62 percentage points) did not change polling places.

35. However, among the 159 counties, 31 did not have any changes to their polling places between 2014 and 2018. When limited to the counties with changes in polling places between 2014 and 2018, the conclusions drawn by Dr. Herron change. As shown below, the difference in the distribution shows a higher proportion Caucasian compared to the proportion African-American among those with a new polling place relative to those without a change in polling place. The Caucasian difference between the two distributions is -0.13 percentage points compared to the African-American difference of +0.03 percentage points. This outcome is contrary to the finding reported by Dr. Herron.

Table 1—Distribution Difference of Dr. Herron’s Table 9 when Counties Without Polling Place Changes are Removed

Race/Ethnicity	New Place	Not New Place	Percentage Point Difference
Caucasian	59.37%	59.24%	-0.13
African-American	28.85%	28.87%	0.03
Unknown	7.61%	7.11%	-0.50
Hispanic	1.80%	1.93%	0.13
Asian/Pacific Islander	1.32%	1.73%	0.40
Other	1.00%	1.06%	0.06
American Indian/Alaskan	0.05%	0.07%	0.01
Total	100.00%	100.00%	

36. Dr. Herron also does not consider the changes in the volume of ballots cast through early voting and absentee (mail-in) ballots. The Election Administration and Voting Survey, conducted by the U.S. Election Commission, collects information from states regarding their voter registration and election statistics.²⁶ I examined the way Georgia voted during the 2014 and 2018

²⁶ See, <https://www.eac.gov/research-and-data/datasets-codebooks-and-surveys>.

general elections by type of ballot cast. As shown in the table below, Georgia registered voters increased their usage of absentee ballots (mail) and early voting and reduced their usage of election day ballots between 2014 and 2018. Dr. Herron fails to consider the influence of this shift on the decisions made by counties to move or close election day polling places.

Table 2—Type of Voter Participation by Election in Georgia

General Election Year	Election Day	UOCAVA	Mail	Provisional Ballot	Early Voting
2014	62.90%	0.05%	4.10%	0.27%	32.68%
2018	46.07%	0.14%	5.58%	0.30%	47.91%
Source: U.S. Election Assistance Commission Data (EAC), 2014 and 2018 elections: https://www.eac.gov/research-and-data/datasets-codebooks-and-surveys .					

V. Dr. Herron’s Analysis of Election Day Turnout *Favors* African-American Registered Voters

37. Dr. Herron also examines the election turnout in 2018 among the registered voters who did not move between 2014 and 2018. At his Tables 10 through 13, Dr. Herron examines the 2018 voter turnout among the registered voters who did not move between 2014 and 2018. His Tables 10 and 11²⁷ are curious because they appear to include those who voted early and/or submitted absentee ballots. These voters would not be impacted by a change in polling place because early voting places and submitting an absentee ballot have no relationship to the election day polling place of a voter. It is not clear why Dr. Herron chose to include these distributions by race/ethnicity in his report as they are misleading.

38. Table 12,²⁸ on the other hand, limits the distribution to turnout among election day voters where the polling place would be relevant. This table is contrary to Tables 10 and 11. At Table 12, the difference in the distribution between the percentage African-American among

²⁷ Herron Report, page 69 and 71.

²⁸ Herron Report, page 73.

changed and unchanged polling places is less than it is for any other racial/ethnic category. The percentage Caucasian among those voters with a new polling place on election day is 26.57% compared to 31.22% among voters without a change in polling place, a difference of -4.65 percentage points. The percentage African-American among those voters with a new polling place on election day is 21.45% compared to 24.28% among voters without a polling place change, a difference of -2.83 percentage points.

39. Similarly, at Table 13,²⁹ Dr. Herron further restricted the voters to those who also voted in 2014. Again, the difference in the distribution between the percentage African-American among those with and without a change in polling places is less than it is for any other racial/ethnic category. The percentage Caucasian among those voters with a new polling place on election day is 31.33% compared to 37.61% among voters without a polling place change, a difference of -6.27 percentage points. The percentage African-American among those voters with a new polling place on election day is 26.57% compared to 30.35% among voters without a polling place change, a difference of -3.77 percentage points. Consequently, the difference in the distribution percentage reported by Dr. Herron at both Tables 12 and 13 is *smaller* for African-Americans compared to Caucasians and any other racial/ethnic group category.

VI. Conclusions

40. Generally, Dr. Herron reported his findings across all Georgia counties thereby ignoring the individual decision-making of each county to determine the location of each polling place as dictated by Georgia Statute § 21-2-265. In addition, he fails to take into account the shift in the manner in which Georgia voters cast their ballots in 2018 relative to 2014, thereby

²⁹ Herron Report, page 74.

potentially influencing the location and number of polling places as determined by each county. Georgia voters increased their usage of absentee ballots and early voting in 2018 and reduced their usage of election day voting. Additionally, Dr. Herron fails to take into account the real-world reasons for polling place closures or moves that are not under the control of the county, reasons such as torn down sites or facilities that no longer wished to serve as a polling place.

41. Further, in general, African-Americans are shown to move geographically at a higher rate than Caucasians. As a consequence, Dr. Herron's overall statistics that include movers are misleading. Additionally, when Dr. Herron's closure statistics are examined by county, more counties have majority African-American polling places with a *lower* closure rate than the non-majority African-American polling places.

42. Dr. Herron's examination of the distribution by race/ethnicity among those with a new polling place and those without a change in polling place between 2014 and 2018 are influenced by 31 counties without any changes in polling places between 2014 and 2018. When these 31 counties are removed, Dr. Herron's conclusions change. The difference in the distribution for African-Americans is *smaller* than that which is calculated for Caucasians, a reversal of Dr. Herron's finding.

43. Finally, Dr. Herron's report shows that with regards to voting on election day, African-American registered voters were "disenfranchised" *the least* during the 2018 election by changes in the polling place.

I have read the foregoing statement consisting of 43 paragraphs and swear that it is true and accurate to the best of my knowledge and belief.

Janet R. Thornton

Janet R. Thornton, Ph.D.

Subscribed and sworn to before me
this 24th day of March, 2020.

Diana R. Bryson



Appendix A

Curriculum Vitae and Testimony List

Curriculum Vitae



Janet R. Thornton, Ph.D.
BERKELEY RESEARCH GROUP, LLC
2457 Care Drive, Suite A-200, Tallahassee, FL 32308

Direct: 850-402-5105
jthornton@thinkbrg.com

EDUCATION

Ph.D., Florida State University, Economics, 1992.
M.S., Florida State University, Economics, 1985.
B.A., University of Central Florida, Economics and Political Science, 1981

ACADEMIC EXPERIENCE

FLORIDA STATE UNIVERSITY

Instructor, Quantitative Methods for Business Decisions (2010)
Instructor, Quantitative Methods and Statistics (2000-2001)
Instructor, Economics (1984-1985)
Instructor and Teaching Assistant, Economics (1982-1984)

GEORGIA SOUTHWESTERN COLLEGE

Part-time Instructor (1985-1986)

UNIVERSITY OF CENTRAL FLORIDA

Research Assistant (1981)

PRESENT EMPLOYMENT

Managing Director, Berkeley Research Group, LLC (2015)

Dr. Thornton specializes in analyzing employment, insurance, and credit decisions. She has testified as an expert witness in federal court, state court, and administrative hearings regarding allegations of discrimination and the calculation of economic damages, and has been retained by both plaintiffs and defendants.

Dr. Thornton has prepared economic and statistical analyses involving allegations of gender, race, ethnicity, religious, and age discrimination in a variety of employment practices including selection, termination, and compensation. She has prepared analyses for employers both proactively and in response to litigation and OFCCP audits.

Dr. Thornton estimates economic damages and provides analysis of wage and hour claims as they relate to overtime (including misclassification), calculation of the regular rate of pay, and off-the-clock work issues including donning and doffing time. She has provided expert



witness testimony in wage and hour matters including a class action involving a large restaurant/retail chain.

Dr. Thornton has provided expert witness testimony regarding simple and complex random sampling designs, has analyzed survey data, and has calculated and incorporated statistical error rates associated with sampling designs. This expertise and her knowledge of complex databases has been used to help organize, manage, and process data for litigation including the use of sampling to identify anomalies in the organizations data processes.

Dr. Thornton's expertise in the analysis of lending practices has led her to design monitoring software specifically tailored to meet her clients' needs. She has prepared several reports and testified in class action lawsuits related to credit pricing issues.

Dr. Thornton has provided expert witness testimony regarding voting rights issues including the analysis of voter ID match rates and voting patterns among demographic groups.

PREVIOUS POSITIONS

Managing Director, ERS Group (2011 – 2015)
Director, ERS Group (2004-2011)
Vice President and Senior Research Economist, ERS Group (1998-2004)
Senior Research Economist, ERS Group (1997-1998)
Research Economist, ERS Group (1986-1997)
Research Assistant, ERS Group (Summer 1985)
Research Assistant, ERS Group (Summer 1984)

HONORS AND AWARDS

Omicron Delta Epsilon (Economics)
Omicron Delta Kappa (National Leadership)
Pi Sigma Alpha (Political Science)
Phi Kappa Phi Honor Society
Scholarship to attend the Conference on Public Choice at the Center for Public Choice in Blacksburg, Virginia, 1983

SPECIALIZATION

Labor and Natural Resource Economics



PUBLICATIONS AND PRESENTATIONS

ARTICLES

"A Labor Economist's View of the Pay Gap: Approaches for Identifying Firm-Specific Wage Disparities and Enhancing Diversity in Light of Fair Pay Laws." Prepared for the American Employment Law Council's Twenty-Third Annual Conference, October 2015.

"New Tools for the Calculation of Infringement Damages," (with Roy Weinstein and Paul White). Prepared for The Center of American and International Law, Plano, TX, October 2010.

"Weathering the Economic Downturn: Economic and Statistical Analysis for Layoffs," (with Fredrick Holt), EEO Insight, Vol. 1, Issue 3, 2009.

"Recent Developments in the Analysis of Employment Practices," (with Joan Haworth and Paul White), Developments in Litigation Economics, Eds. Patrick Gaughan and Robert Thornton. Vol. 87 of Contemporary Studies in Economic and Financial Analysis. Amsterdam: Elsevier, 2005.

"Minority and Female Owned Business Opportunity in Atlanta," (with Joan G. Haworth). Prepared for the City of Atlanta, October 2000.

"Cohort Analysis and the Determination of Economic Damages Resulting from Employment Discrimination," (with Michael J. Piette). Journal of Forensic Economics, Vol. VIII, No. 1, Winter 1995.

"Using New Labor Force Participation Rates When Computing Economic Damage and Loss: A Methodological Note," (with Michael J. Piette). Journal of Legal Economics, Vol. 4, No. 2, Summer 1994.

"A Human Capital Approach to School Retention," Ph.D. Dissertation, Department of Economics, Florida State University, April 1992.

"The Use of Cohort Analysis in the Litigation Context," (with Michael J. Piette). Presented at the American Economic Association Meeting, New Orleans, LA, January 1992.

"Changes in Labor Force Participation Rates Over Time: Some New Evidence from Census Data," (with Michael J. Piette). Presented at the Southern Economic Association Meeting, Washington, D.C., November 1992.

PRESENTATION AND TRAINING ENGAGEMENTS

"Equal Pay for Comparable Work: How to Make It Work in Massachusetts" (with Ellen Kearns), a webinar for Constangy, Brooks, Smith & Prophete, LLP, April 2018.

"Pay Equity" (panel with Lori Bowman, Zev J. Eigen, Ph.D., Genie Harrison and Susannah Howard), presented at the Daily Journal Employment Law Forum, July 2017.



"Deep Diving Pay Equity" (panel with Hon. Charlotte A. Burrows, Adam T. Klein and Nancy E. Rafuse), presented at the American Bar Association National Conference on Equal Employment Opportunity Law, March 2016.

"From the Labor Economists' Perspective – Class Certification Statistical Modeling Post-Walmart and How the Employer May Improve its Chances of Prevailing in Discrimination Cases," presented with Mary Baker, Ph.D. at the American Employment Law Council's Twenty-Third Annual Conference, October 2015.

"Economic and Statistical Analyses of Common Employment Issues" (with Bo Shippen, Ph.D.), presented at Fisher & Phillips, November 2014.

"Shoot First, Ask Questions Later: Managing through the EEOC's Strategic Priorities" (with Shay Hable and Nancy Rafuse), presented at the Corporate Counsel Institute Program, December 2013.

"How to Prepare for an OFCCP Compensation Audit" (with Steve Greene), a webinar for World at Work, September 2013.

"Compensation Analysis for Federal Contractors/Sub-Contractors," presented at the Jacksonville, Florida, Industry Liaison Group Conference, July 2012.

"WHO SAID LIFE WAS FAIR: Successfully Analyzing and Defending Fair Lending Claims" (with Eric Taylor), presented at the American Conference Institute's 13th National Forum on Consumer Finance Class Actions & Litigation, January 2012.

"Compensation Analyses," presented at the Space Coast Florida Industry Liaison Group Conference, October 2011.

"Compensation Analyses and Pay Equity," presented at the Central/Space Coast Florida Industry Liaison Group Conference, March 2010.

"Basic Statistics and Applications in AA Plan Development, Adverse Impact and Compensation," a course for the American Association for Affirmative Action's PDTI training 2010, February 2010.

"Demystifying Compensation Analysis: Concepts & Challenges, Part II," a webinar for the American Association for Affirmative Action's PDTI 2009 Webinar Series, September 2009.

"Tools for Analyzing and Monitoring Compensation," presented at the Jacksonville Industry Liaison Group Conference, May 2009.

"Tools for Analyzing and Monitoring Compensation," presented at the Central/Space Coast Florida Industry Liaison Group Conference, April 2009.

"Demystifying Compensation Analysis: Concepts & Challenges," a webinar for the American Association for Affirmative Action's PDTI 2009 Webinar Series, March 2009.

"Weathering the Economic Downturn: Economic and Statistical Analysis for Layoffs," presented at the Jacksonville Industry Liaison Group Conference, "Preparing for Change: Hot Topics for 2009 and Beyond," February 2009.



"Tools for Analyzing and Monitoring Compensation," presented at the Southwest and Rocky Mountain Regional Industry Liaison Group Conference, "Fairness and Inclusion in a Changing Workforce," November 2008.

Presented at the Proskauer Rose LLP seminar "Navigating Wage and Hour Issues in California," April 2008.

SEMINAR PRESENTATIONS

"Employment Discrimination: Economic and Statistical Evidence," an ERS Group seminar. Presented the following topics: "Commonly Used Statistical Techniques" and/or "Advanced Statistical Techniques: Compensation Analysis" and/or "Statistical Concepts: Modeling & Data Issues" and/or "Exposure and Liability: Calculating Damages." Orlando, 2012 and 2014; Washington, D.C. and New York, 2009; Washington, D.C. and New York, 2006; Washington, D.C. and New York, 2004; Washington, D.C. and New York, 2003; Chicago and New York, 2002; Dallas, 2001; New York and Los Angeles, 2000; Atlanta, Chicago, San Francisco, 1999; and Los Angeles, 1998.

"2010 Compensation Tune-up: Are Your Pay Practices Ready for Challenges?" an ERS Group webinar, January 2010.

"Weathering the Economic Downturn: Economic and Statistical Analysis for Layoffs," an ERS Group webinar, January 2009 and December 2008.

"Compensation Tune-Up for 2007: Tools for Analyzing and Monitoring Compensation," an ERS Group webinar, February 2007.

"Analyzing and Monitoring Compensation in Today's Regulatory Environment," an ERS Group seminar, Washington, D.C. and San Francisco, 2005.

PROFESSIONAL ASSOCIATIONS AND MEMBERSHIPS

American Economic Association
National Association of Forensic Economics
North Florida Committee on Foreign Relations

Expert Testimony
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Janet R. Thornton, Ph.D.

BERKELEY RESEARCH GROUP, LLC
2457 Care Drive, Suite A-200, Tallahassee, FL 32308

Johnny Reynolds, et al. v. Alabama Department of Transportation, et al.; Case No. CV-85-T-665-N, U.S. District Court, Middle District of Alabama, Northern Division. [affidavits, depositions]

Roxie Sibley, et al. v. Sprint Nextel Corporation and Sprint/United Management Company; Case No. 02:08-CV-02063-KHV/JPO, U.S. District Court, District of Kansas. [affidavits, deposition]

North Carolina State Conference of the NAACP, et al. v. Patrick Lloyd McCrory, in his official capacity as Governor of North Carolina, et al. (Case No. 1:13CV658); League of Women Voters of North Carolina, et al. and Louis M. Duke, et al. v. The State of North Carolina, et al. (Case No. 1:13CV660); and United States of America v. The State of North Carolina, et al. (Case No. 1:13CV861), U.S. District Court, Middle District of North Carolina. [declarations, depositions, trial testimony]

Charles M. Bingham v. Raytheon Technical Services Co., LLC; Case No. 1:13-CV-00211-TWP-DKL, U.S. District Court, Southern District of Indiana, Indianapolis Division. [declaration]

Alberta Currie, et al. v. The State of North Carolina and the North Carolina State Board of Elections; Case No. 13-CVS-1419, State of North Carolina General Court of Justice, Superior Court Division, County of Orange. [affidavit]

Barbara H. Lee, et al. v. Virginia State Board of Elections, et al.; Case No. 3:15-CV-357, U.S. District Court, Eastern District of Virginia. [deposition, declaration, trial testimony]

Sheree Steele and Momina Ansoralli, et al. v. CVS Pharmacy, Inc.; Case No. 15-CV-04261, U.S. District Court, Southern District of New York. [deposition]

United States of America v. South Dakota Department of Social Services; Case No. 5:15-cv-05079-JLV, U.S. District Court, District of South Dakota, Western Division. [deposition]

Arizona Democratic Party, et al. v. Michele Reagan, et al.; Case No. CV-16-01065-PHX-DLR, U.S. District Court, District of Arizona. [deposition, trial testimony]

Stacy Tebo v. City of DeBary, Florida, and Leo Daniel Parrott; Case No. 6:16-cv-01599-31-DAB, U.S. District Court, Middle District of Florida, Orlando Division. [deposition]

Betsy Ackerson v. The Rector and Visitors of the University of Virginia; Case No. 3:17-cv-00011-GEC, U.S. District Court, Western District of Virginia, Charlottesville Division. [deposition]

Cherie Noelle Maness v. City of High Point, North Carolina; Case No. 1:17-cv-384, U.S. District Court, Middle District of North Carolina. [deposition]

Nial Benton and Hutton Graham, et al. v. Deli Management, Inc. d/b/a Jason's Deli; Case No. 1:17-cv-00296-WSD, U.S. District Court, Northern District of Georgia, Atlanta Division. [deposition]

Ohio A. Philip Randolph Institute, et al. v. Ryan Smith, Speaker of the Ohio House of Representatives, et al.; Case No. 1:18-cv-00357-TSB-KNM-MHW, U.S. District Court, Southern District of Ohio. [deposition, trial testimony]

Common Cause, et al. v. Representative David R. Lewis, et al.; Case No. 18-CVS-014001, North Carolina General Court of Justice, Superior Court Division, County of Wake. [affidavits, deposition, trial testimony]

Jabari Holmes, et al. v. Timothy K. Moore, Speaker of the North Carolina House of Representatives, et al.; Case No. 18-CVS-15292, State of North Carolina General Court of Justice, Superior Court Division, County of Wake. [affidavit, deposition]

Rebecca Harper, et al. v. David Lewis, Senior Chairman of the House Select Committee on Redistricting, et al.; Case No. 19-CV-012667, North Carolina General Court of Justice, Superior Court Division, County of Wake. [affidavit]

Equal Employment Opportunity Commission v. R&L Carriers, Inc. and R&L Carriers Shared Services, LLC; Case No. 1:17-cv-00515-DRC, U.S. District Court, Southern District of Ohio, Western Division at Cincinnati. [deposition]

Appendix B

Materials Relied Upon

Materials Relied On

- Amended Complaint for Declaratory and Injunctive Relief, dated February 19, 2019
- Expert Report of Michael C. Herron, Ph.D., dated February 18, 2020, and supporting materials
- Additional materials in support of his February 18, 2020 report provided on March 4, 2020
- Deposition of Michael C. Herron, Ph.D., dated February 26, 2020
- Statute regarding selection of polling places (Ga. Code Ann., § 21-2-265)
- Publicly available data as referenced in the report.