

**THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF MISSISSIPPI
GREENVILLE DIVISION**

**DYAMONE WHITE; DERRICK
SIMMONS; TY PINKINS;
CONSTANCE OLIVIA SLAUGHTER
HARVEY-BURWELL**

PLAINTIFFS

VS.

CIVIL ACTION NO. 4:22-cv-00062-SA-JMV

**STATE BOARD OF ELECTION
COMMISSIONERS; TATE REEVES
*in his official capacity as Governor of
Mississippi; LYNN FITCH in her
official capacity as Attorney General of
Mississippi; MICHAEL WATSON in
his official capacity as Secretary of
State of Mississippi***

DEFENDANTS

**DEFENDANTS' MOTION TO STRIKE PLAINTIFFS' EXPERTS'
IMPROPER REBUTTAL DISCLOSURES**

COME NOW the defendants, State Board of Election Commissioners, Tate Reeves, in his official capacity as Governor of Mississippi, Lynn Fitch, in her official capacity as Attorney General of Mississippi, and Michael Watson, in his official capacity as Secretary of State of Mississippi, (hereinafter collectively "Defendants") by and through counsel, and file this their motion to strike Plaintiffs' experts' improper rebuttal disclosures, and in support thereof would show unto the Court the following:

1. The Court should strike Plaintiffs' rebuttal report of Traci Burch, Ph.D., and a portion of their rebuttal report and corrected rebuttal report of Byron D'Andra Orey, Ph.D., because these disclosures exceed the scope of permissible expert rebuttal or supplementation

pursuant to FRCP 26. Furthermore, the governing factors weigh in favor of striking the aforementioned improper expert disclosures and excluding any related testimony.

2. Defendants adopt and incorporate by reference, as if fully and completely set forth herein, the arguments authorities set forth in the *Memorandum of Authorities in Support of Defendants' Motion to Strike Plaintiffs' Experts' Improper Rebuttal Disclosures*, being filed contemporaneously herewith.

3. On the basis of the grounds asserted herein and as further set forth in the aforementioned memorandum of authorities, Defendants submit that the Court should strike Plaintiffs' improper expert rebuttals and exclude any related testimony.

4. In further support of their motion, Defendants submit the following:

Exhibit "A" Orey Corrected Rebuttal Report

Exhibit "B" Diaz Report

Exhibit "C" Burch Initial Report

Exhibit "D" Orey Initial Report

Exhibit "E" Swanson Report

Exhibit "F" Bonneau Report

Exhibit "G" Burch Rebuttal Report

Exhibit "H" Orey Rebuttal Report

Exhibit "I" 2/14/2023 Good Faith Letter

Exhibit "J" 2/16/2023 E-mail from Plaintiffs' Counsel to Defense Counsel

Exhibit "K" 2/27/2023 E-mail from Plaintiffs' Counsel to Defense Counsel

Exhibit "L" 2/28/2023 E-mail Correspondence between Counsel and Court

Exhibit "M" Declaration of David A. Swanson, Ph.D.

WHEREFORE, PREMISES CONSIDERED, Defendants respectfully request that the Court make and enter its Order (1) granting Defendants' motion to strike; (2) striking the rebuttal report of Traci Burch, Ph.D., in its entirety; (3) striking Paragraphs 6-8 and Table 1 of the rebuttal report and corrected rebuttal report of Byron D'Andra Orey, Ph.D.; and (4) excluding, at the trial of this matter, any and all testimony related to the aforementioned rebuttal disclosures so stricken. Defendants respectfully request that the Court suspend the remaining case management deadlines pending a ruling on the instant motion. In the event the motion is denied in whole or in part, Defendants request a reasonable extension of time for their experts to prepare written surrebuttals to any unstricken portions of the rebuttal reports of Dr. Burch and Dr. Orey. Defendants further respectfully request any and all such other relief to which they may be entitled in the premises.

THIS the 10th day of March, 2023.

Respectfully submitted,

STATE BOARD OF ELECTION
COMMISSIONERS, TATE REEVES, IN HIS
OFFICIAL CAPACITY AS GOVERNOR OF
MISSISSIPPI, LYNN FITCH, IN HER OFFICIAL
CAPACITY AS ATTORNEY GENERAL OF
MISSISSIPPI, AND MICHAEL WATSON, IN HIS
OFFICIAL CAPACITY AS SECRETARY OF
STATE OF MISSISSIPPI, DEFENDANTS

By: LYNN FITCH, ATTORNEY GENERAL
STATE OF MISSISSIPPI

By: s/Rex M. Shannon III
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Special Assistant Attorney General

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ATTORNEYS FOR DEFENDANTS STATE
BOARD OF ELECTION COMMISSIONERS,
TATE REEVES, IN HIS OFFICIAL CAPACITY
AS GOVERNOR OF MISSISSIPPI, LYNN
FITCH, IN HER OFFICIAL CAPACITY AS
ATTORNEY GENERAL OF MISSISSIPPI, AND
MICHAEL WATSON, IN HIS OFFICIAL
CAPACITY AS SECRETARY OF STATE OF
MISSISSIPPI

CERTIFICATE OF SERVICE

I, Rex M. Shannon III, Special Assistant Attorney General and one of the attorneys for the above-named State Defendants, do hereby certify that I have this date caused to be filed with the Clerk of the Court a true and correct copy of the above and foregoing via the Court's ECF filing system, which sent notification of such filing to all counsel of record.

THIS the 10th day of March, 2023.

s/Rex M. Shannon III
REX M. SHANNON III

Responsive Report of Byron D'Andra Orey, Ph.D.

February 6, 2023 (Corrected February 24, 2023)

1. My name is Byron D'Andra Orey. My initial report for this case, dated October 3, 2022, was submitted previously. The attorneys for the plaintiff have asked me to provide a rebuttal report that responds to the report of Dr. Christopher Bonneau.
2. My findings for the report submitted on October 3, 2022, reveal that racially polarized voting exists in Mississippi and in Supreme Court District 1, and that white bloc voting usually prevents black-preferred candidates from winning elections in Supreme Court District 1, in accordance with the *Gingles* prong 2 and 3 tests.¹ On average, blacks were found to vote as a cohesive bloc and whites voted as a bloc to usually defeat black preferred candidates. As explained below, nothing in Dr. Bonneau's report leads me to alter my conclusions that voting in elections in Mississippi is racially polarized and that white bloc voting usually defeats black-preferred candidates in the jurisdiction of interest.

Dr. Bonneau Does Not Substantiate His Claims Regarding the Role of Political Party in Explaining Racial Polarization

3. Dr. Bonneau does not appear to contest my empirical analysis demonstrating the existence of racially polarized voting. Rather, he contends that the observed polarization is "largely on the basis of political party" (paragraph 56).
4. In drawing his conclusions about the role of political party, Dr. Bonneau fails to provide systematic evidence to substantiate his claims. For example, in paragraph 40, he writes, "However, Bonneau and Cann (2015) found that there are high levels of

¹ *Thornburg v. Gingles*. 478 U.S. 30, 50-51 (1986).



partisan voting even in nonpartisan elections. That is, voters registered as Democrats vote for the Democratic candidate (and the same for Republicans) even if the partisan identification of the candidates is not on the ballot.” But in Mississippi, voters do not register by party. Moreover, Dr. Bonneau does not provide any empirical evidence to substantiate that this claim applies specifically to Mississippi. Additionally, in paragraph 41, Dr. Bonneau cites Salter (2017), “Folks who tend to vote Republican have found a way to learn the identity of judicial candidates favored by Republicans and the same has been true for Democrat [sic] voters seeking to back Democrat [sic] judicial candidates.” Dr. Bonneau does not provide any data based on Mississippi’s elections to support this claim.

5. In response to Dr. Bonneau’s position that voters make their decisions “largely on the basis of political party” (paragraph 56), it should be noted that the State Supreme Court contests in Mississippi are non-partisan (that is, no party affiliations appear on the ballot). Hence, in the absence of survey data (which Dr. Bonneau does not offer), there is no empirical basis for the claim that partisan considerations drove the observed patterns of polarization in these non-partisan contests. Indeed, the fact that racial polarization is observed in these non-partisan contests is significant evidence that party is *not* the reason for the polarization.
6. In addition to the existing set of endogenous and quasi-endogenous District 1 contests, I have conducted additional EI analyses on two other endogenous/quasi-endogenous contests that are from the recent time period, but are not biracial. While not as salient as biracial contests, these contests (2016 Supreme Court and 2015 Public Service Commission) also exhibit polarization along racial lines, as set forth in Table 1. Thus, racial polarization is observed in 3 endogenous non-partisan contests (2012 Supreme Court, 2016 Supreme Court, 2020 Supreme Court).

7. To further refute Dr. Bonneau's conclusion that party rather than race explains racially polarized voting in Mississippi, I have also conducted an empirical analysis to provide evidence that blacks and whites prefer different candidates, even in primary elections (i.e., where party necessarily cannot be the explanation of any observed racial polarization).
8. Consistent with my previous report submitted on October 3, 2022, I conduct an EI analysis of the 2011 primary election, which featured a head-to-head, competitive, biracial contest for the Democratic nomination for Governor in Mississippi. Based on Table 1, blacks supported the black candidate (DuPree) with 86% of the vote, while whites supported the black candidate (DuPree) with 41.2% of the vote.

Table 1.

Election	Black Preferred Candidate	Black Vote for the Black Preferred Candidate	White Vote for the Black Preferred Candidate	Black Preferred Candidate Won	Racial Polarization?
2011 Dem. Gubernatorial Primary	DuPree	86.3 (85.5-87.4)	41.2 (39.9-43.2)	Yes	Yes
2015 Public Service Commission	Brown	94.7 (94.3-96.5)	16 (15.6-16.4)	Yes	Yes
2016 Supreme Court	Kitchens	68.3 (67.8-68.9)	40.36 (39.7-41.0)	Yes	Yes

9. In paragraph 46, Dr. Bonneau cites an expert witness report that I previously prepared for another court case. He concludes in paragraph 47, “Based on Justice Diaz’s and Dr. Orey’s reports, we would expect black voters to choose candidates based on *party* and not based on race.” The conclusions drawn in that report are based on analyses where blacks voted against a black candidate who ran as a Republican. These conclusions in no way relate to the analyses conducted for my report submitted on October 3, 2022.

Dr. Bonneau Overstates the Success of Black Candidates in Supreme Court District 1 and Fails to Account for the Observed Levels of White Bloc Voting

10. Relevant to *Gingles* 3, throughout Dr. Bonneau’s report, he overstates the success of black candidates in Supreme Court District 1. In paragraph 24, for example, he writes, “Since 2000, African-Americans have won 3 elections to the Mississippi Supreme Court from District 1 and lost 3 elections. In Districts 2 and 3, African Americans have won 0 races and lost 1 race.” The 2004 contest that he alludes to is dated and is thus less probative in assessing the existence of polarization in the present day. And in the case of the other two contests to which Dr. Bonneau refers, Justice Leslie King ran unopposed in both elections. It is impossible to use an uncontested election to make any assessment of whether white bloc voting was sufficient to defeat black voters’ candidates of choice.
11. In paragraph 28, Dr. Bonneau infers, “Thus, incumbent justices—both white and African— overwhelmingly win their bids to retain their seats.” Again, to say that African-Americans “overwhelmingly win their bids” overstates the results because Justice King ran unopposed in two elections.

12. Dr. Bonneau continues in paragraph 30, concluding, “Thus, in District 1, the results of these elections do not support a finding of racial discrimination: African-American justices invariably win their bids for reelection (and, indeed, since 2000, are never challenged), and when an African-American judge challenges an incumbent, their elections are relatively close.” To be sure, some of the elections under discussion are close. (The 2012 Banks election was not especially close as he received only 44.4 percent of the vote, but the 2020 Westbrook election was close.) However, these elections are close because blacks vote as a cohesive bloc. The black preferred candidate usually loses however, because whites also vote as a bloc. That is the essence of the *Gingles* dynamic.

13. Dr. Bonneau writes in paragraphs 31 and 32, “[I]n District 1, African-American state supreme court candidates who challenge incumbents receive an average of 46.5%, while white candidates who challenge incumbents receive an average of 42.5% of the vote” and that “[c]omparing the vote of similarly-situated African-American candidates to white candidates in these elections shows no evidence of racial bias in voting.” The results of my analysis as set forth in my October 3, 2022 report reveal that black candidates only received, on average, 6 percent of the white vote, thereby impeding black voters from electing the candidate of their choice.

14. In paragraph 34, Dr. Bonneau writes, “In 2012, in the counties that comprise District 1, President Obama (an African-American) received 229,978 votes. Albert Gore, Jr. (a white candidate for the U.S. Senate, but not the former Vice-President) received 198,285 votes, significantly fewer than President Obama. Earle Banks, an African American candidate (a Democrat) for the state supreme court, received only 170,513. William Waller, Jr. (the white Republican incumbent) received 213,375 votes. Had

Banks performed as well as President Obama, he would have easily won election.” Dr. Bonneau goes on to suggest that “Banks’ race was not the reason he lost; rather, he lost because voters, the same voters who supported President Obama, determined that he was not the best candidate.” This conclusion is mere speculation. Dr. Bonneau fails to take into consideration roll-off voting and white bloc voting. Indeed, in paragraph 7, based on his research, Dr. Bonneau writes, “[n]onpartisan elections for state supreme courts have less voter participation (higher levels of ballot roll-off) than partisan elections.” In this case, turnout for the Presidential race was 409,949, compared to 383,888 for the Supreme Court race.

15. In any event, the issue here is racial polarized voting and the level of white bloc voting. In 2012, whites supported Obama with 12% of the vote but provided Banks with only 5% of the vote. Hence, roll-off, in tandem with racial polarized voting, impeded blacks from electing the candidate of their choice (blacks overwhelmingly supported Banks).
16. Similarly, in paragraph 35, Dr. Bonneau writes, “More recently, in 2020, President Biden received 220,405 votes in the counties that comprise District 1. Mike Espy, an African-American candidate for the U.S. Senate, outperformed President Biden and received 229,498 votes in these counties. Once again, Justice King ran unopposed for his seat. Latrice Westbrooks, an African-American challenger to Justice Kenny Griffis, received only 190,455 votes; Justice Griffis was reelected with 202,530 votes, so had Westbrooks not underperformed Espy by close to 40,000 votes, she would have won her election.” Dr. Bonneau again fails to take into consideration roll-off and white bloc voting. In the presidential race, 419,323 people turned out to vote. Whereas, only 390,285 people turned out for the Supreme Court race. There was very little roll-off in

the Senate race, with 419,094 people turning out to vote. As it relates to white racial bloc voting, Espy received 13.5% of the white vote. In the non-partisan Supreme Court race, however, Westbrook received only 6% of the white vote.

17. In paragraph 37, Dr. Bonneau writes, “Examining the 2012 and 2020 elections does not lead to the conclusion that the nonincumbent African-American candidates for the state supreme court lost because of their race. They may have lost because the election was nonpartisan and so it was more difficult for voters to identify their preferred candidate. They may have lost because they were not incumbents. They may have lost because voters did not think they were the best candidate for the job. But, given the vote patterns described above and the performance of other African-American candidates in the same counties on the same ballot, it is highly unlikely these candidates lost because they are African-American.” In each of these elections, it is extremely clear that whites voted as a cohesive bloc to defeat the black preferred candidate, providing only 6 percent of their vote to black candidates.

18. A systemic analysis reveals that *Gingles* 3 is satisfied here. The results of my previous empirical analysis, which Dr. Bonneau has failed to rebut, reveal that in the two endogenous biracial contests, black candidates were defeated in both contests due to very high degrees of white bloc voting. Similarly, black candidates were defeated in four out of five quasi-endogenous biracial contests. Thus, over the last decades, black candidates running for office in District 1 have been defeated by white bloc voting in six out of seven contests (85%).

Dr. Bonneau Over-relies on Exogenous Elections to Draw Conclusions

19. In paragraph 50, Dr. Bonneau writes, “While an African-American candidate has not won a statewide election in Mississippi, this is not true for elections in District 1. In 2012, President Obama won 53.9% of the vote in District 1, outpacing state supreme court candidate Earle Banks by almost 10 percentage points. In 2020, Mike Espy received 54.8% of the vote in District 1, outpacing state supreme court candidate Latrice Westbrooks by 6 percentage points. Indeed, Espy even outperformed President Biden in District 1.” However, exogenous elections are less salient when compared to endogenous elections. In both the Obama and Espy races, one can apply the incumbency argument advanced by Dr. Bonneau. President Obama was an incumbent and former Representative Espy once served in Congress. Also, Dr. Bonneau does not take into account racial polarized voting, whereby whites voted as a bloc to defeat the preferred black candidate.
20. In paragraph 51, Dr. Bonneau writes, “The evidence strongly suggests that African-American candidates are able to win elections in District 1 (for statewide offices as well as state supreme court) under its current boundaries.” Again: When conducting a systematic analysis, the results reveal that blacks were only able to win one election out of seven endogenous and quasi-endogenous contests. Overall, when including exogenous statewide biracial elections, blacks were successful in only six of 17 contests that took place in District 1 over the last decade.
21. In paragraph 52, Dr. Bonneau writes, “Indeed, the plaintiff’s examination of the 2019 elections for other offices using the same geographic boundaries as District 1 illustrates this: an African-American Democrat won an open seat on the Transportation Commission while another African-American candidate barely lost a seat to an

incumbent on the Public Service Commission. This, once again, shows the power of incumbency. The winning African-American candidate for the Transportation Commission had a larger margin of victory than the white candidate for the Public Service Commission. Race cannot be the determinant of these elections since one African-American candidate won and the other lost.” To be sure, an African American was successful in winning the Transportation Commission election. However, based on the empirical evidence, whites voted as a bloc to usually defeat the black candidate of choice in 11 of the 17 contests analyzed in my October 3, 2022 report, including 6 of the 7 endogenous and quasi-endogenous contests.

22. In paragraph 53, Dr. Bonneau writes, “This does not support the third precondition of *Thornburg v. Gingles* (1986): the majority group does not vote as a bloc such that it will usually defeat the minority group’s preferred candidate. In fact, the mixed success of African American candidates in District 1 elections strongly suggests that voters (both white and black) are making decisions based on the suitability of the candidates themselves.” The data examined for this report reveals that whites usually voted as a racial bloc; and in an overwhelming 65 percent of all biracial elections (and 85 percent of endogenous and quasi-endogenous biracial elections, which are the most salient contests), blacks were unable to elect the candidate of their choice due to white bloc voting.

Conclusion

23. First, voting in recent Mississippi elections has been racially polarized. Blacks and whites vote differently, and that pattern is not simply a function of partisanship. Racial polarization has been found in non-partisan contests and within Democratic primaries when black candidates run against white candidates in head-to-head contests. This

conclusion refutes Dr. Bonneau's contention that "voters in Mississippi make decisions for the state supreme court largely on the basis of political party" (paragraph 56).

24. Second, white bloc voting usually defeats black voters' candidates of choice in District

1. In an overwhelming 65 percent of all biracial elections and 85 percent of endogenous and quasi-endogenous biracial elections, blacks were unable to elect the candidate of their choice due to the persistence of white bloc voting.

25. I reserve the right to amend, modify, or supplement my analysis and opinions.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the information and opinions contained in this report are true and correct to the best of my knowledge.

February 24, 2023

Byron D'Andra Orey, Ph.D

Appendix 1: EI RAW RESULTS AND SCRIPT**Brown v. Bailey**

```

> # Plot out Results -----
> plot(iter, rxc)
> ## Ecological Inference Analyses
> ##USE this one
> # Outline:
> # Loading libraries & importing data
> # King's iterative EI
> # Row by Columns (RxC) EI
> # Summarizing results
> # DataVis
>
> # Data files:
> # PracticeData-ReCoded.csv
>
>
> # Libraries and Data -----
> #library(ei)
> library(eiCompare) # Use from latest release, which was summer 2020
> ####dat <- read.csv("C:/Users/J00584364/Downloads/PracticeData-ReCoded.csv",
sep=",")### > dat <- read.csv("C:/Users/J00584364/Downloads/Brown_2015.csv", sep=",") >
> summary(dat$Espy)
Length Class Mode
0 NULL NULL
>
> dat$pVoteA <- dat$pVoteA/100
> dat$pVoteB <- dat$pVoteB/100
> dat$pBlackVAP <- dat$pBlackVAP/100
> dat$pWhiteVAP <- dat$pWhiteVAP/100
> #dat$pOtherVAP <- dat$pOtherVAP/100
> #dat$WhiteOtherVAP <- dat$WhiteOtherVAP
>
> # Iterative EI (King's EI) -----
> iter <- ei_iter(
+ data = dat,
+ #cand_cols = c("pVoteA", "pVoteB"),
+ cand_cols = c("pVoteA", "pVoteB"),
+ race_cols = c("pBlackVAP", "pWhiteVAP"),
+ #race_cols = c("pBlackVAP", "pWhiteVAP", "pOtherVAP"),
+ totals_col = "total_votes",
+ name = "Iterative EI"
+ )

```

```

=====| 100% >
> # Rows by Columns (RxC) -----
> rxc <- ei_rxc(
+ data = dat,
+ cand_cols = c("pVoteA", "pVoteB"),
+ race_cols = c("pBlackVAP", "pWhiteVAP"),
+ totals_col = "total_votes",
+ name = "RxC EI",
+ )
>
> # Summary Table -----
> summary(iter, rxc)
$BlackVAP
  mean_Iterative.EI sd_Iterative.EI ci_95_lower_Iterative.EI
pVoteA 94.73 0.2 94.34
pVoteB 5.28 0.2 4.93
  ci_95_upper_Iterative.EI mean_RxC.EI sd_RxC.EI ci_95_lower_RxC.EI pVoteA 95.10 96
0.28 95.39
pVoteB 5.71 4 0.28 3.47
  ci_95_upper_RxC.EI
pVoteA 96.53
pVoteB 4.61
$WhiteVAP
  mean_Iterative.EI sd_Iterative.EI ci_95_lower_Iterative.EI
pVoteA 15.98 0.22 15.57
pVoteB 84.00 0.19 83.65
  ci_95_upper_Iterative.EI mean_RxC.EI sd_RxC.EI ci_95_lower_RxC.EI pVoteA 16.43
14.82 0.29 14.27
pVoteB 84.36 85.18 0.29 84.56
  ci_95_upper_RxC.EI
pVoteA 15.44
pVoteB 85.73

```

Kitchens v. Griffis

```

> # Plot out Results -----
> plot(iter, rxc)
> ## Ecological Inference Analyses
> ##USE this one
> # Outline:
> # Loading libraries & importing data
> # King's iterative EI
> # Row by Columns (RxC) EI
> # Summarizing results

```

```

> # DataVis
>
> # Data files:
> # PracticeData-ReCoded.csv
>
>
> # Libraries and Data -----
> #library(ei)
> library(eiCompare) # Use from latest release, which was summer 2020 > ###dat <-
read.csv("C:/Users/J00584364/Downloads/PracticeData-ReCoded.csv", sep=",")### > dat <-
read.csv("C:/Users/J00584364/Downloads/Kitchens_2016.csv", sep=",") >
> summary(dat$Espy)
Length Class Mode
0 NULL NULL
>
> dat$pVoteA <- dat$pVoteA/100
> dat$pVoteB <- dat$pVoteB/100
> dat$pBlackVAP <- dat$pBlackVAP/100
> dat$pWhiteVAP <- dat$pWhiteVAP/100
> #dat$pOtherVAP <- dat$pOtherVAP/100
> #dat$WhiteOtherVAP <- dat$WhiteOtherVAP
>
> # Iterative EI (King's EI) -----
> iter <- ei_iter(
+ data = dat,
+ #cand_cols = c("pVoteA", "pVoteB"),
+ cand_cols = c("pVoteA", "pVoteB"),
+ race_cols = c("pBlackVAP", "pWhiteVAP"),
+ #race_cols = c("pBlackVAP", "pWhiteVAP", "pOtherVAP"),
+ totals_col = "total_votes",
+ name = "Iterative EI"
+)

|=====
=====| 100%
>
> # Rows by Columns (RxC) -----
> rxc <- ei_rxc(
+ data = dat,
+ cand_cols = c("pVoteA", "pVoteB"),
+ race_cols = c("pBlackVAP", "pWhiteVAP"),
+ totals_col = "total_votes",
+ name = "RxC EI",
+)
>
> # Summary Table -----

```

```
> summary(iter, rxc)
```

```
$pBlackVAP
```

```
  mean_Iterative.EI sd_Iterative.EI ci_95_lower_Iterative.EI
pVoteA 68.30 0.28 67.79
pVoteB 31.64 0.30 31.04
  ci_95_upper_Iterative.EI mean_RxC.EI sd_RxC.EI ci_95_lower_RxC.EI
pVoteA 68.87 68.26 0.49 67.26
pVoteB 32.21 31.74 0.49 30.78
  ci_95_upper_RxC.EI
pVoteA 69.22
pVoteB 32.74
```

```
$pWhiteVAP
```

```
  mean_Iterative.EI sd_Iterative.EI ci_95_lower_Iterative.EI
pVoteA 40.36 0.32 39.70
pVoteB 59.58 0.27 59.06
  ci_95_upper_Iterative.EI mean_RxC.EI sd_RxC.EI ci_95_lower_RxC.EI
pVoteA 41.03 40.45 0.46 39.54
pVoteB 60.09 59.55 0.46 58.60
  ci_95_upper_RxC.EI
pVoteA 41.40
pVoteB 60.46
```

```
DuPree v. Lockett
```

```
# Libraries and Data -----
```

```
library(eiCompare) # Use from latest release, which was summer 2020
###dat <- read.csv("C:/Users/J00584364/Downloads/PracticeData-ReCoded.csv", sep=",")###
dat <- read.csv("C:/Users/J00584364/Downloads/Dupree_2011_Runoff_0_100.csv", sep=",")
```

```
dat$pVoteA <- dat$pVoteA/100
dat$pVoteB <- dat$pVoteB/100
dat$pBlackVAP <- dat$pBlackVAP/100
dat$pWhiteVAP <- dat$pWhiteVAP/100
#dat$pOtherVAP <- dat$pOtherVAP/100
```

```
# Iterative EI (King's EI) -----
```

```
iter <- ei_iter(
  data = dat,
  #cand_cols = c("pVoteA", "pVoteB"),
  cand_cols = c("pVoteA", "pVoteB"),
  race_cols = c("pBlackVAP", "pWhiteVAP"),
  #race_cols = c("pBlackVAP", "pWhiteVAP"),
  totals_col = "total_votes",
```

```

name = "Iterative EI"
)

```

```

# Rows by Columns (RxC) -----
rxc <- ei_rxc(
  data = dat,
  cand_cols = c("pVoteA", "pVoteB"),
  race_cols = c("pBlackVAP", "pWhiteVAP"),
  totals_col = "total_votes",
  name = "RxC EI",
)

```

```

# Summary Table -----
summary(iter, rxc)

```

```

# Plot out Results -----
plot(iter, rxc)

```

```
$pBlackVAP
```

	mean_Iterative.EI	sd_Iterative.EI	ci_95_lower_Iterative.EI	
pVoteA	86.34	0.43	85.52	
pVoteB	13.72	0.52	12.75	
	ci_95_upper_Iterative.EI	mean_RxC.EI	sd_RxC.EI	ci_95_lower_RxC.EI
pVoteA	87.36	86.83	0.53	85.74
pVoteB	14.84	13.17	0.53	12.13
	ci_95_upper_RxC.EI			
pVoteA	87.87			
pVoteB	14.26			

```
$pWhiteVAP
```

	mean_Iterative.EI	sd_Iterative.EI	ci_95_lower_Iterative.EI	
pVoteA	41.16	0.85	39.93	
pVoteB	58.84	0.76	57.08	
	ci_95_upper_Iterative.EI	mean_RxC.EI	sd_RxC.EI	ci_95_lower_RxC.EI
pVoteA	43.18	40.22	0.94	38.39
pVoteB	59.94	59.78	0.94	57.86
	ci_95_upper_RxC.EI			
pVoteA	42.14			
pVoteB	61.61			

**IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF MISSISSIPPI
GREENVILLE DIVISION**

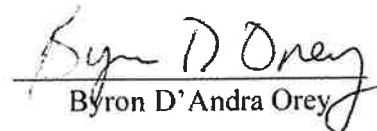
DYAMONE WHITE, et al.,)
) No. 4:22-cv-00062-SA-JMV
) *Plaintiffs,*)
 v.) **Responsive Declaration of**
) **Byron D'Andra Orey**
)
 STATE BOARD OF ELECTION)
 COMMISSIONERS, et al.,)
)
 Defendant.)

RESPONSIVE DECLARATION OF BYRON D'ANDRA OREY

I, Byron D'Andra Orey, make the following declaration based on personal knowledge:

I have been retained by the Plaintiffs in the above referenced matter as an expert. I filed a declaration in this lawsuit on October 3, 2022. I submit that the foregoing corrected report dated February 24, 2023, in response to the report of Dr. Christopher Bonneau is a true and accurate copy of the report I provided to Plaintiffs in this matter. I declare that the information and opinions contained in the report are true and correct to the best of my knowledge. Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Dated: 2/24/2023


Byron D'Andra Orey

**UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF MISSISSIPPI
GREENVILLE DIVISION**

DYAMONE WHITE; DERRICK
SIMMONS; TY PINKINS; CONSTANCE
OLIVIA SLAUGHTER HARVEY-
BURWELL,

Plaintiffs,

vs.

STATE BOARD OF ELECTION
COMMISSIONERS; TATE REEVES *in his
official capacity as Governor of Mississippi;*
LYNN FITCH *in her official capacity as
Attorney General of Mississippi;* MICHAEL
WATSON *in his official capacity as
Secretary of State of Mississippi,*

Defendants.

4:22-cv-0062-SA-JMV

REPORT OF OLIVER E. DIAZ, JR.

October 3, 2022



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I. INTRODUCTION AND QUALIFICATIONS

1. My name is Oliver E. Diaz, Jr. I have been retained as an expert by counsel for Plaintiffs in *White et al. v. State Board of Elections et al.*, captioned above. I have prepared this report according to Federal Rule of Civil Procedure 26(a)(2)(B).

2. In March 2000, I was appointed as a Justice of the Mississippi Supreme Court by Governor Ronnie Musgrove. I was seated in District 2, Place 2. Several months later, in November 2000, I was elected to serve an eight-year term as a Justice of the Mississippi Supreme Court in that same district and seat. I served my full term. I served as a Presiding Justice on the Court for two years and was second in seniority when I left the bench. In November 2008, I lost my bid for re-election to the Mississippi Supreme Court.

3. Since leaving the bench, I have been engaged in private practice of law in Mississippi with an emphasis on appellate litigation. I have served as a Special Master in federal court in the District of Columbia, and I am currently a Senior Status Judge in the state of Mississippi. I have been appointed by the Mississippi Supreme Court to serve as a Circuit Court judge in Hinds County, Mississippi, and to serve on the Special Committee on Judicial Election Campaign Intervention, which previously oversaw judicial elections in the state of Mississippi.¹

4. Prior to my appointment to the Mississippi Supreme Court, I served as a judge on the Mississippi Court of Appeals. I was elected to the Court of Appeals in November 1994 and I remained in that role until I ascended to serve on the Mississippi Supreme Court in March 2000.

¹ See Supreme Court of Mississippi, *The Judicial Election Oversight Committee*, <https://courts.ms.gov/commissions/electionoversight.php> (“The Judicial Election Oversight Committee (‘Oversight Committee’) was created by Order of the Mississippi Supreme Court on November 30, 2021 . . . The Oversight Committee replaced the previous Special Committee on Judicial Election Campaign Intervention which existed under the prior version of Canon 5F.”).

5. From 1988 until 1994, I served as a member of the Mississippi House of Representatives. I represented District 116, which included Biloxi and D'Iberville. During my tenure in the Mississippi Legislature, I was a subcommittee chairman on the Insurance and Judiciary Committees, and served as Secretary of the Constitution Committee. In addition, I was a member of the Ways and Means Committee.

6. From 1989 to 1995, I held the position of City Attorney for the City of D'Iberville.

7. I earned my B.A. from the University of South Alabama in 1982, and my J.D. from the University of Mississippi School of Law in 1985. I also went on to earn an L.L.M. degree from the University of Virginia School of Law in 2004.

8. As a Supreme Court Justice, I authored approximately 337 opinions which have been published in the Southern Reporter. I have lectured at the National Press Club, the Center for American Progress, the American Association for Justice, along with various judicial, bar association, and law school events around the country. I have also presented continuing legal and judicial education courses around the country.

9. A copy of my curriculum vitae is attached as Appendix A.

10. I have not previously testified as an expert witness.

II. ASSIGNMENT

11. I have been asked by counsel for Plaintiffs in this action to provide my understanding and opinions as to the history, structure, and composition of the Mississippi Supreme Court, including but not limited to appointments and elections to the Court.

12. I am being compensated for my work at the rate of \$450 an hour (\$550 per hour for testimony). This remuneration is not contingent on my opinions and does not influence my conclusions in any way.

13. The information and opinions in this report are based largely on the eight and one half years I spent as a Justice of the Mississippi Supreme Court, my more than five years as a judge on the Court of Appeals of the State of Mississippi, my experiences running for election for seats on the Mississippi Supreme Court and the Court of Appeals, my time as a state legislator, and my continued involvement with elections and with the Mississippi judiciary.

14. In preparing this report, I have also relied on my knowledge of the inner workings of the Mississippi appellate court system, scholarly research, news articles, and other materials in the public domain, as well as the statutes and rules relevant to the Supreme Court's composition and operations cited herein. A list of the materials I considered in preparing this report is attached as Appendix B.

15. I understand that fact discovery in this litigation is ongoing. This report is based on the information presently available to me, and I reserve the right to supplement or modify this report based on additional facts, testimony, or other information that may come to light.

III. SUMMARY OF CONCLUSIONS

16. In this report, I first discuss the structure and function of the Mississippi Supreme Court. I then discuss the process by which candidates are elected to the Court and the rules and practices governing that process. Throughout, I offer my observations based on my personal involvement with the Court and the electoral process. I also reach the following conclusions:

a. It is surprising to me that the Supreme Court districts have not been redrawn since 1987. When I was a state legislator, it was my expectation that these districts would be redrawn periodically to reflect population changes within the districts.

b. Despite the fact that elections for the Supreme Court are non-partisan, such elections include many of the same features as partisan elections for political office. Successful campaigns are expensive, and elections are influenced by outside interest

groups. In addition, even though elections are non-partisan, political parties and party leaders can and do make endorse Supreme Court candidates.

c. Supreme Court elections are not free from racial appeals, though often subtle rather than overt. Those appeals can be made rhetorically—for example, through “tough on crime” messaging—or visually, particularly through opponents’ gratuitous use of photographs of Black candidates in campaign materials to highlight their race.

d. There have only been four Black justices on the Mississippi Supreme Court in its history, with each serving in succession starting in 1985. Each Black justice has held the District 1, Place 2 seat, and has first been appointed by the Governor before subsequently running for election as an incumbent. Given the racial polarization of Mississippi voters and the lack of a majority-minority district under the district lines as currently drawn, an incumbent Black Justice is far more likely to be reelected to the seat than an otherwise similarly situated Black candidate.

IV. THE MISSISSIPPI SUPREME COURT’S STRUCTURE AND FUNCTION

A. Court Structure

17. The Mississippi Supreme Court (the “Supreme Court” or the “Court”) is the highest court in Mississippi.² The Court sits in Jackson, Mississippi and holds two terms each year, one commencing on the second Monday in September and another commencing on the first Monday of March, for a total of at least nine months in session.³ Among other responsibilities, the Supreme Court is vested with general rule-making authority over the courts, and sets the rules of evidence

² See Miss. Const., art. VI, § 144.

³ See Miss. Const. art. VI § 148; Miss. Code § 9-3-3.

and practice and procedure for trials in the circuit, chancery and county courts of Mississippi and appeals in the Court of Appeals.⁴

18. The Justice who has continuously been as a member of the Court for the longest time serves as the Chief Justice of the Court.⁵ The two Justices who have been members of the Court for the next longest continuous periods of time serve as the Presiding Justices.⁶ The Chief Justice is presently compensated at \$174,000 per annum; the Presiding Justices are presently compensated at \$169,500 per annum; and the Associate Justices are presently compensated at \$166,500.⁷ The Chief Justice serves as chief administrative officer of all Mississippi courts,⁸ and has a variety of responsibilities, including:

- Appointing the Chief Judge of the Court of Appeals⁹;
- Appointing special judges to temporary assignments¹⁰;
- Assigning Court of Appeals judges to serve as lower court trial judges to provide docket relief¹¹;
- Serving as a member of the Mississippi Sentencing Disparity Task Force¹²;
- Appointing members of the Mississippi Ethics Commission¹³; and
- Appointing a member of the Corrections and Criminal Justice Oversight Task Force.¹⁴

⁴ Miss. Code § 9-3-61.

⁵ Miss. Code § 9-3-1.

⁶ *Id.*

⁷ Miss. Code § 25-3-35. Salary increases go into effect in January 1, 2023. *Id.*

⁸ Miss. Code § 9-21-3.

⁹ Miss. Code § 9-4-7(3).

¹⁰ Miss. Code § 9-1-105.

¹¹ Miss. Code § 9-4-7(4).

¹² Miss. Code § 99-19-13.

¹³ Miss. Code § 25-4-5.

¹⁴ Miss. Code § 47-5-6.

19. The Justices serve on panels of three Justices, each headed by either the Chief Justice or a Presiding Justice.¹⁵ Cases are randomly assigned to the panels, which are responsible for reviewing the cases and preparing opinion recommendations. Each panel remains together for an eight week period, the last two weeks of which are consumed by writing the opinions and wrapping up the appeals. At the end of the eight week period, known as a “sitting,” the panels are reconstituted. As a result, each term, Justices sit on panels with most of the other Justices. The Supreme Court has six sittings per year.¹⁶

20. Opinion recommendations are made in accordance with the views of at least two out of the three Justices on the panel. The panel’s decisions are presented to the full Court for review and approval. In the event that one or more of the Justices on the Court disagrees with the decision, the case may be considered and adjudged by the full Court or a quorum of the Court.¹⁷ The full Court can override a panel decision and issue a decision that is different from the opinion of the panel.

B. Court Operations

21. The Supreme Court has jurisdiction over all appeals from final orders of trial courts.¹⁸ The Court may try and determine all issues of fact arising out of any appeal before the Court.¹⁹ The Supreme Court may, in its discretion, assign cases to the Mississippi Court of Appeals (the “Court of Appeals”) for intermediate appellate review, subject to the exceptions set forth in

¹⁵ Miss. Const. art VI § 149A.

¹⁶ Supreme Court Docket Calendar, <https://courts.ms.gov/appellatecourts/sc/scdocketcalendar.php>.

¹⁷ See generally Miss. Const. art VI § 149A.

¹⁸ Miss. Const. art. VI § 146; Miss. Code § 9-3-9; M.R.A.P. 16(a).

¹⁹ Miss. Code § 9-3-37; M.R.A.P. 14(a).

paragraph 22 below.²⁰ The Court may, by order, provide that certain categories of cases will be immediately transferred to the Court of Appeals or retained by the Court.²¹ Once the Supreme Court enters an order assigning a case to the Court of Appeals, no party may seek reassignment of the case to the Supreme Court.²²

22. The Court must retain jurisdiction over appeals in cases involving election contests, the imposition of the death penalty, utility rates, annexations, and bond issues; as well as any appeal of a trial court decision holding a state statute unconstitutional.²³ The Court also retains jurisdiction over cases involving attorney discipline and judicial performance, and certified questions from a federal court.²⁴ In addition, the Court ordinarily retains jurisdiction over cases involving: (1) a major question of first impression; (2) fundamental and urgent issues of broad public importance requiring prompt or ultimate determination by the Supreme Court; (3) substantial constitutional questions as to the validity of a statute, ordinance, court rule, or administrative rule or regulation; or (4) issues as to which there is an inconsistency in the decisions of the Court of Appeals or of the Supreme Court or conflicts between the decisions of the two courts.²⁵

23. When I served on the Court, one of the Justices was assigned the responsibility of screening cases for assignment or retention on a rotating basis. Each of the Justices took turns serving in this role. A staff attorney on the Court would initially review each case and make a

²⁰ M.R.A.P. 16(a).

²¹ M.R.A.P. 16(d).

²² M.R.A.P. 16(e).

²³ M.R.A.P. 16(b).

²⁴ M.R.A.P. 16(d); *id.* 20(a).

²⁵ M.R.A.P. 16(d).

recommendation as to whether the case should be retained or assigned to the Court of Appeals. In most cases, the screening Justice would simply accept the recommendation of the staff attorney. In the event that the screening Justice recommended that a case be assigned to the Court of Appeals, the case would nonetheless be retained by the Court if a majority of the Justices disagreed with the recommendation and voted to retain jurisdiction.

24. Once the Court assigns a case to the Court of Appeals, there is no appeal as of right to the Supreme Court.²⁶ A party may petition the Supreme Court for a writ of certiorari, which the Supreme Court may grant in its sole discretion upon the affirmative vote of at least four of the nine Justices.²⁷ The Supreme Court will typically grant a writ of certiorari “only for the purpose of resolving substantial questions of law of general significance.”²⁸ The Supreme Court often grants review of (a) Court of Appeals decisions that conflict with controlling Supreme Court precedent or a prior decision of the Court of Appeals; (b) cases in which it appears that the Court of Appeals did not consider a controlling constitutional provision; (c) cases that should have been decided by the Supreme Court rather than the Court of Appeals under the Mississippi Code and/or the Mississippi Rules of Procedure; and (d) cases involving fundamental issues of broad public importance that require determination by the Supreme Court.²⁹ However, the Supreme Court is not required to grant review of cases that fall into any of the foregoing categories, and may grant review of cases that do not meet any of the foregoing criteria.³⁰ Even after the Court grants a

²⁶ M.R.A.P. 17(a).

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

petition for certiorari, the Supreme Court may decide that there is no need for further review of the Court of Appeals' decision and may dismiss the petition on its own motion.³¹

25. All decisions of the Supreme Court to grant or deny a petition for a writ of certiorari are final and not subject to reconsideration.³² No party may move for reconsideration of the Court's decision.³³ When I served on the Court, we denied petitions for certiorari in over 90% of cases.

26. The Supreme Court announces decisions every Thursday when the Court is in session.³⁴ The Supreme Court may, but is not required to, write opinions in cases heard by the Court.³⁵ All written opinions by the Court are published.³⁶ The Supreme Court's general practice is to write opinions in cases where it reverses or remands a trial court or administrative agency.³⁷ In cases where the Court affirms the decision of the trial court, the Supreme Court (a) will issue a written opinion if the Court assesses damages for a frivolous appeal; and (b) may issue a written opinion if a majority of the Justices deciding the case determine that it would add to the value of Mississippi jurisprudence or be useful to the parties or to the trial court.³⁸

³¹ M.R.A.P. 17(f).

³² *Id.*

³³ *Id.*

³⁴ M.R.A.P. 23(d).

³⁵ M.R.A.P. 35-A(a).

³⁶ *Id.*

³⁷ M.R.A.P. Comment to Rules 35-A and 35-B.

³⁸ M.R.A.P. 35-A(a); *id.* 35-A(c)

V. THE ELECTORAL PROCESS FOR MISSISSIPPI SUPREME COURT JUSTICES

A. Mississippi Supreme Court Districts

27. Mississippi Supreme Court Justices are elected from three districts demarcated by the Legislature.³⁹ The First Supreme Court District (“District 1”) consists of the counties of Bolivar, Claiborne, Copiah, Hinds, Holmes, Humphreys, Issaquena, Jefferson, Kemper, Lauderdale, Leake, Madison, Neshoba, Newton, Noxubee, Rankin, Scott, Sharkey, Sunflower, Warren, Washington and Yazoo. The Second Supreme Court District (“District 2”) consists of the counties of Adams, Amite, Clarke, Covington, Forrest, Franklin, George, Greene, Hancock, Harrison, Jackson, Jasper, Jefferson Davis, Jones, Lamar, Lawrence, Lincoln, Marion, Pearl River, Perry, Pike, Simpson, Smith, Stone, Walthall, Wayne, and Wilkinson. The Third Supreme Court District (“District 3”) consists of the counties of Alcorn, Attala, Benton, Calhoun, Carroll, Chickasaw, Choctaw, Clay, Coahoma, DeSoto, Grenada, Itawamba, Lafayette, Lee, Leflore, Lowndes, Marshall, Monroe, Montgomery, Oktibbeha, Panola, Pontotoc, Prentiss, Quitman, Tallahatchie, Tate, Tippah, Tishomingo, Tunica, Union, Webster, Winston and Yalobusha.⁴⁰

28. Three justices are elected from each district on an at-large basis, for a total of nine justices.⁴¹ Each of the nine Supreme Court seats is considered a separate office.⁴² The three seats in each district are designated as Position or Place Number 1, Position or Place Number 2 and Position or Place Number 3.⁴³ Each Justice serves for a staggered term of eight years, such that not

³⁹ Miss. Const. art. VI, § 145.

⁴⁰ Miss. Code § 9-3-1.

⁴¹ MS. Const. art. VI, § 145B; *see also id.* §§ 145, 145A,

⁴² Miss. Code § 23-15-993.

⁴³ Miss. Code § 23-15-993.

all Supreme Court seats are up for election at the same time.⁴⁴ Below is a chart of the most recent election year, and the next election year, for each Supreme Court seat.⁴⁵

Supreme Court Seat	Most recent general election	Next general election
District 1, Place 1	2020	2028
District 1, Place 2	2020	2028
District 1, Place 3	2016	2024
District 2, Place 1	2018	2026
District 2, Place 2	2016	2024
District 2, Place 3	2020	2028
District 3, Place 1	2016	2024
District 3, Place 2	2016	2024
District 3, Place 3	2020	2028

29. All Justices participate in hearing cases from across the state.⁴⁶ Although the Justices are elected by Supreme Court districts, there is no distinction made in the law between the Justices based on the districts from which they were elected, nor do the districts have any implications for their roles on the Court. Consistent with this, in my experience, Justices view themselves and each other as statewide officials rather than as representatives of the specific districts from which they were elected.

30. In 1987, shortly before I was elected to serve in the State Legislature, the Supreme Court districts were redrawn to their current configuration, shifting Attala and Winston counties from District 1 to District 3, and Claiborne, Copiah, and Jefferson counties from District 1 to

⁴⁴ Miss. Const. art. VI § 149; Miss. Code §§ 23-15-991; 23-15-993.

⁴⁵ Mississippi Supreme Court elections, Ballotpedia, *available at* https://ballotpedia.org/Mississippi_Supreme_Court_elections#2016; https://ballotpedia.org/Mississippi_Supreme_Court_elections#2018; https://ballotpedia.org/Mississippi_Supreme_Court_elections#2020.

⁴⁶ See Mississippi Supreme Court website, <https://www.ms.gov/Agencies/mississippi-supreme-court> (“Each Supreme Court justice participates in deciding appeals from the entire state.”).

District 2.⁴⁷ Because at that time the districts had recently been redrawn, to the best of my recollection, the legislature did not consider proposals to redraw the Supreme Court district lines while I was in my legislative office.

31. In 1982, a constitutional amendment was passed to provide for redistricting of circuit and chancery court districts following each federal decennial census.⁴⁸ Although there is no statutory or constitutional requirement to redistrict Supreme Court districts, there was a general understanding among the legislators at the time that I served that the Supreme Court districts should also be redistricted following each decennial census, to account for population changes in the districts. It is thus surprising to me that the Supreme Court districts have remained unchanged since 1987.

B. Mississippi Supreme Court Elections

32. Supreme Court elections are held concurrently with regular federal elections for representatives of Congress, *i.e.*, on even numbered years, on the first Tuesday after the first Monday in November.⁴⁹ This is unlike most elections for statewide office in Mississippi, which are held in odd-numbered years.⁵⁰ The term of office of the winning candidate commences on the first Monday of January of the year in which the incumbent's term expires.⁵¹ As explained above

⁴⁷ See H.B. 552 (1987).

⁴⁸ See House Concurrent Resolution No. 23 (Nov. 2, 1982), reproduced in Inter-university Consortium for Political and Social Research, REFERENDA AND PRIMARY ELECTION MATERIALS [Computer file]. CPSR ed. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [producer and distributor], 1994, https://cdn.ballotpedia.org/images/1/1b/Referenda_Elections_for_Mississippi_1968-1990.pdf, at p.24. Note that this amendment passed before the creation of the Mississippi Court of Appeals.

⁴⁹ Miss. Code § 23-15-991.

⁵⁰ Miss. Code § 23-15-193.

⁵¹ Miss. Code § 23-15-991.

(*see* paragraph 28), because Supreme Court Justices serve for staggered eight year terms, not all Supreme Court Justices are up for election at once.

33. All voters from the relevant Supreme Court district, regardless of party affiliation, may vote for Supreme Court Justices.⁵² The names of all qualifying Supreme Court candidates for any given seat will be placed on the ballot for electors in the relevant Supreme Court district.⁵³ The candidate names are listed on a separate portion of the ballot in alphabetical order, with no reference to any party affiliation.⁵⁴ If a candidate receives an absolute majority of the votes, that candidate wins the seat outright, but if no candidate receives a majority of the votes (*i.e.*, 50% + 1), then the two candidates receiving the highest number of votes proceed to a runoff election held a few weeks later.⁵⁵

34. Because elections for Supreme Court Justice positions are non-partisan, there are no primaries. Primary elections for the two main political parties often have the effect of narrowing the field to two credible candidates. The absence of such a primary process creates the possibility that more than two candidates will be on the ballot at any one time without the signaling provided by party affiliation in partisan elections as to which candidates have a realistic possibility of success. This, in turn, increases the chances that when more than two candidates are on the ballot, no candidate will achieve an absolute majority of votes in the general election, necessitating a runoff.

35. Turnout for Supreme Court general elections is dependent on turnout for other races held on the same date, particularly federal Presidential or Congressional elections, though voters

⁵² Miss. Code § 23-15-985.

⁵³ Miss. Code §§ 23-15-981, 23-15-993.

⁵⁴ Miss. Code §§ 23-15-978, 23-15-979.

⁵⁵ Miss. Code § 23-15-981.

might vote for the “top of the ticket” race (such as the Presidential race) and not vote for Supreme Court Justice. Turnout at runoff elections for Supreme Court positions is typically very low. Such elections are held on weekdays, making it potentially difficult for voters with work or childcare obligations to participate. Runoff elections are also held less than a month after the general election, which makes it even less likely that voters will be motivated to return to the polls.⁵⁶

36. For example, when I was elected to the Supreme Court in 2000, three candidates were on the ballot. I won a plurality with 39% of the votes in the November 7, 2000 general election; one of my opponents, then-Circuit Judge Keith Starrett, came in second place with 31%.⁵⁷ This led to a runoff election held on Tuesday, November 21, 2000. Only about a third of the voters who turned out for the November 7, 2000 general election cast ballots in the runoff election.⁵⁸ As another, more recent example of this phenomenon, in 2016, now-Justice Robert Chamberlin won 31.17% of the votes in the general election held on November 8, 2016 for the District 3, Place 1 seat while the candidate with the second-most votes, John Brady, won 29.15% of the vote.⁵⁹ This led to a runoff election on Tuesday, November 29, 2016 in which Justice Chamberlin prevailed.⁶⁰ While 330,845 voters cast ballots in the general election for that Supreme Court seat, only 36,586 voters cast ballots in the runoff election.⁶¹

⁵⁶ *Id.*

⁵⁷ “Justice Runoff Set Today: Circuit Judge Challenges Incumbent Oliver Diaz,” *The Commercial Appeal* (Memphis, TN) (Nov. 21, 2000) (available on Lexis).

⁵⁸ “Miss. justice wins controversial race,” *The Advocate* (Nov. 23, 2000) (available on Lexis).

⁵⁹ Mississippi Supreme Court elections, 2016, Ballotpedia, *available at* https://ballotpedia.org/Mississippi_Supreme_Court_elections_2016.

⁶⁰ *Id.*

⁶¹ *Id.*

C. Running For Election

37. A candidate for a Supreme Court seat must be a qualified elector at least 30 years of age who resides in the Supreme Court district in which the candidate seeks election and has been a practicing attorney and citizen of Mississippi for at least five years immediately preceding the election.⁶² Any eligible attorney who wishes to run for a Supreme Court seat may become a candidate by (i) filing a “Qualifying Statement of Intent” form with the State Board of Election Commissioners by February 1 of the year in which the general election will be held (or the first business day after February 1 if that date falls on a weekend or legal holiday); (ii) paying a \$200 candidacy fee; and (iii) signing an “Affidavit of Judicial Candidate” form attesting that the candidate will abide by all laws, canons and regulations applicable to judicial elections.⁶³ The candidate must identify both the Supreme Court district and the position number of the seat in which the candidate wishes to run.⁶⁴

38. Since 1994, elections for Supreme Court Justice positions are non-partisan.⁶⁵ I was a member of the legislature that passed the bill changing the electoral process from partisan to non-partisan, and I voted in favor of the bill. My recollection is that this was a good-government initiative aimed at removing party politics from judicial elections, in keeping with the principle that judges should be independent and above party politics. However, while I still strongly believe that non-partisan judicial elections are preferable to overtly partisan elections, I do not believe that

⁶² Miss. Const. art. VI, § 150.

⁶³ Miss. Code §§ 23-15-977, 23-15-977.1. A copy of the “Qualifying Statement of Intent” form is available at https://www.sos.ms.gov/content/documents/elections/candidate%20qualifying/Judicial%20Cand%20Qualifying%20Statement_Rev%209%202019.pdf. A copy of the “Affidavit of Judicial Candidate” form is available at https://www.sos.ms.gov/content/documents/elections/candidate%20qualifying/Affidavit%20of%20Judical%20Candidate_Rev%209%202019.pdf.

⁶⁴ Miss. Code § 23-15-993.

⁶⁵ Miss. Code § 23-15-976.

the goal of removing partisan politics from the judicial elections process was accomplished. Party politics continue to play a major role in judicial elections in general, and even more acutely in elections to the Supreme Court.

39. Because elections for the Mississippi Supreme Court are non-partisan, candidates and their political committees may not campaign on the basis of a party affiliation or align themselves with party-affiliated candidates who are running in any primary or general election.⁶⁶ Supreme Court candidates are also prohibited from holding leadership roles in a political organization, making speeches for a political organization, or publicly endorsing a candidate for public office.⁶⁷

40. Political parties may, however, participate in Supreme Court elections by supporting candidates. As the Supreme Court explained in a 2019 order revising the Code of Judicial Conduct, the provisions of Miss. Code § 23-15-976 that prohibit political parties from endorsing judicial candidates or fundraising for candidates were held unconstitutional in a case called *Mississippi Republican Party v. Musgrove*, No. 3:02-cv-1578-WS (S.D. Miss. Oct. 21, 2002). *See In re Code of Judicial Conduct*, 2019 Miss. LEXIS 422, at ¶4 (Miss. Dec. 12, 2019). As the Supreme Court explained, in that case United States District Judge Henry Wingate “ruled that political parties, just as any other citizen or association, have a constitutional right to participate in judicial elections, including the endorsement of judicial candidates.” *Id.*

41. In contested elections, parties, or leading State party figures, can and do endorse Supreme Court candidates. For example, in the 2016 race for the District 1, Place 3 seat, between

⁶⁶ Miss. Code § 23-15-973.

⁶⁷ Miss. Code of Judicial Conduct, Canon 5A(1). Candidates for Supreme Court may, however, attend or speak at political gatherings in their personal capacity. *See* Miss. Code of Judicial Conduct, Commentary to Canon 5C (“Attending or speaking at a political party gathering in the judge’s own behalf while a candidate does not constitute alignments or affiliation with the party sponsoring the gathering.”).

incumbent Justice Jim Kitchens and challenger Kenny Griffis, then a judge on the Court of Appeals, the *Clarion-Ledger* reported:

Although judicial races are nonpartisan, Republicans Gov. Phil Bryant and Lt. Gov. Tate Reeves are apparently supporting Griffis. A notice was sent out about a fundraiser in April hosted by Bryant. Then in May, a reception was held for Griffis listing Reeves as the special guest. Bryant spokesman Knox Graham said last week Bryant is indeed supporting Griffis. Reeves' spokeswoman Laura Hipp said Reeves being at the event speaks for itself.⁶⁸

The same article later quotes Kitchens' campaign spokeswoman Pam Johnson as stating "it would be impractical to think that partisan politics can be avoided in any election."⁶⁹ (Note that Justice Kitchens prevailed in the 2016 election for the District 1, Place 3 seat, and then-Judge Griffis was appointed to the District 1, Place 1 seat on the Supreme Court by Governor Bryant on February 1, 2019.⁷⁰)

42. Similarly, in the 2020 race for the District 1, Place 1 seat between incumbent Justice Griffis and challenger Latrice Westbrooks, a judge on the Court of Appeals, *Mississippi Today* reported that "[a]lthough Mississippi Supreme Court races are nonpartisan, Griffis has been endorsed by the state Republican Party, and Westbrooks has the support of numerous Democratic state leaders and groups."⁷¹

⁶⁸ Jimmie E. Gates, "State high court race takes political tone," *Clarion Ledger* (June 16, 2016), <https://www.clarionledger.com/story/news/2016/06/16/state-high-court-race-takes-political-tone/85925878/>.

⁶⁹ *Id.*

⁷⁰ Jimmie E. Gates, "Justice Jim Kitchens wins re-election," *Clarion Ledger* (Nov. 8, 2016), <https://www.clarionledger.com/story/news/2016/11/08/kitchens-and-griffis-close-battle/93442776/>; Kenny Griffis, University of Mississippi School of Law, <https://law.olemiss.edu/faculty-directory/kenny-griffis/#:~:text=Justice%20Kenny%20Griffis%20was%20appointed.tenure%20as%20its%20Chief%20Judge.>

⁷¹ Geoff Pender, "Kenny Griffis claims Supreme Court opponent Latrice Westbrooks voted illegally," *Mississippi Today* (Oct. 28, 2020), <https://mississippitoday.org/2020/10/28/kenny-griffis-claims-supreme-court-opponent-latrice-westbrooks-voted-illegally/>.

43. Another example of how partisan affiliates can be conveyed in non-partisan elections is the below newspaper advertisement, published on November 2, 2000 in *The Conservative*, a newspaper from Carrollton, Mississippi, in connection with that year's race between incumbent Chief Justice Lenore Prather and challenger Charles Easley. As can be seen below, the advertisement—paid for by Easley's campaign—highlights claimed distinctions between the two candidates. The first identified distinction is that Easley is "conservative" while Prather is "liberal." Mr. Easley then goes on to present himself as a tough-on-crime prosecutor, contrasting this with Prather having "[v]oted to reverse and/or remand "over 400 criminal convictions," "over 100 murder convictions," and "Death Penalty cases." Mr. Easley won the election with 51.9% of the vote.

[remainder of page left blank; see image on following page]

\$480,000.00

has been dumped into the supreme court election campaigns of Lenore Prather and three others in an attempt to buy the supreme court judicial elections by special interest groups. If you believe the Supreme Court should not be for sale then vote for

Charles "Chuck" Easley Supreme Court

Your next Supreme Court Judge will serve a term of eight years.
Please know the differences between the candidates:
More details on the reversal voting record of Lenore Prather are available on Internet at www.easleyforsupremecourt.com

<h3 style="margin: 0;">Chuck Easley</h3> <ul style="list-style-type: none"> • Conservative • 51 years old • Served as an Assistant District Attorney with a conviction rate of over 90% • Never lost a murder case as an Assistant District Attorney • Graduate of National District Attorney's College 	<h3 style="margin: 0;">and Lenore Prather</h3> <ul style="list-style-type: none"> • Liberal • 80 years old • Voted to reverse and/or remand over 400 criminal convictions • Voted to reverse and/or remand over 100 murder convictions • Voted to reverse and/or remand Death Penalty cases
--	--

Charles "Chuck" Easley

<ul style="list-style-type: none"> • Married to Pamela Robinson Easley. Chuck and Pam have three children, Chris, Lindsey, and Ali Marie. • Member of Kololo Springs Baptist Church, Caledonia. • Judge for Town of Caledonia and formerly served as Prosecutor for Town of Caledonia. • Former Assistant District Attorney with over 90% conviction record, who never lost a murder case. • Graduate of University of Mississippi; Bachelor of Business Administration; Juris Doctor (Law Degree) • Served on Board of Directors of the Big Brothers & Big Sisters • Farmer and Rancher • Graduate of Mississippi State University; Master's of Business Administration 	<ul style="list-style-type: none"> • Graduate of National District Attorney's College. (Current Prosecutor's Course) • Mason and Shriner • Member of NRA • Served as Guardian for Youth Court • Lowndes County Commitment Attorney • Mississippi Trial Lawyers Association • American Trial Lawyers Association • American Bar Association • Lowndes County Bar Association • Served on Board of Directors of the Mississippi Prosecutor's Association • Served on Board of Directors of American Cancer Society
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Elect Charles "Chuck" Easley

(Submitted, approved & paid for by Charles "Chuck" Easley)

44. Lawyers and judges also play a major role in identifying and electing qualified candidates for the Supreme Court.⁷² Candidates spend a great deal of time cultivating support

⁷² See, e.g., Miss. Code of Judicial Conduct, Commentary to Canon 2B ("Judges may participate in the process of judicial selection by cooperating with appointing authorities and screening committees seeking names for consideration, and by responding to official inquiries concerning a person being considered for a judgeship.").

among the members of the bar. In fact, one of the ways that Supreme Court candidates may campaign is through addresses to jury pools at the circuit court.⁷³

D. Rules Governing Supreme Court Campaigns

45. A Supreme Court candidate's campaign committee may "conduct campaigns for the candidate through media advertisements, brochures, mailings, candidate forums and other means not prohibited by law."⁷⁴ Any materials distributed by a candidate or the candidate's campaign committee must state that these materials are being distributed with the candidate's approval; and conspicuously identify who prepared and is distributing the material.⁷⁵

46. During a campaign, a Supreme Court candidate may not "make statements that commit or appear to commit the candidate with respect to cases, controversies or issues that are likely to come before the court."⁷⁶ While the rules prohibit a candidate from "making pledges or promises to decide cases in any particular way," a candidate may use phrases that indicate a general view on categories of cases (*e.g.*, "tough on crime" or "pro-business").⁷⁷ A candidate may also "respond to personal attacks or attacks on the candidate's record," subject to the restrictions of Judicial Canon 5A(3)(d) (described above).⁷⁸ A candidate is also prohibited from "knowingly

⁷³ See Miss. Code § 23-15-973 ("It shall be the duty of the judges of the circuit court to give a reasonable time and opportunity to the candidates for the office of judge of the Supreme Court, judges of the Court of Appeals, circuit judge and chancellor to address the people during court terms.").

⁷⁴ Miss. Code of Judicial Conduct, Canon 5C(2).

⁷⁵ Miss. Code § 23-15-1025; *see also* Miss. Sec'y of State, Presentation on 2020 Mississippi Judicial Elections, at 37, <https://courts.ms.gov/commissions/JCI/2020%20Judicial%20Presentation.PPTX>.

⁷⁶ Miss. Code of Judicial Conduct, Canon 5A (3)(d)(ii).

⁷⁷ Miss. Code of Judicial Conduct, Commentary to Canon 5-A (3)(d).

⁷⁸ Miss. Code of Judicial Conduct, Canon 5A (3)(e).

misrepresent[ing] the identity, qualifications, present position or other fact concerning the candidate or an opponent.”⁷⁹

47. Over the past few decades, the costs of running a Supreme Court campaign have skyrocketed. In the early 1990s, the winning candidate might have spent somewhere in the order of \$25,000 on a successful election campaign. When I ran in 2000, my campaign cost approximately a million dollars. Since then, costs have continued to rise, in part due to the influx of spending by outside interest groups. Such outside spending has become even more prevalent after the U.S. Supreme Court’s decision in *Citizens United v. Federal Election Commission*, 558 U.S. 310 (2010), which removed limitations on corporate funding of independent political communications.

48. Under Mississippi law, Supreme Court candidates may not “personally solicit or accept campaign contributions.”⁸⁰ A candidate may, however, create campaign committees to “solicit and accept reasonable campaign contributions, manage the expenditure of funds for the candidate’s campaign and obtain public statements of support for the candidacy.”⁸¹ The committees are specifically authorized to “solicit[] and accept[] reasonable campaign contributions from lawyers.”⁸² The committee may seek campaign contributions beginning from the date the individual qualifies as a candidate until 120 days after the last election in which the

⁷⁹ Miss. Code of Judicial Conduct, Canon 5A (3)(d)(iii).

⁸⁰ Miss. Code of Judicial Conduct, Canon 5B (2).

⁸¹ *Id.*

⁸² *Id.*

candidate participates during the calendar year.⁸³ Campaign contributions may not be used for the private benefit of the candidate or any other person.⁸⁴

49. No individual or political action committee not affiliated with a political party may donate, directly or indirectly, more than \$5,000 to a Supreme Court candidate's campaign.⁸⁵ No corporation may contribute more than \$1,000 to a Supreme Court candidate's campaign.⁸⁶

50. Strict reporting requirements apply to judicial candidates and campaign committees. Both a Supreme Court candidate and the candidate's campaign committees must file reports of contributions and disbursements until such time as they submit a final report attesting that contributions will no longer be received, disbursements will no longer be made, and that there are no outstanding debts or obligations.⁸⁷ The reports must also identify each person, political committee or entity who makes a contribution or receives a payment totaling \$200 or more in the calendar year, as well as the total amount of all contributions, the total amount of all expenditures, and the total amount of cash on hand.⁸⁸

51. Supreme Court candidates must disclose the identity of any person or entity from which the candidate or the candidate's campaign committee receives a loan or extension of credit, as well as any cosigners of the loan or extension of credit.⁸⁹ The candidate or the candidate's

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ Miss. Code Ann. § 23-15-1021; *see also* Miss. Sec'y of State, Presentation on 2020 Mississippi Judicial Elections, at 7, <https://courts.ms.gov/commissions/JCI/2020%20Judicial%20Presentation.PPTX>.

⁸⁶ Miss. Code § 97-13-15; *see also* Miss. Sec'y of State, Presentation on 2020 Mississippi Judicial Elections, at 7, <https://courts.ms.gov/commissions/JCI/2020%20Judicial%20Presentation.PPTX>.

⁸⁷ Miss. Code §§ 23-15-807(a), 23-15-805(a).

⁸⁸ Miss. Code § 23-15-807(d); *see also* Miss. Sec'y of State, Presentation on 2020 Mississippi Judicial Elections, at 12, <https://courts.ms.gov/commissions/JCI/2020%20Judicial%20Presentation.PPTX>.

⁸⁹ Miss. Code § 23-15-1023.

campaign committee must disclose how the loan or extension of credit was used, how and when the loan or extension credit will be repaid, and the method of repayment.⁹⁰ In addition, the candidate or the candidate's campaign committee must disclose all loan documents related to such loans or extensions of credit.⁹¹

52. Any entity or individual who contributes more than \$2,000 to a Supreme Court Justice's most recent election campaign is considered a "major donor" under the Mississippi Code of Judicial Conduct.⁹² For purposes of determining who is a major donor, contributions include "all contributions of every kind and type whatsoever, whether in the form of cash, goods, services, or other form of contribution, and whether donated directly to the judge's campaign or donated to any other person or entity for the purpose of supporting the judge's campaign and/or opposing the campaign of the judge's opponent(s);" as well as "any publication, advertisement or other release of information, or payment therefor, other than a bona fide news item published by existing news media, which contains favorable information about the judge or . . . unfavorable information about the judge's opponent(s)."⁹³ A party to a litigation pending before the Court may file a motion to recuse a Justice if a major donor is an opposing party or counsel of record for an opposing party in the case.⁹⁴

E. Involvement of Interest Groups in Supreme Court Elections

53. Mississippi has a law in place that attempts to limit the involvement of interest groups in judicial campaigns by regulating any "independent expenditure," defined as "an

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² Miss. Code of Judicial Conduct, Terminology.

⁹³ *Id.*

⁹⁴ Miss. Code of Judicial Conduct, Canon 3E (2).

expenditure by a person expressly advocating the election or defeat of a clearly identified candidate that is made without cooperation or consultation with any candidate or any authorized committee or agent of the candidate, and that is not made in concert with or at the request or suggestion of any candidate or any authorized committee or agent of the candidate.”⁹⁵ Specifically, the law requires that every person or entity, other than a political committee, who makes “independent expenditures” of \$200 or more during a calendar year must file a statement indicating the name of the contributor and “[i]nformation indicating whether the independent expenditure is in support of, or in opposition to, the candidate involved”; as well as a certification made under penalty of perjury attesting to whether the expenditure was made in cooperation or consultation with, or at the request or suggestion of, the candidate.⁹⁶

54. These laws were put to the test during my 2000 election for a Supreme Court seat. The United States Chamber of Commerce aired a series of commercials favorable to my opponent, Keith Starrett. In particular, the commercials emphasized my opponent’s views on the rights of victims of crimes. The U.S. District Court for the Southern District of Mississippi held that these commercials constituted “independent expenditures” for the purposes of Mississippi’s campaign finance laws.⁹⁷ However, the Fifth Circuit reversed and held that the commercials did not constitute “express advocacy” within the meaning of the definition of “independent expenditures” because the commercials did “not contain explicit words exhorting viewers to take specific electoral action for or against the featured candidates.”⁹⁸ The Fifth Circuit held that “a state may

⁹⁵ Miss. Code § 23-15-801.

⁹⁶ Miss. Code § 23-15-809.

⁹⁷ *Chamber of Commerce of the United States v. Moore*, 191 F. Supp. 2d 747 (S.D. Miss. 2000).

⁹⁸ *Chamber of Commerce of the United States v. Moore*, 288 F.3d 187, 198 (5th Cir. 2002).

regulate a political advertisement only if the advertisement advocates *in express terms* the election or defeat of a candidate.”⁹⁹

55. Since the Fifth Circuit’s decision, there have been no limits on the amount of money that interest groups may spend to influence Supreme Court elections, provided those groups are careful to avoid expressly advocating for the election or defeat of any given candidate.

56. The advertisements at issue in that lawsuit are illustrative of the tactics of outside interest groups. The Chamber of Commerce represents business interests, and was motivated to support judges who were viewed as having broadly pro-defendant views in civil cases. Particularly in the 1990s and 2000s, Mississippi was a site of conflict between business groups and the plaintiffs’ bar, following the success of certain high-profile plaintiffs’ attorneys in litigation against asbestos and tobacco companies, and in light of the then-prominent national “tort reform” movement promoted by business interests. However, because of the relative lower salience of civil law issues to the general public, advertisements funded by interest groups typically focused on criminal law issues. For instance, the court described the Chamber of Commerce-funded advertisement in favor of my opponent as follows:

Exhibit C begins with the narration, “Keith Starrett — a common sense Justice.” As pictures of Judge Starrett appear on the screen, followed by scenes of school children and scenes of citizens going about their daily routines, the narrator says that Keith Starrett formed the first drug court in Mississippi, and that Starrett’s drug court saved taxpayers over one half million dollars in the first year. Then, as the words “Baptist Deacon” and “Victim’s Rights Count” appear on the screen, the narration states, “a Baptist Deacon who once headed South Mississippi Child Protection, Starrett knows victims have as much a right to justice as defendants do.” The narration closes with, “Judge Keith Starrett — he knows victims rights count!”¹⁰⁰

⁹⁹ *Id.* at 190.

¹⁰⁰ *Chamber of Commerce of U.S. v. Moore*, 191 F. Supp. 2d 747, 751-52 (S.D. Miss. 2000).

57. Another Chamber-funded advertisement at issue in that case favored Chief Justice Prather, whose opponent, Charles Easley, was a plaintiffs' personal injury lawyer. The court's description of that advertisement is set forth below:

Exhibit B begins with the photograph of a gavel and a picture of Chief Justice Lenore Prather slowly materializes in the background. The narration states, "Lenore Prather — Chief Justice of Mississippi's Supreme Court; Lenore Prather — using common sense principles to uphold the law; Lenore Prather — putting victims rights ahead of criminals and protecting our Supreme Court from the influence of special interests." As the narration proceeds, the words "Chief Justice," "Common Sense," and "Victims Rights" appear on the screen. The narrator then states that Lenore Prather was the first woman appointed to the Mississippi Supreme Court, and that she has thirty-five years of experience.¹⁰¹

58. As can be seen in comparing this advertisement to the newspaper advertisement from Prather's opponent Charles Easley, both focus on criminal law issues and both present the favored candidate as "tough on crime."

59. Outside interest groups offer an easy mechanism for individuals and entities to influence campaigns without being subject to the legal limits on direct campaign contributions. Instead of donating to a Supreme Court candidate's campaign committee, an individual or entity may simply donate to, or create, an interest group that is willing to run advertisements that influence voters to choose the desired candidate, without explicitly instructing the voters to do so. In my view, such spending by interest groups is one of the most significant factors impacting state Supreme Court elections.

60. As a general rule, Supreme Court candidates themselves do not run overtly negative campaigns, in keeping with the ideal that judges are not partisans and will evaluate matters fairly and not based on partisan biases. Negative campaigning is typically left to outside groups, who

¹⁰¹ *Id.* at 751.

can highlight perceived weaknesses in the records of the candidates they oppose, without requiring the candidate they support to engage in attacks on their opponents. As can be seen from the advertisements presented above, crime and public safety issues are typically the primary focus of Supreme Court campaigns—even though the Court typically resolves more civil than criminal cases on the merits.¹⁰² Negative campaigns typically cherry-pick the records of the opposing candidates to find examples of pro-defendant opinions or dissents joined or authored by the candidate, and argue based on these examples that the candidate represents a danger to public safety or is out of step with Mississippi values.

61. For instance, in my 2008 campaign for reelection, an outside interest group called “Law Enforcement Alliance of America” ran an ad that accused me of “voting for” convicted killers and rapists. This ad was denounced by Mississippi’s Special committee on Judicial Election Campaign Intervention, and as a result, some but not all television stations stopped running it.¹⁰³ The storyboard for this ad, as documented by the Brennan Center, is reproduced below.¹⁰⁴

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¹⁰² See, e.g., Supreme Court of Mississippi, 2021 Annual Report at 3 (“Of the 109 appeals decided on the merits, 82 (75.2 percent) were civil, and 27 (24.8 percent) were criminal.”), *available at* <https://courts.ms.gov/research/reports/SCTAnnRep2021.pdf>; Supreme Court of Mississippi, 2007 Annual Report at 13 (“Of those [cases] decided on the merits, 141 (66%) were civil, and 47 (21%) were criminal.”), *available at* <https://courts.ms.gov/research/reports/SCTAnnRep2007.pdf>; Supreme Court of Mississippi, 2000 Annual Report at 1 (“Of the cases disposed of on the merits, 222 (or 79%) were civil and 60 (or 21%) were criminal.”), *available at* <https://courts.ms.gov/research/reports/SCTAnnRep2000.pdf>.

¹⁰³ Brennan Center for Justice, *Buying Time 2008: Mississippi*, <https://www.brennancenter.org/our-work/research-reports/buying-time-2008-mississippi>.

¹⁰⁴ Brennan Center for Justice, *Buying Time 2008: Mississippi – Advertisements: LEAA Diaz Protect Our Families*, https://www.brennancenter.org/sites/default/files/analysis/Buying_Time/10-21-08%20STSUPCT_MS_LEAA_DIAZ_PROTECT_OUR_FAMILIES.pdf



62. I believe that Black candidates for the Supreme Court are targets of subtle racial appeals to white voters in a number of different ways. First, in my opinion, voting in Mississippi is extremely polarized along racial lines. White candidates are generally understood to be associated with the Republican party, and Black candidates with the Democratic party, and, as discussed above, even though Supreme Court elections are non-partisan, parties and party leaders can and do endorse particular candidates.

63. Second, while campaigns around criminal law and public safety issues are pervasive, “tough on crime” messaging can also have a racial component. White candidates, and









outside groups supporting them, can appeal to the preexisting prejudices of white voters that connect concerns over crime with stereotypes about Black Mississippians and Black-majority areas of the state. So, too, can messaging that a white candidate is “one of us” or supports “traditional Mississippi values.” For example, in the 2004 race against incumbent Justice James Graves, the third Black Mississippian appointed to the Court, Justice Graves’ opponent ran advertisements focused on the phrase “one of us.” One such ad, presented below, stated that “In the race for Supreme Court, Central District, only one candidate stands for traditional Mississippi values.”¹⁰⁵ Another reiterated that “[a]t a time when our civil liberties and traditional values are under attack, we need Samac Richardson on the State Supreme Court. He’s one of us.”¹⁰⁶ Notably, the three-judge panel in *Jordan v. Winter*, 604 F. Supp. 807 (N.D. Miss. 1984), found that an earlier instance of such “one of us” messaging, made in a congressional campaign by a white candidate opposing a Black candidate, amounted to a “racial campaign tactic[]” that “support[ed] the conclusion that Mississippi voters are urged to cast their ballots according to race.”¹⁰⁷

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¹⁰⁵ Brennan Center for Justice, https://www.brennancenter.org/sites/default/files/legacy/d/STSUPCT_MS_RICHARDSON_ONE_OF_US_.pdf

¹⁰⁶ Brennan Center for Justice, https://www.brennancenter.org/sites/default/files/legacy/d/STSUPCT_MS_FRICHARDSON_ONE_FOUS_2.pdf

¹⁰⁷ *Jordan v. Winter*, 604 F. Supp. 807, 813 & n.8 (N.D. Miss. 1984).

 <p>[Announcer]: In the race for Supreme Court, Central District, only one candidate stands for traditional</p>	 <p>Mississippi values. [Richardson]: "I'm Judge Samac Richardson and I'm running for the State</p>	 <p>Supreme Court." [crowd cheers] [Richardson]: "If you think the words 'under God' belong in our</p>
 <p>Pledge of Allegiance, then you are one of us." [crowd cheers] [Richardson]: "If you are concerned about</p>	 <p>the image and integrity of our Supreme Court, then you are one of us." [crowd cheering]</p>	 <p>[Richardson]: "If you think the rights of victims are just as important as the rights of defendants,</p>
 <p>then you are one of us." [crowd cheers] [Richardson]: "I need your vote November the 2nd."</p>	 <p>[PFB]: Committee to Elect Samac Richardson</p>	

64. Third, white candidates and outside groups supporting them can also make subtle racial appeals through the use of advertisements that feature photographs of their Black opponents. For example, I reviewed a report submitted by former Justice Fred Banks in another redistricting case.¹⁰⁸ In that report, Justice Banks stated that when he ran for election after having been appointed to the Supreme Court, his opponent, "who is white, put out campaign posters in predominantly white areas prominently featuring a photograph of me, showing that I was African American, because my literature did not indicate the race of either candidate." Justice Banks also

¹⁰⁸ Report of Fred L. Banks, *Thomas v. Bryant*, No. 3:18-cv-00441, ECF No. 81-9 (S.D. Miss. Feb. 28, 2019).

noted that when he ran for reelection in 1996, his white opponent's television advertisements also included such photographs.

65. A copy of the advertisement referenced by Justice Banks is reproduced below.¹⁰⁹ The court in the *Magnolia Bar* case concluded based on this advertisement, and others like it, "that subtle and overt racial appeals have characterized some Supreme Court elections and other judicial elections in Mississippi," although it ultimately gave less weight to this finding based on other evidence presented in that case.¹¹⁰

Fred Banks

**EXERCISE YOUR CONSTITUTIONAL
RIGHT TO VOTE ON THE
MISSISSIPPI
SUPREME COURT
JUDGE DILLARD HAS
THE EXPERIENCE**

**Judge W.O.
"Chet" Dillard**

Tough by Education
USM '53, UM School of Law '60, National Judicial College '88

Tough by Military
Marine PLCs, Navy OCS, Navy Pilot in Newfoundland

Tough as Prosecutor
City of Laurel Prosecutor '63, Jones County District Attorney '64-'68

Tough in Law Enforcement
Commissioner of Public Safety '72-'76. Handled Parchman Riots. Built Crime Lab. Commissioned First Black Officers on Highway Patrol.

Tough in Court
Assistant Attorney General '84-'87. Tried Public Officials & Recovered State Funds

Tough as Judge
Released Jackson Jail Breaching Video - Jailed Numerous Parties for Failure to Pay Child Support as Chancellor from January 1988 to Present

IT'S TIME TO GET TOUGH ON CRIME !

Paid for by Committee to Elect W.O. "Chet" Dillard, P.O. Box 123, Jackson, MS 39205

¹⁰⁹ JACKSON CLARION-LEDGER, Oct. 29, 1991, at 6A; Carole Lawes, *Banks' Supporters Blast Court Race Opponent's Ad*, JACKSON CLARION-LEDGER, Oct. 30, 1991, at 13

¹¹⁰ *Magnolia Bar Ass'n, Inc. Lee*, 793 F. Supp. 1386, 1410 (S.D. Miss. 1992).

VI. GUBERNATORIAL APPOINTMENTS

66. If a Supreme Court Justice seat becomes vacant for any reason, such as through the retirement of a sitting Justice, the Governor may appoint a qualified individual to fill the seat.¹¹¹ If less than half the term remains, the Governor's appointee shall serve until the expiration of the term.¹¹² If half or more of the term remains, the Governor's appointee shall serve until the next regular election for state officers or for representatives in Congress occurring more than nine months after the vacancy to be filled occurred.¹¹³ The term of office of the Justice elected to fill a Supreme Court vacancy begins on the first Monday in January following the election.¹¹⁴

67. Prospective candidates for appointment to a vacant Supreme Court seat may not solicit or accept funds, either personally or through a committee, to support their appointment;¹¹⁵ or engage in any political activity to secure the appointment.¹¹⁶ However, a candidate may (i) communicate with any person from the Governor's Office who is involved in the selection process or any selection or nominating committee regarding the candidate's interest in the position and qualifications for the role; and (ii) seek the support or endorsement of individuals or organizations that make recommendations for Supreme Court appointments.¹¹⁷

68. The appointment process takes place largely outside of the public view. Governors have complete discretion in deciding whom to nominate for an open seat on the Court, and there

¹¹¹ Miss. Code § 9-1-103; *see also* Miss. Code § 9-1-101(a); Miss. Code § 23-15-849(2).

¹¹² Miss. Code § 23-15-849(2).

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ Miss. Code of Judicial Conduct, Canon 5B (1).

¹¹⁶ Miss. Code of Judicial Conduct, Canon 5B (2).

¹¹⁷ Miss. Code of Judicial Conduct, Canon 5B (2).

is no constitutionally or statutorily-mandated selection committee or process.¹¹⁸ To the extent that Governors might play a role in encouraging Justices to step down to create vacancies that can be filled by appointments, any such conversations would be completely private and off the record.

69. I was appointed to the Court by Governor Ronnie Musgrove in 2000, following the unexpected death of Justice Michael Sullivan, who served in the District 2, Place 2 seat. I was serving as an appellate judge on the Court of Appeals at the time. Given my judicial experience, a number of the Governor's supporters recommended that the Governor appoint me to the seat. I had known the Governor for a number of years, and we had served together in the State Legislature. He knew me well and was comfortable with me. Prior to the appointment, someone from the Governor's Office contacted me to ask if I would accept the appointment if it were offered. Shortly after that conversation, I was appointed to the Court.

70. Since 1985, Governors have historically appointed Black candidates to serve in the District 1, Place 2 seat. In 1985, Governor Bill Allain appointed Reuben Anderson, who is Black, to fill a vacancy in the District 1, Place 2 seat.¹¹⁹ Justice Anderson subsequently won a special election in 1986, and ran unopposed in 1988. In 1990, when Justice Anderson resigned, Governor Ray Mabus appointed Fred Banks, who is Black, to replace him. Justice Banks won a contested Special Election in 1991; and won reelection in 1996. In 2001, Justice Banks resigned. Governor Ronnie Musgrove appointed James Graves, who is Black, to take his seat. He was elected for a full term in 2004 after winning a contested runoff election. Justice Graves resigned in 2010 to take a position as a judge on the U.S. Court of Appeals for the Fifth Circuit.¹²⁰ Governor Haley Barbour

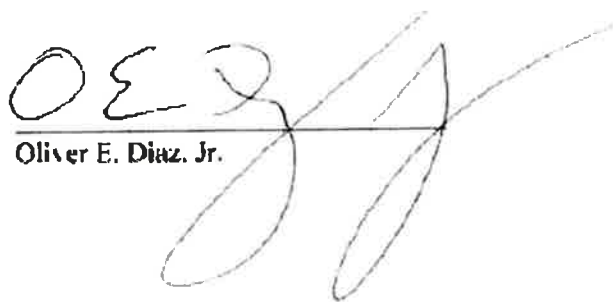
¹¹⁸ Judicial Selection in Mississippi (2022), https://ballotpedia.org/Judicial_selection_in_Mississippi.

¹¹⁹ Robert McDuff, *The Voting Rights Act and Mississippi 1956-2006*, <http://www.protectcivilrights.org/pdf/voting/MississippiVRA.pdf>.

¹²⁰ *Id.*

appointed Leslie King, who is Black, to take his seat. Justice King has twice been reelected without opposition, and he remains on the Court.¹²¹

71. These gubernatorial appointments have ensured that, since 1985, there is always a Black Justice on the Court. Once appointed, that Justice has an incumbency advantage in future elections, including strong name recognition among the members of the Bar, and automatic credibility from the Justice's position on the bench. Given the racial polarization of Mississippi voters and the lack of a majority-minority district under the district lines as currently drawn, an incumbent Black Justice is far more likely to be reelected to the seat than a similarly-credentialed Black attorney who does not have experience on the Court.


Oliver E. Diaz, Jr.

¹²¹ Ward Schaefer, "Barbour Taps Leslie King for Supreme Court", Jackson Free Press (Feb. 24, 2011), <https://www.jacksonfreepress.com/news/2011/feb/24/barbour-taps-leslie-king-for-supreme-court/>.

APPENDIX A

OLIVER E. DIAZ, JR.



EDUCATION

LL.M. University of Virginia School of law	2004
J.D. University of Mississippi School of Law	1985
B.A. University of South Alabama	1982
A.A. Mississippi Gulf Coast Junior College	1979

WORK EXPERIENCE

Licensed attorney in private practice	1985 – 1995; 2009 - present
Special Master Federal Court, Washington, D.C.	2012 - present
Mississippi Supreme Court Justice (Elected)	2001 - 2009
Mississippi Supreme Court Justice (Appointed)	2000 - 2001
Mississippi Court of Appeals Judge (Elected)	1995 - 2000
Mississippi House of Representatives (Elected)	1987 - 1995
City Attorney, D'Iberville, Mississippi	1990 - 1995

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I have authored approximately 337 opinions which have been published in the Southern Reporter. The opinions were published between 1997 and 2009 on various issues of law and ethics. Of those, approximately 231 are majority opinions, 93 are dissenting opinions, and 13 are concurring opinions. Notable opinions include:

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WILG "Esther S. Weissman Eternal Optimism" Award	2012
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APPENDIX B

Appendix B

Material Considered

Judicial Rulings

1. *Chamber of Commerce of the United States v. Moore*, 191 F. Supp. 2d 747 (S.D. Miss. 2000)
2. *Chamber of Commerce of the United States v. Moore*, 288 F.3d 187 (5th Cir. 2002)
3. *Citizens United v. Federal Election Commission*, 558 U.S. 310 (2010)
4. *In re Code of Judicial Conduct*, 2019 Miss. LEXIS 422 (Miss. Dec. 12, 2019)
5. *Jordan v. Winter*, 604 F. Supp. 807 (N.D. Miss. 1984)
6. *Magnolia Bar Ass'n, Inc. Lee*, 793 F. Supp. 1386 (S.D. Miss. 1992)

Statutes and Rules

1. H.B. 552 (1987)
2. House Concurrent Resolution No. 23 (Nov. 2, 1982), reproduced in Inter-university Consortium for Political and Social Research, *Referenda and Primary Election Materials* CPSR ed. Ann Arbor, MI: Inter-university Consortium for Political and Social Research (1994)
3. Mississippi Code (various provisions cited in footnotes)
4. Mississippi Code of Judicial Conduct (various provisions cited in footnotes)
5. Mississippi Constitution (various provisions cited in footnotes)
6. Mississippi Rules of Appellate Procedure (various provisions cited in footnotes)

State of Mississippi Online Resources

1. Mississippi Secretary of State, "Affidavit of Judicial Candidate", https://www.sos.ms.gov/content/documents/elections/candidate%20qualifying/Affidavit%20of%20Judicial%20Candidate_Rev%209%202019.pdf
2. Mississippi Secretary of State, Presentation on 2020 Mississippi Judicial Elections, <https://courts.ms.gov/commissions/JCI/2020%20Judicial%20Presentation.PPTX>
3. Mississippi Secretary of State, "Qualifying Statement of Intent", https://www.sos.ms.gov/content/documents/elections/candidate%20qualifying/Judicial%20Cand%20Qualifying%20Statement_Rev%209%202019.pdf
4. Mississippi Supreme Court website, <https://www.ms.gov/Agencies/mississippi-supreme-court>
5. Mississippi Supreme Court Docket Calendar, <https://courts.ms.gov/appellatecourts/sc/scdocketcalendar.php>
6. Supreme Court of Mississippi, 2021 Annual Report, *available at* <https://courts.ms.gov/research/reports/SCTAnnRep2021.pdf>
7. Supreme Court of Mississippi, 2007 Annual Report, *available at* <https://courts.ms.gov/research/reports/SCTAnnRep2007.pdf>

8. Supreme Court of Mississippi, 2000 Annual Report, *available at* <https://courts.ms.gov/research/reports/SCTAnnRep2000.pdf>

Court Filings

1. Report of Fred L. Banks, *Thomas v. Bryant*, No. 3:18-cv-00441, ECF No. 81-9 (S.D. Miss. Feb. 28, 2019)

News Articles

1. Carole Lawes, Banks' Supporters Blast Court Race Opponent's Ad, JACKSON CLARION-LEDGER, Oct. 30, 1991, at 13
2. Justice Runoff Set Today: Circuit Judge Challenges Incumbent Oliver Diaz, THE COMMERCIAL APPEAL (Memphis, TN) (Nov. 21, 2000)
3. Miss. justice wins controversial race, THE ADVOCATE (Nov. 23, 2000)
4. Ward Schaefer, Barbour Taps Leslie King for Supreme Court, JACKSON FREE PRESS (Feb. 24, 2011), *available at* <https://www.jacksonfreepress.com/news/2011/feb/24/barbour-taps-leslie-king-for-supreme-court/>
5. Jimmie E. Gates, State high court race takes political tone, JACKSON CLARION-LEDGER (June 16, 2016), *available at* <https://www.clarionledger.com/story/news/2016/06/16/state-high-court-race-takes-political-tone/85925878/>
6. Jimmie E. Gates, Justice Jim Kitchens wins re-election, CLARION-LEDGER (Nov. 8, 2016), *available at* <https://www.clarionledger.com/story/news/2016/11/08/kitchens-and-griffis-close-battle/93442776/>
7. Geoff Pender, Kenny Griffis claims Supreme Court opponent Latrice Westbrooks voted illegally, MISSISSIPPI TODAY (Oct. 28, 2020), *available at* <https://mississippitoday.org/2020/10/28/kenny-griffis-claims-supreme-court-opponent-latrice-westbrooks-voted-illegally/>

Campaign Advertisements

1. Newspaper advertisement, "Judge Dillard has the Experience," JACKSON CLARION-LEDGER, Oct. 29, 1991, at 6A.
2. Newspaper advertisement, "\$480,000.00," THE CONSERVATIVE, Nov. 2, 2000, at 7.
3. Television advertisement, "One of Us" (Oct. 2004), *available at* Brennan Center for Justice, https://www.brennancenter.org/sites/default/files/legacy/d/STSUPCT_MS_RICHARDSON_ONE_OF_US_.pdf
4. Television advertisement, Law Enforcement Association of America, "Diaz – Protect our Families" (Oct. 2008), *available at* Brennan Center for Justice, *Buying Time 2008: Mississippi*, https://www.brennancenter.org/sites/default/files/analysis/Buying_Time/10-21-08%20STSUPCT_MS_LEAA_DIAZ_PROTECT_OUR_FAMILIES.pdf

Other Sources

1. Brennan Center for Justice, *Buying Time 2008: Mississippi*, <https://www.brennancenter.org/our-work/research-reports/buying-time-2008-mississippi>
2. Robert McDuff, *The Voting Rights Act and Mississippi 1956-2006*, <http://www.protectcivilrights.org/pdf/voting/MississippiVRA.pdf>
3. Ballotpedia, *Judicial Selection in Mississippi* (2022), https://ballotpedia.org/Judicial_selection_in_Mississippi
4. Ballotpedia, *Mississippi Supreme Court elections*, available at https://ballotpedia.org/Mississippi_Supreme_Court_elections#2016; https://ballotpedia.org/Mississippi_Supreme_Court_elections#2018; https://ballotpedia.org/Mississippi_Supreme_Court_elections#2020
5. University of Mississippi School of Law, Kenny Griffis, <https://law.olemiss.edu/faculty-directory/kenny-griffis/#:~:text=Justice%20Kenny%20Griffis%20was%20appointed,tenure%20as%20its%20Chief%20Judge>

**UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF MISSISSIPPI
GREENVILLE DIVISION**

DYAMONE WHITE; DERRICK
SIMMONS; TY PINKINS; CONSTANCE
OLIVIA SLAUGHTER HARVEY-
BURWELL,

Plaintiffs,

vs.

STATE BOARD OF ELECTION
COMMISSIONERS; TATE REEVES *in his
official capacity as Governor of Mississippi;*
LYNN FITCH *in her official capacity as
Attorney General of Mississippi;* MICHAEL
WATSON *in his official capacity as
Secretary of State of Mississippi,*

Defendants.

4:22-cv-0062-SA-JMV

DECLARATION OF OLIVER E. DIAZ, JR.

I, Oliver E. Diaz, Jr., make the following declaration based on personal knowledge:

1. I have been retained by Plaintiffs in the above-captioned matter as an expert.
2. The foregoing report dated October 3, 2022 is a true and correct copy of the report

I provided to Plaintiffs in this matter.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true
and correct.

Oct. 3, 2022


OLIVER E. DIAZ, JR.

OLIVER E. DIAZ, JR.

EDUCATION

LL.M. University of Virginia School of law	2004
J.D. University of Mississippi School of Law	1985
B.A. University of South Alabama	1982
A.A. Mississippi Gulf Coast Junior College	1979

WORK EXPERIENCE

Licensed attorney in private practice	1985 – 1995; 2009 - present
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DYAMONE WHITE; DERRICK SIMMONS; TY PINKINS;
CONSTANCE OLIVIA SLAUGHTER HARVEY-
BURWELL,

4:22-cv-0062-SA-JMV

Plaintiffs,

vs.

STATE BOARD OF ELECTION COMMISSIONERS;
TATE REEVES *in his official capacity as Governor of
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Attorney General of Mississippi*; MICHAEL WATSON *in his
official capacity as Secretary of State of Mississippi,*

Defendants.

DECLARATION OF OLIVER E. DIAZ, JR.

I, Oliver E. Diaz, Jr., make the following declaration based on personal knowledge:

1. I have been retained by Plaintiffs in the above-captioned matter as an expert.
2. The foregoing report dated October 3, 2022 is a true and correct copy of the report I provided to Plaintiffs in this matter.
3. The information and opinions contained in the report are true and correct to the best of my knowledge.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Oct. 3, 2022


OLIVER E. DIAZ, JR.

Qualifications and Background

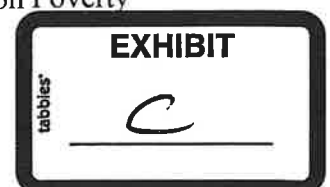
My name is Traci Burch. I am an Associate Professor of Political Science at Northwestern University and Research Professor at the American Bar Foundation. I received my Ph.D. in Government and Social Policy from Harvard University in 2007.

Over the past 15 years, I have led several large, long-term quantitative and qualitative research projects on political participation in the United States. I have participated in and coauthored several book chapters and articles that examine race, political participation, and inequality. For instance, I have worked with Professors Kay Schlozman, Sidney Verba, and Henry Brady on book chapters and articles related to the causes and consequences of inequality in political participation. I also collected data on congressional hearings and interest group activities for that book. For my coauthored article with Jennifer Hochschild and our book with Vesla Weaver, I analyzed the legislative history of several racial policies, including the 1965 Hart-Cellar Act. We also explore political participation and attitudes in our book as well.

I am widely regarded as an expert on political behavior, barriers to voting, and political participation. My work has been widely cited and replicated and has won several awards. In particular, my dissertation on the effects of felony disenfranchisement on voting in North Carolina, Georgia, and other states, "Punishment and Participation: How Criminal Convictions Threaten American Democracy" won the Robert Noxon Toppan Prize for the Best Dissertation on a Subject of Political Science at Harvard in 2007. I also achieved national recognition for this work; the dissertation was also awarded the E.E. Schattschneider Award from the American Political Science Association for the best dissertation in American Government, and the William Anderson Award for the best dissertation in federalism, intergovernmental relations, and state and local politics. Several articles from this dissertation, including work evaluating voting patterns among people with felony convictions in North Carolina, Georgia, Florida, Missouri, and Michigan, have been published in leading peer-reviewed journals.

In particular, my articles "Did Disfranchisement Laws Help Elect President Bush? New Evidence on the Turnout and Party Registration of Florida's Ex-Felons" and "Turnout and Party Registration among Criminal Offenders in the 2008 General Election," which appeared in the peer-reviewed journals *Law and Society Review* and *Political Behavior*, respectively, included my calculations of felony disenfranchisement. My academic book on the community-level effects of criminal convictions on political participation, *Trading Democracy for Justice*, was published by the University of Chicago Press and also won multiple national awards from the American Political Science Association and its sections, including the Ralph J. Bunche Award for the best scholarly work that explores the phenomenon of ethnic and cultural pluralism and best book awards from the law and politics and urban politics sections. *Trading Democracy for Justice*, as well as the articles "The Effects of Imprisonment and Community Supervision on Political Participation," "Did Disenfranchisement Laws Help Elect President Bush?" "Skin Color and the Criminal Justice System," and "Turnout and Party Registration among Criminal Offenders in the 2008 General Election" rely on the analysis of data from Georgia.

I have testified before the U.S. Commission on Civil Rights about the collateral consequences of felony convictions with respect to voting and other issues. I have received several grants for my work, including a grant from the Stanford University Center on Poverty



and Inequality. I also serve as co-Principal Investigator on a National Science Foundation grant that supports graduate and postdoctoral fellowships at the American Bar Foundation. I have served on Editorial Boards of leading journals including Political Behavior and Law and Social Inquiry. Currently, I am on the Board of Overseers for the General Social Survey, a longstanding national public opinion survey run by the National Opinion Research Center at the University of Chicago. I routinely review the work of my peers for tenure, scholarly journals, university presses, and grants and have served as a reviewer for the American Political Science Review, The American Journal of Political Science, The Journal of Politics, Political Behavior, the National Science Foundation, Cambridge University Press, Princeton University Press, the University of Chicago Press, Oxford University Press, and many other entities. I also am a member of the Executive Council of the Elections, Public Opinion, and Voting Behavior Section of the American Political Science Association.

My curriculum vitae is provided in the Appendix. I am being compensated \$350 per hour for work in this case, plus expenses. This is my ninth engagement as an expert witness. I previously testified at trial and in a deposition in a case in federal district court in Florida, Kelvin Jones vs. Ron DeSantis, etc. et al. (Consolidated Case No. 4:19-cv-300), at trial and in a deposition in North Carolina (Community Success Initiative, et al., Plaintiffs v. Timothy K. Moore in Superior Court, Wake County, NC Case No. 19-cv-15941) and at trial and in a deposition in federal district court in Alabama (People First of Alabama, et al., v. John Merrill, in his official capacity as the Secretary of State of Alabama, et al.; Case No.: 2:20-cv-00619-AKK). I was deposed and testified at trial in a case in federal district court in Florida (Florida State Conference of the NAACP, Common Cause, and Disability Rights Florida v. Laurel M. Lee; Case no. 4:21-cv-00187-MW-MAF) and deposed in a case in federal district court in the western district of Wisconsin (One Wisconsin Institute Inc. v. Jacobs Case No. 15-CV-324-JDP; Luft v. Evers Case No. 20-CV-768-JDP. I also testified in a preliminary injunction hearing in Robinson et al. v. Ardoin (Case No. 22 CV-00211, Middle District of Louisiana). In all cases where an opinion was issued, the courts accepted and relied on my expert testimony.

Scope of the Report

I was asked by the attorneys for the plaintiffs in this case to provide information relevant for evaluating Senate Factor 5, or “the extent to which minority group members bear the effects of discrimination in areas such as education, employment, and health, which hinder their ability to participate effectively in the political process.” I have also been asked to provide information relevant for evaluating Senate Factor 8, “whether there is a lack of responsiveness on the part of elected officials to the particularized needs of minority group members.” In formulating my opinions, I relied on my analysis of standard sources for political scientists such as the reviews of scholarly literature and the analysis of demographic data, government reports, and public opinion surveys where noted. My work in this matter is ongoing, and I reserve the right to amend, modify, or supplement my analysis and opinions.

Summary of Conclusions

Based on my analyses and review of the scholarly literature, I offer the following opinions:

- Senate Factor 5: The state of Mississippi has consistently failed to provide equal educational opportunities to Black children in the state, and as a result, there are significant gaps in educational attainment and academic achievement between Black and white Mississippians.
- Senate Factor 5: Voter turnout in Mississippi varies by educational attainment, and much of the gap in turnout between Black and white Mississippi residents can be accounted for by the denial of educational opportunities to Black Mississippians.
- Senate Factor 5: Black people in Mississippi also face discrimination in employment and access to capital; financial resources have been shown to affect voter turnout generally and in studies of Mississippi in particular.
- Senate Factor 5: Housing discrimination also plagues Black Mississippians; factors such as homeownership and racial residential segregation have been shown to affect voter turnout.
- Senate Factor 5: Health outcomes such as cancer mortality, infant mortality, and life expectancy vary by race in Mississippi. Discrimination is a factor in these racial gaps: studies of Mississippi residents have shown that exposure to racial discrimination affects heart health, and that Black Mississippi residents have greater difficulty accessing health care and healthy foods.
- Senate Factor 5: Research has shown that discrimination affects conviction and sentencing in Mississippi; such discrimination plays a role in the racial gaps in criminal justice supervision between Black and white Mississippi residents. These racial gaps also affect voting because of Mississippi's felony disenfranchisement law.
- Senate Factor 8: Mississippi ranks at the bottom of states in almost all measures of well being, including health, education, and poverty. However, despite the availability of federal resources and majority public support for policies that could alleviate racial disparities in education, socioeconomic status, health, and criminal justice, the state of Mississippi clearly and repeatedly refuses to enact such policies. In fact, in several instances, the state has misused or misspent federal money earmarked to help vulnerable groups.

I discuss each of these conclusions further in the sections below.

Senate Factor 5: Discrimination in Educational Attainment and Voting Participation

People with higher educational attainment are more likely to vote (Almond and Verba 1963, Brady, Verba, and Schlozman 1995b, Burden 2009, Campbell et al. 1980, Verba, Schlozman, and Brady 1995b). Verba, Schlozman, and Brady argue that the relationship between socioeconomic status and voting exists because people with greater education also tend to have more of the resources such as time, money, and civic skills that affect the calculus of participation (1995: 282). Education makes it easier for individuals to navigate the costs of voting such as acquiring information about the candidates and issues or learning how to register and vote (Verba, Schlozman, and Brady 1995b).

Black people in Mississippi have faced educational discrimination throughout the state's history, hindering their ability to vote. Although the U. S. Supreme Court ruled segregation in public schools unconstitutional in *Brown v. Board of Education* in 1954, and Congress outlawed segregation in public accommodations in the Civil Rights Act of 1964, as I will discuss, the state failed to desegregate public schools for several years after those rulings. In fact, I will show

below that Mississippi's state and local governments have continued to enforce and support segregation in educational institutions even in recent years; for instance, by funding racially homogenous private schools, by assigning students to schools and classrooms by race and by maintaining racially separate proms, homecoming courts, and other activities.

Despite the court's ruling in *Brown*, the education provided by the state to Black and white students remained separate and unequal. Mississippi historically spent less money on educating Black children than white children; for instance, in 1950, this gap was \$22.29 dollars to \$71.00, respectively (Margo 1990). By May of 1961, the Southern Educational Reporting Service found that no Mississippi Black students attended school with white students in public elementary, secondary, or post-secondary institutions (Southern Educational Reporting Service 1961, 1961).

The lack of progress on desegregating public schools was due to the massive resistance of white parents and the policies of Mississippi state and local governments. The Mississippi legislature adopted several laws in special sessions that were designed to maintain segregated schools (1961, Douglas and Center 2005). Beginning in the mid-1960s, many districts in the state "desegregated" by adopting a "freedom of choice" scheme that encouraged the maintenance of separate public and private schools for white children (Fuquay 2002, Bolton 2009). Of course, no white children opted to go to Black schools, and Black students who tried to attend white schools faced intimidation and violence (Fuquay 2002: 172-175). Even as late as 1967, one-third of Mississippi school districts were still completely segregated, and fewer than three percent of Black children in the state attended school with white children (Bolton 2009).

Mississippi officially desegregated all school districts in 1970 in the aftermath of rulings in *Alexander v. Holmes County Board of Education*, 396 US 19 (1969) and *U.S. v. Hinds County Board of Education*, 417 F.2nd 852 (5th Cir. 1969). However, Mississippi schools continued to be segregated in practice. The number of private schools for white children increased dramatically after the desegregation order, as did the number of white children opting out of the public school system:

The *Alexander* decision led to an explosion of private schools across Mississippi. One student of the movement estimated that 61 schools were founded in that year, a number that is certainly understated. By 1973 there were 125 segregation academies operating in Mississippi. In the 30 districts specifically named by the *Alexander* decision, the number of academies increased from 6 to 30. Incredibly, most of these schools were created between the time of the court order in December and its implementation date on January 7. Already existing schools were in a position to take full advantage of the advent of "mass integration" and they saw their enrollments skyrocket. (Fuquay 2002: 176-177).

The State continued to support school segregation. Early on, state vouchers paid for students to attend these "segregation academies," and even after 1970 these schools received textbooks, supplies, and transportation paid for with public money (Fuquay 2002: 169, 178). The state also punished districts for desegregating: in 1971, the governor of Mississippi issued an executive order denying school districts state funds if children were bused to desegregate, an order that caused Jackson Public Schools to lose 40% of their budget that year (Dixon 2020:3).

White flight did not just occur via the transfer of white students into private schools. In many communities, parents also moved to avoid desegregation (Dixon 2020:3). For instance, the city of Jackson went from majority white in 1960 to majority Black today due to a decline in the white population spurred at first by the prospect of integration (Hennessy-Fiske 2022).

The state resisted desegregation in higher education as well. Well after the Supreme Court ruled in a series of cases that segregation in public education was unconstitutional, Mississippi still maintained a completely segregated system of public higher education (1961: 30). Although the number of Black and white children in the elementary and secondary education system was roughly equal in the state, there were 19 white public colleges but only 6 Black colleges in 1961 (Southern Educational Reporting Service 1961: 30). After violence, riots, and legal maneuvering, James Meredith was able to enroll in the University of Mississippi, escorted by federal agents in 1961 (Bridges and Walker 1995). However, after the admission of Meredith to the University of Mississippi, the U. S. Supreme Court found:

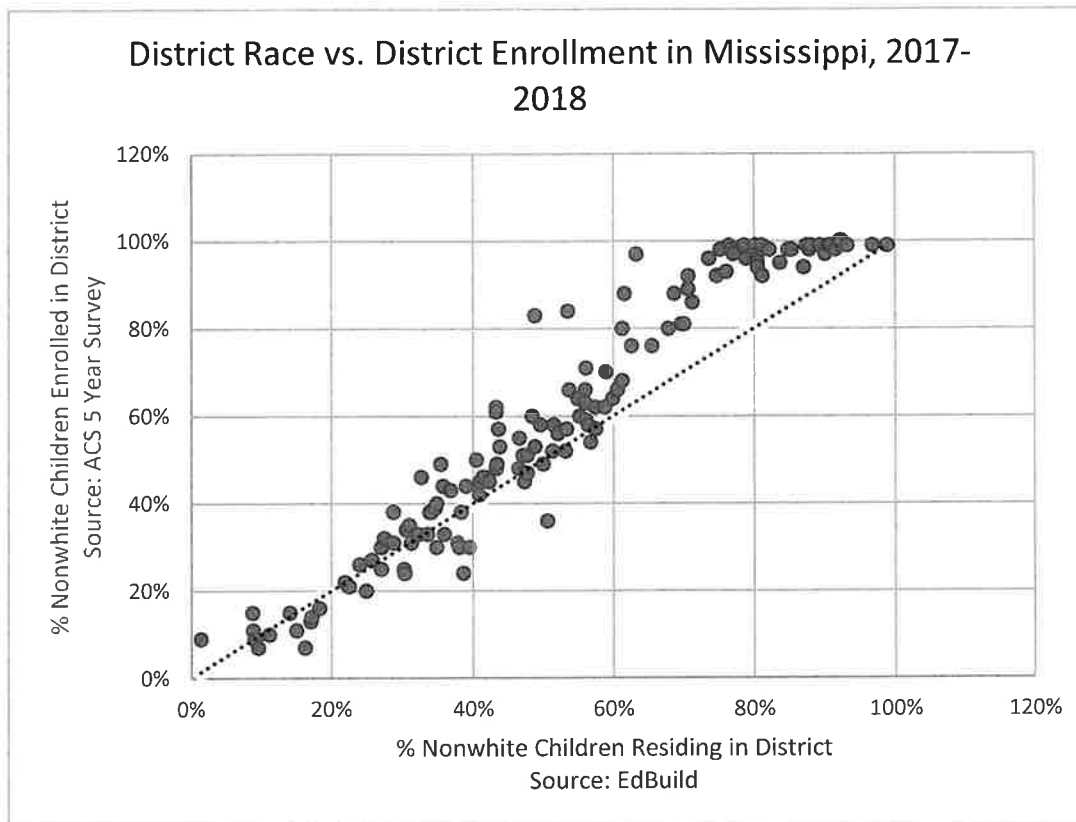
For the next 12 years the segregated public university system in the State remained largely intact. Mississippi State University, Mississippi University for Women, University of Southern Mississippi, and Delta State University each admitted at least one Black student during these years, but the student composition of these institutions was still almost completely white. During this period, Jackson State and Mississippi Valley State were exclusively Black; Alcorn State had admitted five white students by 1968. *United States v. Fordice*, 505 U.S. 717, 722 (1992).

The Court ruled in 1992 that the “State has not met its affirmative obligation to dismantle its prior dual system” of separate but unequal higher education. *Id.* at 743. Research shows that integration of Mississippi’s system of state universities is not complete; Mississippi’s historically Black institutions still are stigmatized and held in low regard by white students (Paul, Steven Andrew, and King 2004).

Today, it is not difficult to see the ways in which Mississippi’s history of racial discrimination against Black citizens in education still produces gaps in educational equality. There is ample evidence that Mississippi has and continues to promote separate and unequal education for Black and white students. Racial segregation and resource inequity still can be found in Mississippi public schools.

School segregation has been shown to detrimentally affect the academic performance of minority students: Black and Latino students who grew up under conditions of segregation were less academically prepared for college and had been exposed to more violence and social disorder than those coming from “majority-dominant settings.” (Massey and Fischer 2006). School segregation continues in Mississippi today. Currently, there are 37 school districts that are more than 90% Black in Mississippi (2022). There is ample evidence of the resistance of white parents and local school boards to desegregation. Following the tradition started with the segregation academies in the 1960s, white parents continue to opt out of public schools, especially in majority Black districts. As shown in Figure 1, Black students are overrepresented relative to their share of the population in most school districts in Mississippi; in fact, in districts (many in the Delta region) where Black students are more than three-quarters of students, white students have abandoned the public schools altogether.

Figure 1: Racial composition of school districts vs. school district enrollment by race in Mississippi for the 2017-18 school year. Data from EdBuild.org and the American Community Survey.



Coincidentally, more than 35 of the schools that began as segregation academies were still operating in 2012 (Carr 2012). These schools still enroll few to no students of color, and have discriminatory rules such as banning Black hairstyles (Carr 2012, Klein 2018). The state allows vouchers paid by public money to be used at some of these academies (Klein 2018). Many Mississippi politicians attended these academies, including Senator Cindy Hyde Smith (Klein 2018).

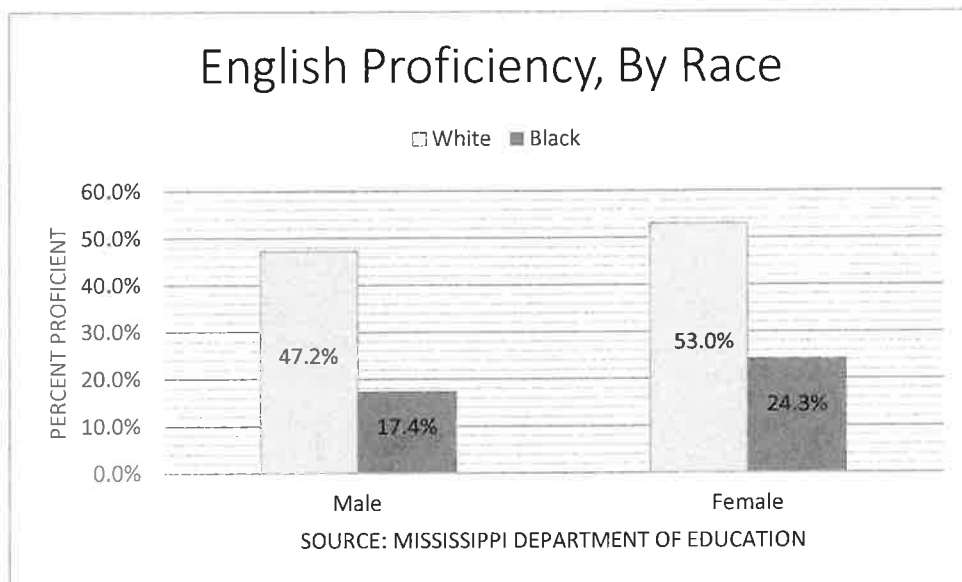
Several districts recently have engaged in practices that actively maintain racial segregation. More than 50 years after *Brown*, several Mississippi districts have been found to assign children to schools, classrooms, and even extracurricular activities by race. For instance, the Cleveland School District finally was ordered to desegregate in 2016 as it was still assigning students to Black and white schools (U. S. Department of Justice 2016). A Brookhaven, Mississippi policy that still assigned students to classrooms based on parent requests also has led to segregated classrooms (Northam 2019). Students still were being assigned to classrooms by race in Waynesboro Elementary School in 2012 (Consent Order, *United States v. Mississippi*, 2012 WL 13219550 (S.D. Miss. Jan. 3, 2012)).¹ A judge found evidence that a racially

¹ <https://www.justice.gov/sites/default/files/crt/legacy/2013/01/17/wayneco2012order.pdf>

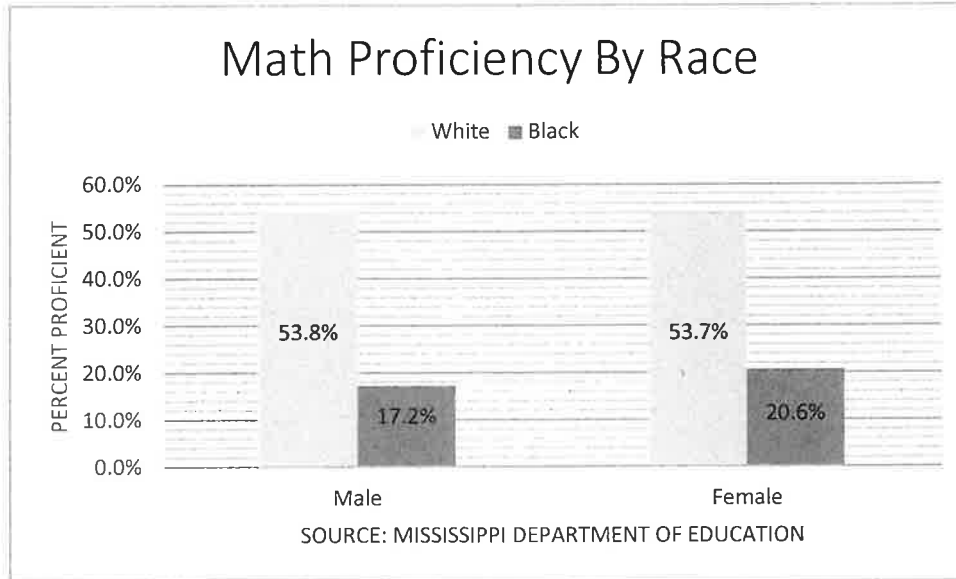
discriminatory policy of transferring white students to all-white schools led to resegregation in Walthall County (U. S. Department of Justice 2010). Recent evidence of separate proms for Black and white students (2008), separate elections for class officers by race, and even separate homecoming court selections has been found as well (*United States v. Nettleton Line Consolidated School District Civil Action*, 2020 WL 5237806 (N.D. Miss. Sept. 2, 2020); *United States v. Covington County School District* 2:66-Cv-02148 (S.D. Miss. Feb. 27, 1976); *United States v. Mississippi*, 2012 WL 13219551 (S.D. Miss. Jan. 3, 2012).

Mississippi also provides resources to schools unequally. Based on data from EdBuild.org, in Mississippi school districts in which 90% or more of the students were nonwhite, the state government provided an average of \$5,280 per pupil, compared with \$5,561 in districts where students were more than 90% white (2022).² When multiplied out based on the number of students in those districts, those nonwhite districts were shortchanged \$27,993,501 in that school year alone. This funding disparity exists even though the Edbuild.org data show that poverty rates were much higher in the 90% nonwhite districts: in those districts, the median student poverty rate was 41% and no district had fewer than 25% of students in poverty (2022). For the white districts, the Edbuild.org data show that the median student poverty rate was 19% and none had a poverty rate above 23% (2022). Evidence of unequal facilities has been found in some districts as well. *Gray v. Lowndes County School District*, 900 F. Supp. 2d 703 (N.D. Miss. 2012). Several Black districts, particularly in the Delta region, have fewer resources, meaning that students have to make do with teacher and bus shortages, older textbooks, and crumbling or dilapidated buildings (Parks 2021). The state has fully funded public education only three times in the last 30 years, and rural districts such as Holmes and Durant have been shortchanged millions of dollars (Parks 2021).

Figure 2: English (a) and Math (b) Proficiency by Race in Mississippi. Source: Mississippi Department of Education.



² This analysis discards the Montgomery School District, which was closed in that year.



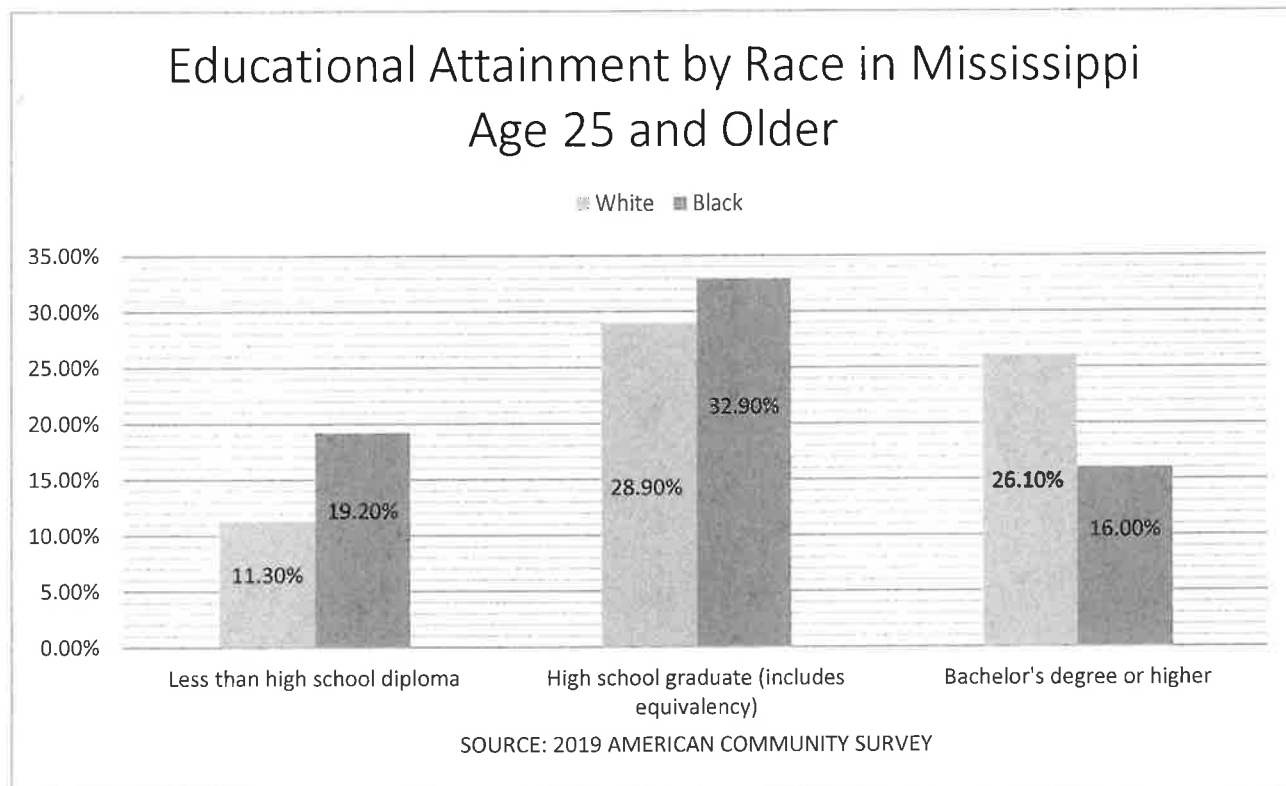
Given this historical and contemporary under-investment in public education for Black students, educational outcomes in Mississippi vary among currently enrolled students by race. As shown in Figure 2, among current students, there is a gap in scores on assessment tests in Mississippi; for example, only 24.3% of Black girls and 17.4% of Black boys are proficient in English, compared with 53.0% of white girls and 47.2% of white boys (Mississippi Department of Education 2022). Similar gaps exist in math proficiency: 20.6% of Black girls and 17.2% of Black boys were proficient in math, compared with 53.7% of white girls and 53.8% of white boys (Mississippi Department of Education 2022). In the 2017-2018 school year (the latest data available from the federal government), Black students were 49.0% and white students were 44.0% of Mississippi public school students (U. S. Department of Education 2018). However, that year, Black students were only 24.4% of students in gifted and talented programs and 31.7% of students taking Advanced Placement courses (U. S. Department of Education 2018).

The evidence suggests that racial disparities in school discipline exist in Mississippi. School suspensions have been shown to increase subsequent arrests and other anti-social behavior in youth (Mowen and Brent 2016, Hemphill et al. 2006). Sixty-five percent of students who received one or more out-of-school suspensions were Black (U. S. Department of Education 2018). Twice as many Black students as white students were referred to law enforcement in Mississippi (U. S. Department of Education 2018). In Meridian, MS, the U.S. Department of Justice found persistent racial disparities in school discipline (U. S. Department of Justice 2013). Corporal punishment is also more likely to be used against Black children in Mississippi (Gershoff and Font 2016).

This long history of persistent racial discrimination in education affects outcomes in educational attainment for Mississippians. Although there have been gains in educational attainment in Mississippi over time, racial gaps persist. Figure 3 shows data from the 2019 1-Year Estimates from the American Community Survey on the educational attainment of Mississippi residents over the age of 25, by race. The data show that white Mississippi adults are

far more likely than Black Mississippi adults to have earned a bachelor's or postgraduate degree, and that Black Mississippians have lower educational attainment overall.³

Figure 3: Educational Attainment by Race in Mississippi. Source: 2019 American Community Survey 1-Year Estimates

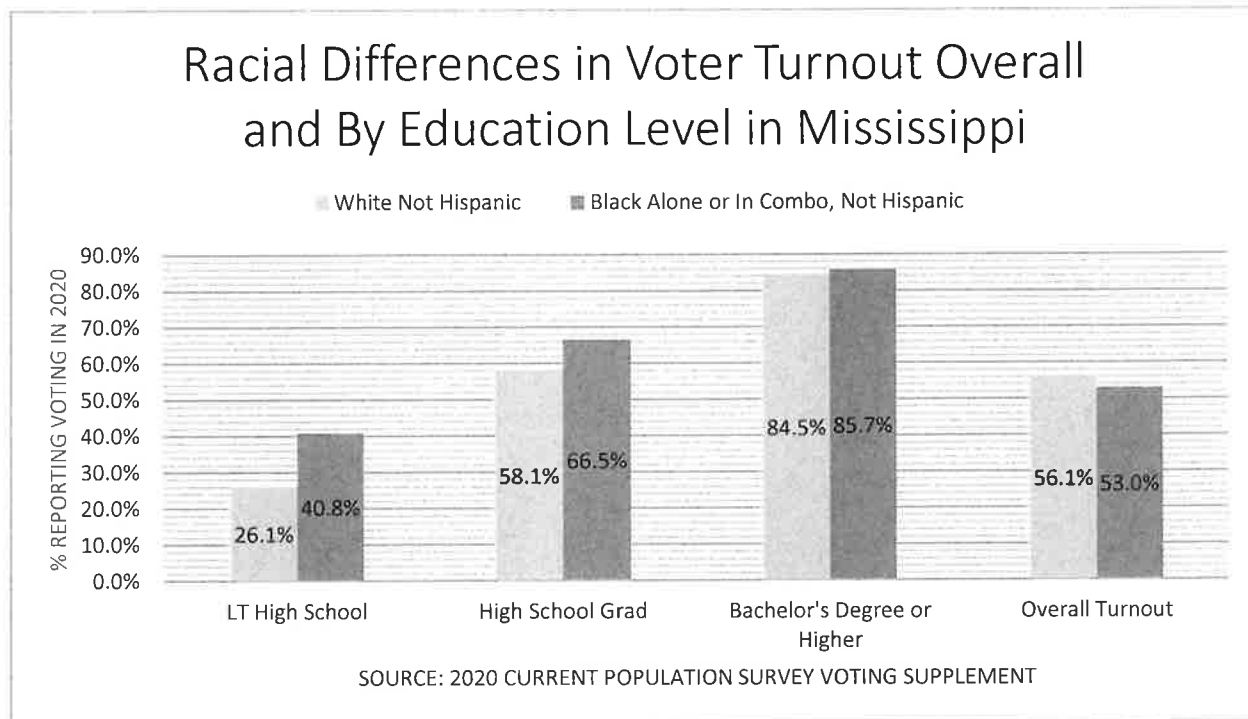


Even worse, literacy rates vary by race in Mississippi. An estimated 28% of Mississippi adults are classified as low literacy (National Center for Education Statistics 2022).⁴ In Black counties, low literacy rates are even more prevalent. For instance, 50% of adults in Humphreys County, 48% of adults in Quitman and Noxubee Counties, and 47% of adults in Holmes, Claiborne, and Wilkinson Counties are estimated to be below level 1 in literacy. Low literacy is a barrier to voting (Brady, Verba, and Schlozman 1995a, Summers et al. 2014).

³ The totals in the chart do not sum to 100% because people with associate degrees or some college are not depicted.

⁴ “Adults at this level can be considered at risk for difficulties using or comprehending print material. Adults at the upper end of this level can read short texts, in print or online, and understand the meaning well enough to perform simple tasks, such as filling out a short form, but drawing inferences or combining multiple sources of text may be too difficult. Adults who are *below Level 1* may only be able to understand very basic vocabulary or find very specific information on a familiar topic. Some adults *below Level 1* may struggle even to do this and may be functionally illiterate.” (National Center for Education Statistics 2022).

Figure 4: Racial Differences in Voter Turnout Overall and by Education Level in Mississippi. Source: 2020 Current Population Survey Voting and Registration Supplement



Examining voter turnout in Mississippi by race and educational level in Figure 4 shows the clear impact of Mississippi's history of educational inequality on voting. As shown in the last columns of the figure, overall, white Mississippians have higher voter turnout than Black Mississippians: 56.1% of white Mississippi citizens voted in the 2020 general election, compared with 53.0% of Black Mississippi citizens. However, once we control for educational level, we see that for every level of educational attainment, Black Mississippians vote at higher rates than white Mississippians. These data suggest that the overall gap in turnout between Black and white Mississippians exists because of the gap in educational opportunities between Black and white Mississippians. Black people in Mississippi have had less access to quality education and therefore have lower educational attainment for the reasons discussed in this section; this lower educational attainment leads to lower voter turnout.

Income, Poverty, Wealth and Voting

Income and wealth affect voting to the extent that greater income can make it easier to overcome the costs of voting, such as having the ability to afford time off work to go to the polls (Verba, Schlozman, and Brady 1995a). On every economic measure, Mississippi ranks among the worst-off states in the country (Suneson 2018). Black Mississippi residents fare worse than white Mississippi residents. For instance, as shown in Figure 5, the median household income for white Mississippi households is almost twice as high as that for Black Mississippi households. In Figure 6, it is clear that gaps exist on other economic measures as well: Black unemployment is more than twice as high as white unemployment, Black poverty is almost three times higher than white poverty, and more than three times as many Black households as white households lack access to a vehicle. Studies have shown that polling place distance affects voter turnout, and those effects are related to transportation access (Brady and McNulty 2011, Bagwe,

Margitic, and Stashko 2020). In states with no excuse absentee voting, people tend to offset issues accessing physical polling places with voting by mail; however, in states with limited absentee ballot options, such as that in Mississippi, the “substitution to mail-in voting” is smaller (Bagwe, Margitic, and Stashko 2020: 4). Overall, poverty and related issues have been shown to decrease political participation in Mississippi and other states (Austin, Franklin, and Lewis 2013).

Figure 5: Median Household Income by Race in Mississippi. Source 2019 American Community Survey 1 year estimates.

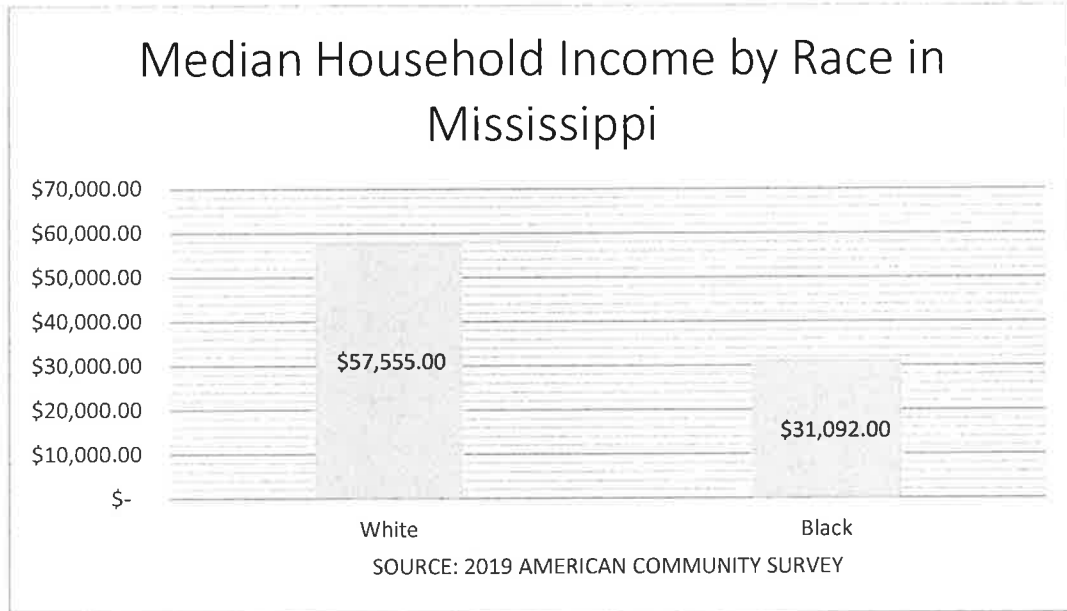
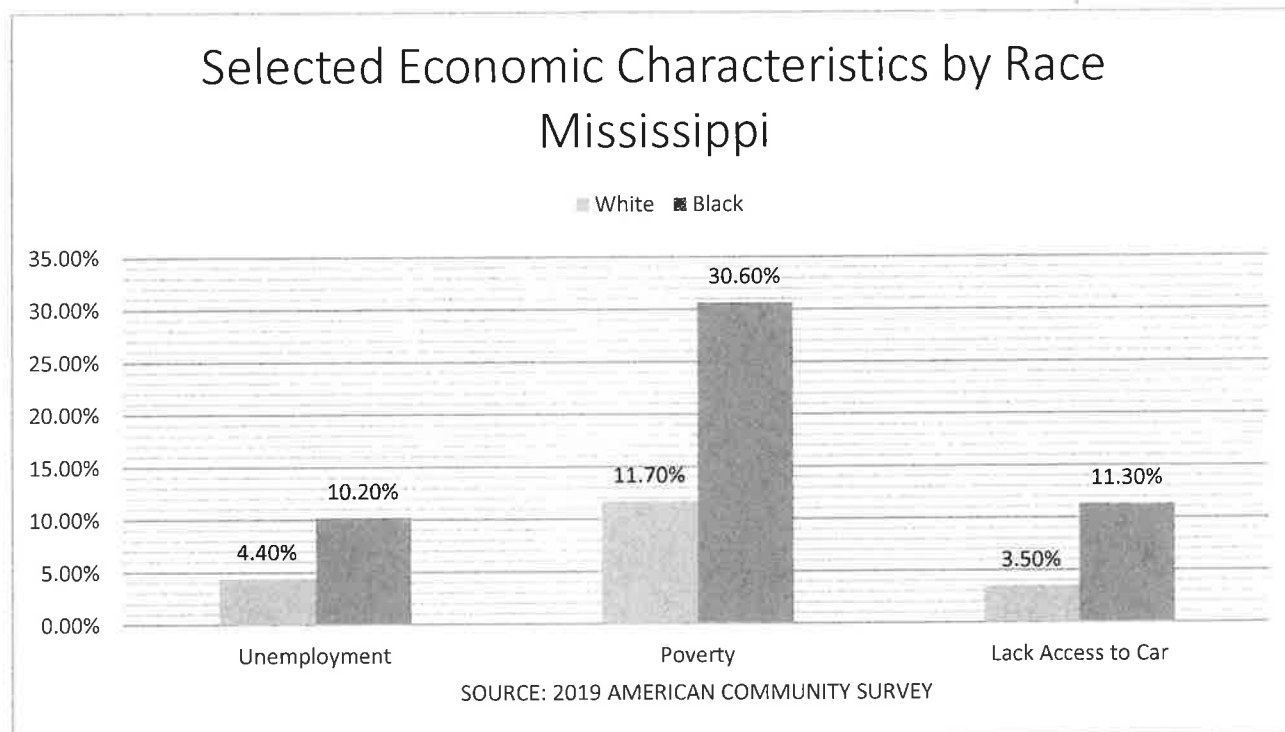


Figure 6: Selected Economic Characteristics by Race in Mississippi. Source: 2019 American Community Survey 1 year estimates.



The persistent educational discrimination faced by Black Mississippi residents can account for much of the disparity in socioeconomic wellbeing (Long 2010). However, decades of persistent discrimination in employment and access to capital over decades also have produced economic disparities.

Mississippi is predominantly rural, so agriculture has loomed large as a determinant of both income and wealth in the state. Of course, Mississippi’s agricultural system was dominated first by plantation slavery and then through sharecropping. Eventually, Black farmers did gain a foothold, buying farmland in the Mississippi delta and other regions. However, land dispossession due to discriminatory or otherwise improper lending practices led Black farmers to lose their land at greater rates than white farmers in the state (Newkirk II 2019). For instance, white farmers had greater access to federal subsidies and farm aid than Black farmers due to discrimination in the federal and local administration of relief programs (United States Commission on Civil Rights 1965). Black farmers lost almost 800,000 acres in Mississippi between 1950 and 1964 (Newkirk II 2019). The federal government eventually compensated Black farmers for these discriminatory practices, *Pigford v. Glickman*, 185 F.R.D. 82 (D.D.C. 1999), but not enough to make Black farmers whole (Newkirk II 2019, Wright et al. 2020).

V.O. Key argues famously that southern politics are driven by race: in “those counties and sections of the southern states in which Negroes constitute a substantial proportion of the population . . . a real problem of politics, broadly considered, is the maintenance of control by a white minority” (Key and Heard 1949:5). Key later writes, “the beginning and the end of Mississippi politics is the Negro” because of the racial diversity of the state (Key and Heard

1949: 229). This political reality has important economic implications for the Delta region. According to Sharon Wright Austin, depopulation of the Delta region was a goal of economic policy in Mississippi by the 1960s, so that wages were kept artificially low and mechanization devastated sharecroppers (Austin 2012: 36). These policies led to a mass exodus of Black people to northern cities in search of opportunity (Austin 2012: 36-37). Afterward, economic development continued to lag in the region because local white elites opposed factories and other economic engines that would replace farming and provide opportunities for advancement (Austin 2012: 39). Plus, poor educational systems and depopulation made the Delta region unattractive to companies looking for places to locate factories and offices (Austin 2012: 37). In this way, the persistent poverty of the region was driven by systematic underdevelopment; although attempts have been made in recent years to spur growth through gaming and prisons, these have not been enough to ameliorate rural poverty in Mississippi (Austin 2012).

Discrimination still affects the ability of Black people to achieve economic parity with white people in Mississippi. For instance, an analysis of data from the Equal Employment Opportunity Commission by Paychex found that Mississippi ranks second highest in the nation for employment discrimination complaints based on color and/or race (Paychex 2019). Employment may affect voter turnout through several pathways. First, white collar occupations may provide employees with a greater opportunity to develop civic skills that can be useful in navigating electoral bureaucracies (Almond and Verba 1963, Verba, Schlozman, and Brady 1995b). Second, salaried workers may have greater freedom to take time off work without risking their pay. Finally, Rosenstone and Hansen argue that work is an important site for recruitment into politics, which also increases voter turnout (Rosenstone and Hansen 1993).

Racial disparities in access to capital also affect Mississippians. Black people in Mississippi are four times as likely to be unbanked as white people in Mississippi (24.1% vs. 6.6%, respectively (FDIC n.d.)). Several towns in Mississippi, such as Itta Bena, are banking deserts, meaning that there are no branches available for people to conduct their daily business (Ross 2019). Banks are more likely to lend in places where they have branches and longstanding relationships with clients (Morgan, Pinkovskiy, and Yang 2016).

Housing, Residence, and Voting

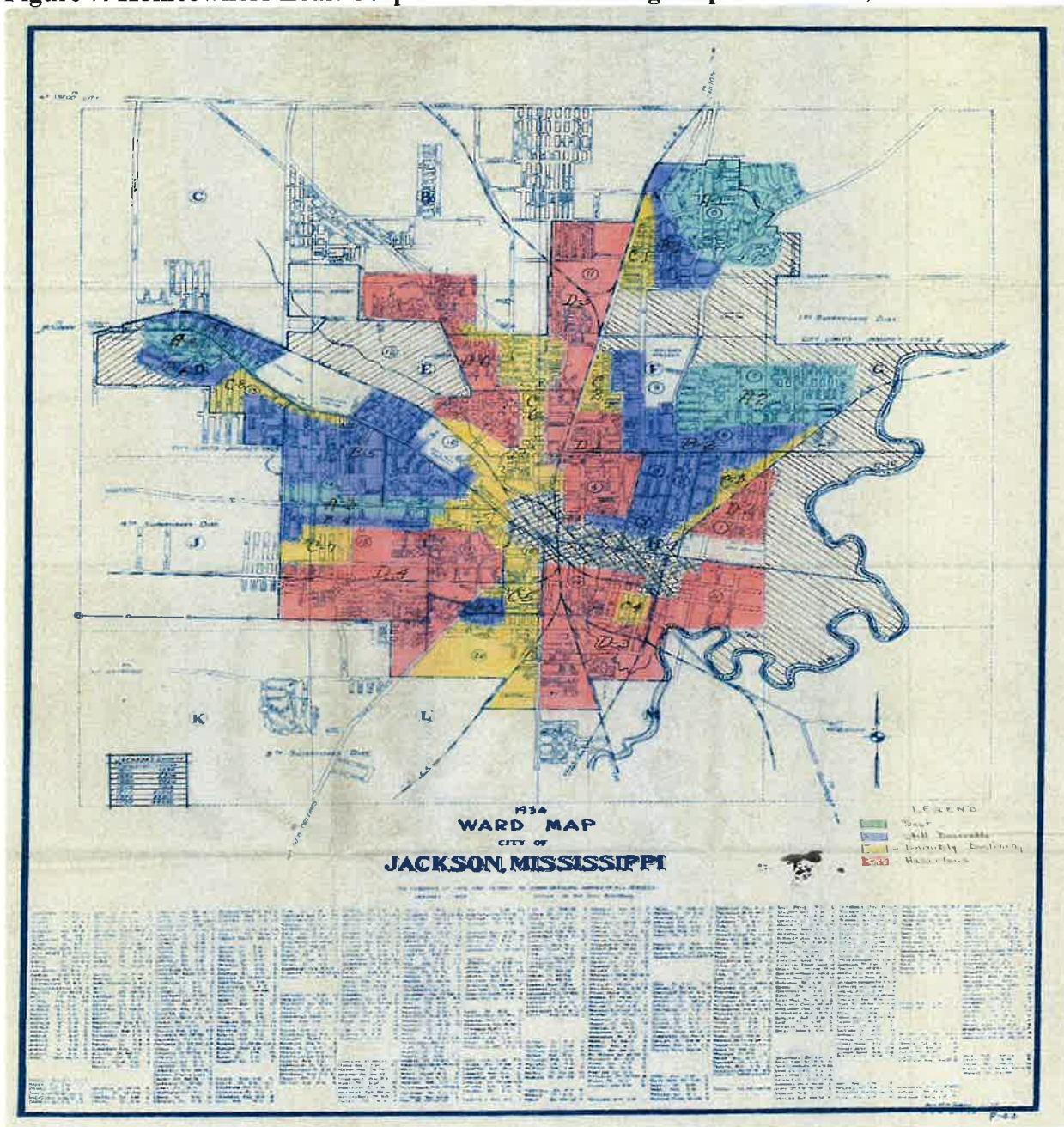
Neighborhood context matters for political mobilization and political outcomes (Burbank 1997, Burch 2013, Cohen and Dawson 1993, Huckfeldt, Plutzer, and Sprague 1993, Huckfeldt 1979, Tam Cho and Rudolph 2008). As discussed elsewhere in this report, many Black Mississippi residents have the misfortune of living in banking, healthcare, and food deserts, which contribute to racial disparities in health and wealth. However, where people live also matters because racial residential segregation has been shown to decrease Black voter turnout. Researchers argue that segregated Black areas have less access to public goods, such as polling places or transportation, that might matter for voting (Zingher and Moore 2019). In fact, Black Mississippi voters in the 2nd Congressional District face longer wait times than other voters in the district (Chen et al. 2019: 54). Racial residential segregation also affects politics indirectly because it is an important determinant of economic and health outcomes. Racial residential segregation increases Black poverty rates, lowers Black educational attainment, and increases income inequality between Black and white residents (Ananat 2011). Research attributes these effects to isolation from quality schools and jobs (Kruse 2013, Massey and Fischer 2006, Wilson 1996). Racial residential segregation also contributes to the test score gap between Black and

white students (Reardon, Kalogrides, and Shores 2019), to inequalities in the provision of public goods, to lower public goods expenditures (Trounstin 2016), and to worse health outcomes and greater exposure to environmental toxins (Ard 2016, Kramer and Hogue 2009).

For example, Jackson, Mississippi was segregated by race historically. Federal housing policy was a major driver of racial residential segregation. The Federal Housing Administration (FHA) was created in 1934 in order to “insure lenders against any loss on loans made for purchasing homes” (Kimble 2007: 402). The FHA, in this role, “could dictate the range of acceptable, insurable terms and conditions of home lending” (Kimble 2007: 403). In order to prevent lending to places where Black people lived, the FHA relied on Residential Security Maps that were produced by the Home Owners Loan Corporation (“HOLC”) (2021a). These maps “color-coded neighborhoods using racial composition as a primary indicator of their acceptability as candidates for mortgage investment” (Kimble 2007: 405). The maps assigned grades to neighborhoods based on racial composition, “with ‘A’ being most desirable and a ‘D’ grade ensuring rejection” (Kimble 2007: 405). The HOLC map for Jackson is shown in Figure 7 and follows this traditional grading system for lending based on neighborhood race (2021a).

Research shows that the Jackson area still suffers from a high degree of racial residential segregation today (2021b, Athey et al. 2021).⁵ As Trounstin (2016) finds, racially segregated cities spend less on public goods and allocate such goods unequally; a prominent example of this phenomenon is the water crisis currently devastating the city. The residents of Jackson were under a boil water advisory for months during the summer of 2022, and ultimately ended up losing running water altogether for weeks (Nawaz 2022). Jackson’s water system has had problems for a long time due to decades of underinvestment (Breslow 2022). However, despite the obvious problems, the Mississippi state legislature refused to appropriate money to fix the system and the Mississippi governor vetoed bipartisan legislation designed to help residents pay their bills and infuse money into the system (Breslow 2022). Professor Robert Bullard, an expert on environmental racism, argued that this neglect of Jackson’s water is because of race (Nawaz 2022).

⁵ Studies also have shown high racial residential segregation in Pascagoula (Athey et al. 2021) and moderate racial residential segregation in the Gulfport/Biloxi area (2021b, Athey et al. 2021).

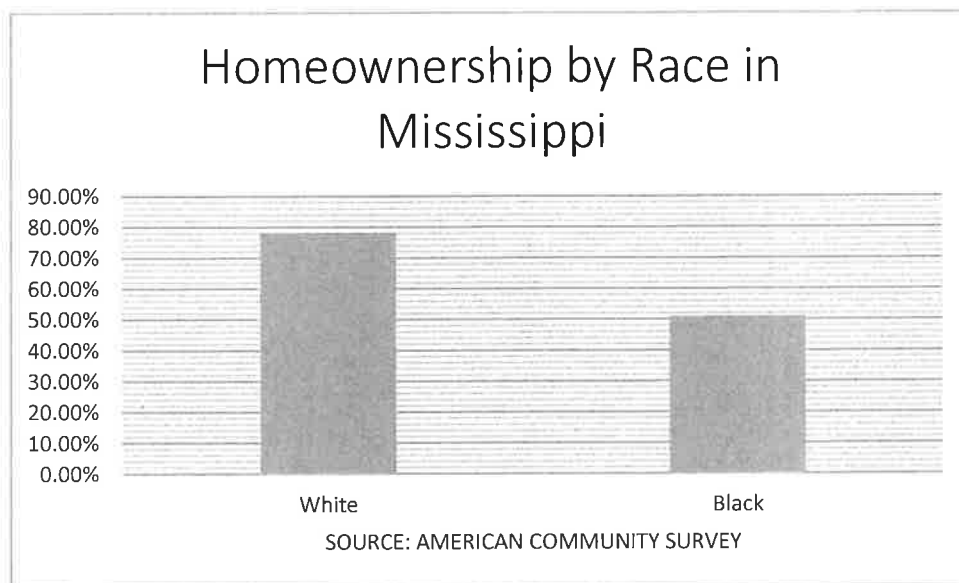
Figure 7: Homeowners Loan Corporation Underwriting Map for Jackson, MS

Homeownership affects voting through at least two pathways. First, residency requirements have been shown to reduce voter registration and turnout, largely because residential mobility increases the administrative burden of maintaining registration (Highton 2000). Renters are more mobile than owners. Second, linking back to the previous section, homeownership also has important effects on wealth accumulation (Grinstein-Weiss et al. 2013, Turner and Luea 2009).

Homeownership differs by race in Mississippi. As shown in Figure 8, Black people in Mississippi are less likely to own their homes. When they do, their homes are worth less than those owned by white Mississippians: according to the 2010 American Community Survey 5-

year estimates, the median home value for white Mississippi residents is \$114,500, but only \$68,300 for Black Mississippi residents. The 2010 American Community Survey data also show that Black Mississippians also are more likely than white Mississippians to live in homes that do not have access to a telephone (7.5% vs. 4.9%, respectively).

Figure 8: Homeownership by Race in Mississippi. Source: 2019 American Community Survey 1 year estimates.



Recent evidence suggests that racial gaps in homeownership as well as access to high quality overall results from discrimination. A 2019 report by the Mississippi Home Corporation, a state entity, found that Black people in Mississippi were denied mortgage loans more frequently and faced discrimination in rental markets (Mississippi Home Corporation 2019). Other studies also have shown that Black Mississippi applicants face discrimination in home lending (Ezeala-Harrison and Glover 2008) and that discriminatory practices affect the ability of Black renters to find rental housing in Mississippi (National Fair Housing Alliance 2017, U. S. Department of Justice 2020).

Health

Health status also may affect voting. Several studies have associated poor health with lower voter turnout (Blakely, Kennedy, and Kawachi 2001, Lyon 2021, Pacheco and Fletcher 2015). The effects of health on voting may take many pathways, such as reducing the availability of free time and money that could otherwise be devoted to politics (Pacheco and Fletcher 2015). Impaired cognitive functioning or physical disability also may make voting more difficult (Pacheco and Fletcher 2015). Poor health is likely the reason that voter turnout declines in old age (Pacheco and Fletcher 2015). People with disabilities also are less likely to vote; problems with polling place accessibility only partially explain this gap (Schur, Ameri, and

Adya 2017, Schur et al. 2002). Health and politics are particularly linked in Mississippi (Jones 2019).

Mississippi ranks among the least healthy of the American states. In many ways, Black Mississippians are worse off relative to white Mississippians. For instance, mortality rates for cancer are worse for Black Mississippi residents relative to whites (217.3 vs. 186.4 per 100,000 residents, age adjusted) (Centers for Disease Control 2022). However, this gap in mortality is not driven by a gap in the incidence of cancer, which is quite similar between Black and white Mississippians (518.2 vs. 513.5 per 100,000 residents, age adjusted) (Centers for Disease Control 2022). As Figure 9 shows, Black people in Mississippi also suffer from diabetes, high blood pressure, and obesity at higher rates than white people in the state (CDC). Overall, life expectancy for Black people in Mississippi is lower than that for white people; in 53 Mississippi counties, the average white person is expected to live more than two years longer than the average Black person (County Health Rankings and Roadmaps 2022). In three counties (Jefferson Davis, Coahoma, and Holmes), the life expectancy for white people is greater than seven years longer than that for Black people (County Health Rankings and Roadmaps 2022). Infant mortality is much higher for Black babies: 11.9 per 1000 live births vs. 6.2 per 1000 live births for white babies (Mississippi State Department of Public Health 2018).

Figure 9: Disease Incidence, by Race. Source, Centers for Disease Control.

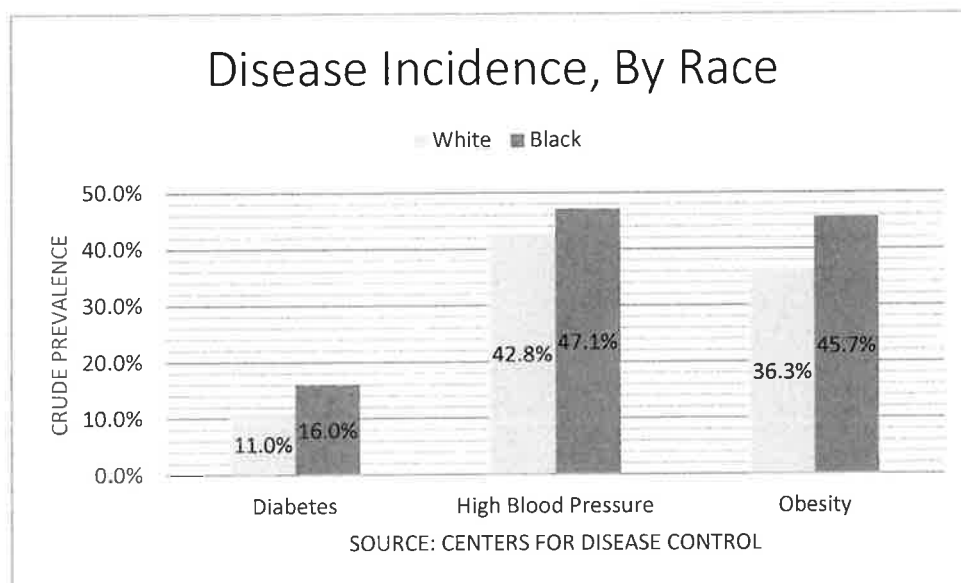
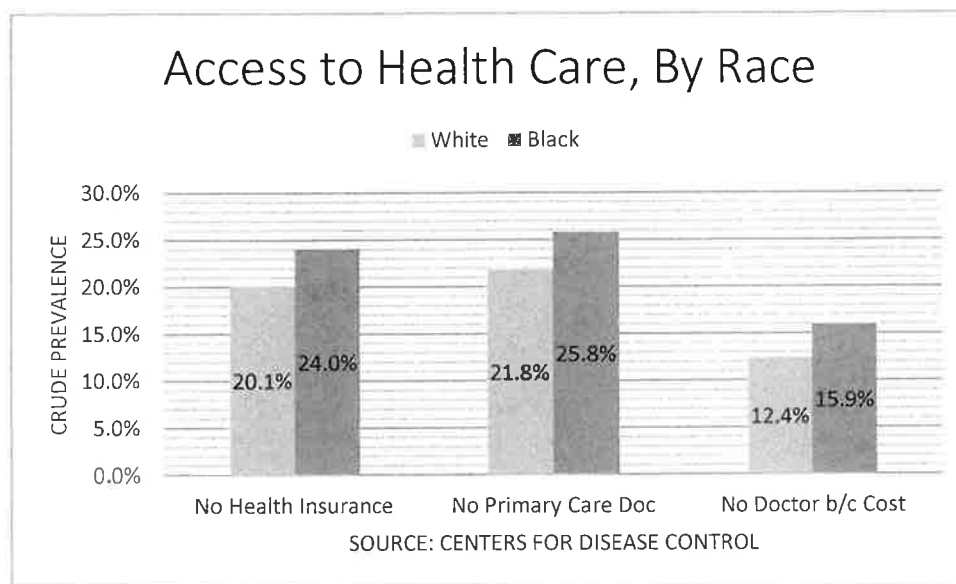


Figure 10: Access to Health Care, by Race. Source: Centers for Disease Control.

These health disparities are caused partially by disparities in access to resources. In Mississippi, as shown in Figure 10, Black people are less likely to have health insurance or a primary care physician than white people (CDC). Moreover, Black people are more likely to report that they did not go see a doctor when they needed to because of cost considerations (CDC). Racial residential segregation also may make it more difficult for Black Americans to access primary care physicians and other doctors (Gaskin et al. 2012, Anderson 2018). For instance, many areas of Mississippi, particularly the Delta region, are medically underserved, and some counties have few to no primary care physicians practicing (Williams and Sprinkle 2021). Many people in the Delta also lack access to stores that sell nutritious food; food deserts have been linked to poor health outcomes as well (Goodman, Thomson, and Landry 2020, Hossfeld and Rico Mendez 2018). Similar problems have been reported with respect to racial disparities in access to COVID-19 vaccination sites early in the vaccine rollout in Mississippi, partly due to failure to reach people in medically underserved areas (Doyle 2021, Gravlee et al. 2021). Even in Jackson, access to vaccines was limited; the city did not open its first drive-thru vaccination site until three weeks after sites opened in other areas (Associated Press 2021).

Discrimination also contributes to racial health disparities. Several long-term studies of Jackson, Mississippi residents have shown that racial discrimination affects cardiac health (Sims et al. 2012, Forde et al. 2020). Racial residential segregation has been shown to lead to worse health outcomes for Black Americans. Several studies have demonstrated that racial residential segregation contributes to racial gaps in cancer outcomes (Landrine et al. 2017, Blanco et al. 2021, Poulson et al. 2021). Such factors, by contributing to racial disparities in health, ultimately may affect voting because of the link between poor health and lower voter turnout.

Criminal Justice

A growing body of research shows that criminal justice interactions affect political behavior. Several studies have shown that, for individuals, contact with the criminal justice system, from police stops, to arrest, to incarceration, directly decreases voter turnout (Burch 2011, Lerman and Weaver 2014, Weaver and Lerman 2010). Primarily, criminal justice contact decreases turnout through “the combined forces of stigma, punishment and exclusion” which impose “barriers to most avenues of influence” and diminish “factors such as civic capacity, governmental trust, individual efficacy, and social connectedness that encourage activity” (Burch 2007: 12).

Black people are disproportionately represented among Mississippi’s prisoners, probationers, and parolees as shown in Figure 11. As a reminder, 38.0% of Mississippi’s population is Black, but according to the Mississippi Department of Corrections, 60.4% of prisoners, 52.0% of probationers, and 55.5% of parolees in Mississippi are Black. Black people were 54.1% of arrestees in Mississippi in 2020 (Federal Bureau of Investigation 2022).

Figure 11: Mississippi Correctional Populations, by Race. Source: Mississippi Department of Corrections



Racial discrimination accounts for some of this disparity. Studies have shown that racial disparities in arrest are caused by factors that make it more likely that police will stop or search Black people, such as spatially differentiated policing, racial residential segregation, and discrimination (Beckett, Nyrop, and Pfingst 2006, Gelman, Fagan, and Kiss 2007, Ousey and Lee 2008, Pierson et al. 2020). Racial disparities in bail decisions (Arnold, Dobbie, and Yang 2018) and in sentencing also may contribute to incarceration disparities (Bushway and Piehl 2001, Mitchell 2005, Steffensmeier and Demuth 2000, Steffensmeier, Ulmer, and Kramer 1998). Research shows evidence of racial discrimination in sentencing in Mississippi (Fender et al. 2006). The Mississippi legislature passed several reforms of the criminal justice system. However, the evidence suggests that racial discrimination still leads to disparate sentencing outcomes (Mississippi Office of State Public Defender 2018). Moreover, the Supreme Court

found evidence of racial discrimination in the use of peremptory challenges in *Flowers v. Mississippi* 139 S. Ct. 2228 (2019). In addition to the *Flowers* case, scholars have found that racial discrimination of the use of peremptory challenges is a widespread practice in Mississippi (DeCamp and DeCamp 2020).

Mississippi's felony disenfranchisement law was designed "to obstruct the exercise of the franchise by the Negro race," *Ratliff v. Beale*, 20 So. 865, 868 (1896), after the Civil War (Behrens, Uggan, and Manza 2003). Because of this law, involvement with the criminal justice system directly affects voting. In Mississippi, people with felony convictions for certain offenses are prevented from voting while they are serving their sentence in prison or in the community and even after they have finished serving their sentences. Because of the disproportionate involvement of Black Mississippians with the criminal justice system, Black people disproportionately are more likely to have lost their voting rights permanently. Based on an analysis of records from the Administrative Office of the Courts, an estimated 56,000 people are disenfranchised permanently in Mississippi (Rozier 2018). Black people are 61% of the disenfranchised population (Rozier 2018),.

In Mississippi, Black people are disproportionately arrested, convicted, and punished for crimes. Research suggests that racial discrimination has played a role in these disparities historically and continues to do so because of discriminatory arrest, conviction, and sentencing practices. It is important to remember that, because of felony disenfranchisement laws, disparities in criminal justice involvement translate into disparities in voting participation because Black Mississippians are disproportionately barred from voting based on their criminal histories.

Section 5: Conclusion

To summarize the discussion, Black people in Mississippi are subjected to worse outcomes in education, socioeconomic status, housing, health, and criminal justice. Research cited in this report shows how these racial disparities partly are the result of historical and contemporary discrimination by state and local governments as well as private market actors. In particular, policies that continue to support segregation in education and fail to allocate resources equitably across domains such as health, housing, and education help maintain racial gaps in well-being. As I have demonstrated in this report, researchers have shown that such disparities in education, employment, poverty, income, housing, health, and criminal justice involvement all contribute to gaps in voter turnout.

Senate Factor 8: Lack of Responsiveness

Under Section 2 of the Voting Rights Act, courts may consider additional factors, such as whether there is a lack of responsiveness on the part of elected officials to the particularized needs of minority group members. The longstanding and persistent gaps in socioeconomic status, incarceration, and health discussed throughout this report demonstrate the lack of responsiveness of public officials to the needs of Mississippi's Black communities. Research has shown that public policies are important for creating and sustaining racial disparities. For instance, as described earlier in this report, persistent test score gaps and educational segregation continue to pose problems for Mississippi students; however, Mississippi continues to underfund public schools in the state (Parks 2021). Black Mississippians have worse health outcomes, are less likely to have health insurance, and are more likely to avoid care because of costs, and yet

Mississippi has not accepted the federal Medicaid expansion (Kaiser Family Foundation 2022). Mississippi is the poorest state in the nation, but Mississippi misused millions of dollars in funds from the Temporary Assistance to Needy Families Program, refusing to spend that money on the citizens with the most need (Wolfe 2020). Mississippi also faces allegations that money meant for rental assistance was misdirected toward millions of dollars in lawyer fees (O'Connell and Torbati 2021), and that money meant to alleviate racial disparities in COVID 19 also went mostly unused (Galewitz, Weber, and Whitehead 2022). In Jackson, a persistent water crisis has left residents without water for weeks, and yet the state refused to allocate money to help the city repeatedly (Breslow 2022). A majority of Mississippi voters favor policies such as Medicaid expansion, helping the city of Jackson with fixing the water crisis, and restoring voting rights to people with felony convictions (College 2019, 2021). Moreover, in each of these cases, federal money is there to help. The state just refuses to do so.

Prominent Black leaders in Mississippi attribute these policy decisions to racism. Representative Bennie Thompson, for instance, said of COVID 19 vaccine sites, “But that is a decision that has to go through the governor's office. And the majority of people don't have any confidence that the governor is interested in providing those kinds of services in the minority community” (Chatlani 2021). Zakiya Summers, a Mississippi State Legislator, said of her state,

“Wealthier areas, she said, “tend to get more resources, more state support. West Jackson, we haven't seen that in a while. It's areas where poor Black people are concentrated where help is slow moving or it's none at all” (Hennessy-Fiske 2022).

Governor Reeves disagrees. He said, “There is not systemic racism in America” (Ganuchau 2021).

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Zingher, Joshua N, and Eric M Moore. 2019. "The Power of Place? Testing the Geographic Determinants of African-American and White Voter Turnout." *Social Science Quarterly* 100 (4):1056-1071.

Appendix

Traci Burch

Employment

- Associate Professor, Northwestern University Department of Political Science (2014-Present)
- Research Professor, American Bar Foundation (2007- Present)
- Assistant Professor, Northwestern University Department of Political Science (2007-2014)

Education

- *Harvard University*
Ph.D. in Government and Social Policy
Dissertation: *Punishment and Participation: How Criminal Convictions Threaten American Democracy*
Committee: Jennifer Hochschild (Chair), Sidney Verba, and Gary King
- *Princeton University*
A.B. in Politics, *magna cum laude*

Publications

- Burch, Traci. 2022. "Adding Insult to Injury: the Justification Frame in Official Narratives of Officer-Involved Killings." *Journal of Race, Ethnicity, and Politics*.
- Burch, Traci. 2022. "Officer-Involved Killings and the Repression of Protest." *Urban Affairs Review*.
- Burch, Traci. 2021. "Not All Black Lives Matter: Officer-Involved Deaths and the Role of Victim Characteristics in Shaping Political Interest and Voter Turnout." *Perspectives on Politics*.
- Kay Lehman Schlozman, Philip Edward Jones, Hye Young You, Traci Burch, Sidney Verba, Henry E. Brady. 2018. "Organizations and the Democratic Representation of Interests: What Happens When Those Organizations Have No Members?" *Perspectives on Politics*.
- Burch, Traci. 2016. "Political Equality and the Criminal Justice System." In Resources, Engagement, and Recruitment. Casey Klofstad, ed. Philadelphia: Temple University Press.
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- Burch, Traci. 2015. “Skin Color and the Criminal Justice System: Beyond Black-White Disparities in Criminal Sentencing.” *Journal of Empirical Legal Studies* 12(3): 395-420.
- Burch, Traci. 2014. “The Old Jim Crow: Racial Residential Segregation and Neighborhood Imprisonment.” *Law & Policy* 36(3) 223-255.
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- Burch, Traci. 2012. “Did Disfranchisement Laws Help Elect President Bush? New Evidence on the Turnout and Party Registration of Florida’s Ex-Felons.” *Political Behavior* 34 (1); 1-26.
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Grants

- Co-Principal Investigator. “Fellowship and Mentoring Program on Law and Inequality.” September 1, 2020 to August 31, 2023. \$349, 313. National Science Foundation.

Honors and Fellowships

- American Political Science Association 2014 Ralph J. Bunche Award (for *Trading Democracy for Justice*).
- American Political Science Association Urban Section 2014 Best Book Award (for *Trading Democracy for Justice*).
- American Political Science Association Law and Courts Section 2014 C. Herman Pritchett Award (for *Trading Democracy for Justice*).
- Research grant, Stanford University Center for Poverty and Inequality (2012).
- American Political Science Association E. E. Schattschneider Award for the best doctoral dissertation in the field of American Government (2009)
- American Political Science Association William Anderson Award for the best doctoral dissertation in the field of state and local politics, federalism, or intergovernmental relations (2008)

- American Political Science Association Urban Section Best Dissertation in Urban Politics Award (2008)
- Harvard University Robert Noxon Toppan Prize for the best dissertation in political science (2007)
- Institute for Quantitative Social Sciences Research Fellowship (2006-07)
- *European Network on Inequality* Fellowship (2005)
- Research Fellowship, The Sentencing Project (2005)
- Doctoral Fellow, Malcolm Weiner Center for Inequality and Social Policy (2004-07)

Professional Service

- APSA Law and Courts Section Best Paper Award Committee (2020-2021)
- APSA Elections, Public Opinion, and Voting Behavior Executive Committee (2020-2023)
- General Social Survey Board of Overseers (2020-2025)
- APSA Kammerer Prize Committee (2017)
- Associate Editor, *Political Behavior* (2015-2019)
- APSA Law and Courts Section, Lifetime Achievement Award Prize Committee (2014-2015)
- Law and Society Association, Kalven Prize Committee (2013-2014)
- American Political Science Association, Urban Politics Section Dissertation Prize Committee (2012-13)
- American Political Science Association, Urban Politics Section Executive Committee (2012-13)
- Law and Society Association Diversity Committee, (2012-2013)
- American Political Science Association, Urban Politics Section Program Co-Chair (2011)
- Associate Editor, *Law and Social Inquiry*
- American Political Science Association, Urban Politics Section Book Prize Committee (2009)

- Reviewer for *The American Political Science Review*, *Public Opinion Quarterly*, *American Politics Research*, and *Time-Sharing Experiments in the Social Sciences*.

Presentations and Invited Talks

- University of Pennsylvania. Virtual. “Voice and Representation in American Politics.” April 2021.
- University of Michigan. Virtual. “Which Lives Matter? Factors Affecting Mobilization in Response to Officer-Involved Killings.” February 2021.
- University of Pittsburgh. Virtual. “Policing and Participation.” November 2020.
- Hamilton College Constitution Day Seminar. Virtual. “Racial Protests and the Constitution.” September 2020.
- New York Fellows of the American Bar Foundation. New York, NY. “Police Shootings and Political Participation.” March 2020.
- Pennsylvania State University, State College, PA. “Effect of Officer Involved Killings on Protest. November 2019.
- Princeton University. Princeton NJ. “Effects of Police Shootings on Protest among Young Blacks.” November 2019.
- Missouri Fellows of the American Bar Foundation. Branson, MO. Police Shootings and Political Participation in Chicago. September 2019.
- Northwestern University. “Police Shootings and Political Participation.” November, 2018.
- Princeton University. Princeton, NJ. “Police Shootings and Political Participation.” September, 2018.
- University of California at Los Angeles. Los Angeles, CA. “Police Shootings and Political Participation.” August, 2018.
- American Bar Association Annual Meeting. Chicago, IL. “Police Shootings and Political Participation.” August 2018.
- American Bar Endowment Annual Meeting. Lexington, KY. “Effects of Police Shooting in Chicago on Political Participation.” June 2018.
- Vanderbilt University. “Effects of Police Shootings in Chicago on Political Participation.” April 2018.

- Washington University in St. Louis. “Effects of Pedestrian and Auto Stops on Voter Turnout in St. Louis.” February 2018.
- Fellows of the American Bar Foundation, Los Angeles. “Assaulting Democracy.” January 2018.
- Northwestern University Reviving American Democracy Conference. Panel presentation. “Barriers to Voting.” January 2018.
- University of Illinois at Chicago. “Effects of Police Shootings in Chicago on Political Participation.” October, 2017.
- Chico State University. “Constitution Day Address: Policing and Political Participation.” September, 2017.
- Fellows of the American Bar Foundation, Atlanta, Georgia. “Policing in Georgia.” May 2017.
- United States Commission on Civil Rights. Testimony. “Collateral Consequences of Mass Incarceration.” May 2017.
- Northwestern University Pritzker School of Law. “Effects of Police Stops of Cars and Pedestrians on Voter Turnout in St. Louis.” April 2017.
- University of California at Los Angeles. Race and Ethnic Politics Workshop. “Effects of Police Stops of Cars and Pedestrians on Voter Turnout in St. Louis.” March 2017.
- University of North Carolina at Chapel Hill. American Politics Workshop. “Effects of Police Stops of Cars and Pedestrians on Voter Turnout in St. Louis.” February 2017.
- National Bar Association, St. Louis MO. “Political Effects of Mass Incarceration.” July 2016.
- Harvard University, Edmond J. Safra Center for Ethics. Inequalities/Equalities in Cities Workshop. April 2016.
- American Political Science Association Annual Meeting. September 2015. “Responsibility for Racial Justice.” Discussant.
- St. Olaf College. April 2015. “The Collateral Consequences of Mass Incarceration.”
- Northwestern University. Institute for Policy Research. February 2015. “The Civic Culture Structure.”

- Texas A&M University. Race, Ethnicity, and Politics Workshop. September 2014. “Trading Democracy for Justice.”
- Columbia University Teachers College. The Suburban Promise of Brown Conference. May 2014. “Can We All Get Along, Revisited: Racial Attitudes, the Tolerance for Diversity, and the Prospects for Integration in the 21st Century.”
- University of Kentucky. Reversing Trajectories: Incarceration, Violence, and Political Consequences Conference. April 2014. “Trading Democracy for Justice.”
- University of Chicago. American Politics Workshop. March 2014. “How Geographic Differences in Neighborhood Civic Capacity Affect Voter Turnout.”
- Kennedy School of Government, Harvard University. February 2014. “Trading Democracy for Justice.”
- University of Michigan. American Politics Workshop. December 2013. “Trading Democracy for Justice.”
- Yale University. American Politics and Public Policy Workshop. September 2013. “Trading Democracy for Justice.”
- American Political Science Association Annual Meeting. August 2013. “The Heavenly Chorus Is Even Louder: The Growth and Changing Composition of the Washington Pressure System.” With Kay Lehman Schlozman, Sidney Verba, Henry Brady, and Phillip Jones.
- National Bar Association, Miami Florida, July 2013. “The Collateral Consequences of Mass Imprisonment.”
- Loyola University. American Politics Workshop. December 2012. “Mass Imprisonment and Neighborhood Voter Turnout.”
- Marquette University School of Law. November 2012. “The Collateral Consequences of Mass Imprisonment.”
- Yale University. Detaining Democracy Conference. November 2012. “The Effects of Imprisonment and Community Supervision on Political Participation.”
- Brown University. American Politics Workshop. October 2012. “Mass Imprisonment and Neighborhood Voter Turnout.”

- American Bar Association National Meeting, August 2012. “Mass Imprisonment: Consequences for Society and Politics.”
- University of Madison-Wisconsin. American Politics Workshop. March 2012. “The Spatial Concentration of Imprisonment and Racial Political Inequality.”
- American Political Science Association Annual Meeting. 2011. “Theme Panel: How Can Political Science Help Us Understand the Politics of Decarceration?”
- University of Pennsylvania. Democracy, Citizenship, and Constitutionalism Conference. April, 2011. “Vicarious Imprisonment and Neighborhood Political Inequality.”
- University of Chicago School of Law. Public Laws Colloquium. Chicago, IL. November, 2010. ““The Effects of Neighborhood Incarceration Rates on Individual Political Efficacy and Perceptions of Discrimination.”
- Pomona College. November, 2010. “Incarceration Nation.”
- University of Washington. Surveying Social Marginality Workshop. October 2010. “Using Government Data to Study Current and Former Felons.”
- American Bar Foundation, Chicago, IL, September 2010. “The Effects of Neighborhood Incarceration Rates on Individual Political Attitudes.”
- Northwestern University. Chicago Area Behavior Conference. May 2010. “Trading Democracy for Justice: The Spillover Effects of Incarceration on Voter Turnout in Charlotte and Atlanta.”
- Annual Meeting of the Law and Society Association, Chicago, IL, May 2010. “Neighborhood Criminal Justice Involvement and Voter Turnout in the 2008 General Election.”
- Annual Meeting of the Southern Political Science Association, Atlanta, GA, January 2010. “The Art and Science of Voter Mobilization: Grassroots Perspectives on Registration and GOTV from Charlotte, Atlanta, and Chicago.”
- University of Illinois at Chicago. Institute for Government and Public Affairs. November 2009. "Turnout and Party Registration among Convicted Offenders during the 2008 Presidential Election."
- Annual Meeting of the American Political Science Association, Toronto, Ontario, Canada, September 2009. "'I Wanted to Vote for History:' Turnout and Party Registration among Convicted Offenders during the 2008 Presidential Election."

- Harris School of Public Policy, University of Chicago. American Politics Workshop. December 2008. "Trading Democracy for Justice? The Spillover Effects of Imprisonment on Neighborhood Voter Participation."
- Northwestern University School of Law. Law and Political Economy Colloquium. November 2008. "Did Disfranchisement Laws Help Elect President Bush? New Evidence on the Turnout Rates and Candidate Preferences of Florida's Ex-Felons."
- University of California, Berkeley. Center for the Study of Law and Society. October 2008. "Trading Democracy for Justice? The Spillover Effects of Imprisonment on Neighborhood Voter Participation."
- Law and Society Association Annual Meeting, Montreal, Canada, May 2008. "Did Disfranchisement Laws Help Elect President Bush? New Evidence on the Turnout Rates and Candidate Preferences of Florida's Ex-Felons."
- Law and Society Association Annual Meeting, Montreal, Canada, May 2008. "Trading Democracy for Justice? The Spillover Effects of Imprisonment on Neighborhood Voter Participation."
- Midwest Political Science Association Conference, Chicago, IL, April 2007. Paper: "Concentrated Incarceration: How Neighborhood Incarceration Decreases Voter Registration."

Working Papers Under Review

- "Introduction" (with Jenn Jackson and Periloux Peay) in *Freedom Dreams: A Symposium on Abolition*. Eds. Jenn Jackson, Periloux Peay, and Traci Burch. Social Science Quarterly.
- "The Effects of Community Police Performance on Protest in Chicago" (For Symposium Honoring John Hagan)
- "How Police Departments Frame Low-Threat Victims of Officer-Involved Killings"
- Which Lives Matter?

Additional Activities

- Expert witness in *Kelvin Jones vs. Ron DeSantis, etc. et al.* (U.S. District Court for the Northern District of Florida Consolidated Case No. 4:19-cv-00).
- Expert witness in *Community Success Initiative, et al., Plaintiffs v. Timothy K. Moore* (Superior Court, Wake County, NC Case No. 19-cv-15941).

- Expert witness in *People First of Alabama v. Merrill* (U.S. District Court in Birmingham, Alabama, Case No. 2: 20-cv-00619-AKK)
- Expert witness in *Florida State Conference of the NAACP v. Lee* (U.S. District Court in the Northern District of Florida, Case No. 4:21-cv-00187-MW-MAF)
- Expert witness in *One Wisconsin Institute Inc. v. Jacobs* (U.S. District Court in the Western District of Wisconsin, Case No. 15-CV-324-JDP).
- Expert witness in *Alpha Phi Alpha Fraternity Inc., et al. v. Raffensperger* (U.S. District Court for the Northern District of Georgia, Case No. 1:21-cv-05337-SCJ)
- Expert witness in *Robinson, et al. v. Ardoin* (U.S. District Court for the Middle District of Louisiana, Civil Action No. 22-cv-00211).
- Expert witness in *Nairne, et al. v. Ardoin* (U.S. District Court for the Middle District of Louisiana, Civil Action No. 3:22-cv-00178 SDD-SDJ).

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF MISSISSIPPI
GREENVILLE DIVISION

DYAMONE WHITE, et al.,)	
)	No. 4:22-cv-00062-SA-JMV
<i>Plaintiffs.</i>)	
v.)	<u>Declaration of Traci Burch</u>
)	
STATE BOARD OF ELECTION)	
COMMISSIONERS, et al.,)	
)	
<i>Defendant.</i>)	

DECLARATION OF TRACI BURCH

I, Traci Burch, make the following declaration based on personal knowledge:

I have been retained by the Plaintiffs in the above referenced matter as an expert. I submit that the foregoing report from me is a true and accurate copy of the report I provided to Plaintiffs in this matter. I declare that the information and opinions contained in the report are true and correct to the best of my knowledge.

I declare under penalty of perjury that the foregoing is true and correct. 28 U.S.C. § 1746.

Dated: 10/1/2022


Traci Burch

Expert Report for Byron D'Andra Orey, Ph.D.

October 3, 2022

I. Introduction

I have prepared this report pursuant to Federal Rule of Civil Procedure 26(a)(2)(B). I have been asked to express opinions on whether racially polarized voting (RPV) exists in Mississippi and in particular in Mississippi Supreme Court District 1, and whether or not RPV has resulted in the defeats of Black-preferred candidates in Mississippi Supreme Court District 1. I have also been asked to consider whether RPV exists independent of polarization on the basis of partisan affiliation. I am being compensated at \$200 per hour for my work on this case. My compensation is not contingent on or affected by the substance of my opinions or the outcome of this litigation. My work in this matter is ongoing, and I reserve the right to amend, modify, or supplement my analysis and opinions.

II. Background on Racially Polarized Voting

In the landmark *Thornburg v. Gingles* case, the Supreme Court set forth a three-prong test for assessing minority vote dilution in litigation arising under Section 2 of the Voting Rights Act (VRA). The *Gingles* test asks whether: 1) the racial or language minority group is “sufficiently large and geographically compact to constitute a majority in a single-member district”; 2) the minority group is “politically cohesive” (meaning its members tend to vote for the same candidate); and 3) the “majority votes sufficiently as a bloc to enable it ... usually to defeat the minority’s preferred candidate.”¹ In particular, the second and the third preconditions

¹ *Thornburg v. Gingles*, 478 U.S. 30, 50-51 (1986).



under the *Gingles* test have become the legal definition of RPV. Moreover, one of the so-called “Senate Factors” that courts consider in evaluating the presence of unlawful minority vote dilution under Section 2 of the Voting Rights Act is “the extent to which voting in the elections of the state or political subdivision is racially polarized.”²

III. Summary of Professional Qualifications

I am a full professor with tenure in the Department of Political Science at Jackson State University and a former chair of the Department of Political Science. I have conducted significant research in the area of racial polarized voting. This research has been presented at professional conferences and published in peer reviewed scholarly journals. These journals include, but are not limited to, *Social Science Quarterly*, *PS: Political Science and Politics*, *American Politics Research*, *Politics and Policy*, *Race and Policy* and *State Politics and Policy Quarterly*. I have also served on the executive committees for the American Political Science Association, the Southern Political Science Association, and the National Conference of Black Political Scientists. I have served as Vice President for the Southern Political Science Association and served on the Editorial Board for the *American Political Science Review* and *State Politics and Policy Quarterly*. Commentary related to my work has appeared in several media outlets, including National Public Radio, Al Jazeera, MSNBC, CNN, the Daily Beast, and the News Hour (PBS).

Attached as **Appendix 1** is a curriculum vitae setting forth my professional background, which includes a list of all publications I have authored or co-authored. I have also testified, at trial, as an expert trial witness *Johnson v. Hamrick*, No. 2:91-CV-02-WCO (N.D. Ga.), a

² *Id.* at 44-45.

redistricting case involving city council elections in Gainesville, Georgia. I have served as an expert in numerous other cases where I have given depositions but did not testify. These include *Lewis, et al. v. Alamance County, et al.*, No. 2:92-cv-00614 (M.D. N.C.) and *Jackson v. Nassau County Board of Supervisors*, No. CV 91-3720 (E.D. N.Y.). I have also provided consultation related to the electoral structure for the City of Hampton, Virginia.

IV. Opinions

I have formed the following opinions: Based on the data available at the time of writing this report, voting in Mississippi (and in particular in Supreme Court District 1) since 2011 is racially polarized. In particular, in 17 of the 17 biracial elections analyzed, Black voters expressed a clear preference for the same candidate and voted cohesively for that candidate, typically at a rate of more than 90%. Furthermore, this preference was not shared by the White voters, who provided very low support for the Black-preferred candidates, and typically voted against Black-preferred candidates at a rate of more than 90%. As a result, the Black preferred candidates were usually defeated due to White bloc voting in the elections analyzed. I identified all biracial statewide and Supreme Court District 1 general election contests (including Public Service Commission and Transportation Commission Central District) from the 2011 election cycle through 2020. Notably, the dataset includes two biracial endogenous contests, consisting of the 2012 and 2020 contests for Supreme Court Justice in Supreme Court District 1. Endogenous elections are elections held using the challenged district at issue (here, the Supreme Court district lines at issue). The dataset also includes five “quasi-endogenous” contests whereby the districts consist of the same lines as Supreme Court District 1, but the position sought is Public Service Commissioner or Transportation Commissioner. In addition to those five “quasi-endogenous,” I

also identified and reviewed 10 exogenous biracial elections. Exogenous elections are elections that do not utilize the particular district lines at issue.³ It should be noted here that estimates for all racial polarized voting analyses are derived only from the precincts contained in Supreme Court District 1. All of those contests exhibited very high levels of racially polarized voting, and the Black-preferred candidate was defeated in Supreme Court District 1 by White bloc voting in 11 contests, including both of the biracial elections for Supreme Court justice, which were non-partisan races in which party affiliation cannot have driven the results.

In sum, it is my opinion that the data demonstrates a high degree of racial polarization and that the second and third *Gingles* criteria are met in this case.

V. Elections Analyzed

The attorneys for the plaintiffs in this case have asked me to analyze whether and to what extent voters' candidate preferences reveal the presence of racially polarized voting. I am aware of case law stating that endogenous elections and biracial elections are generally considered the most probative for assessing RPV.⁴

³ Evidence from exogenous elections can be used to supplement evidence from endogenous elections, particularly where there is little data from recent endogenous elections. The court premised its holding on *Gingles*'s view of sparse data: “[W]here a minority group has begun to sponsor candidates just recently the fact that statistics from only one or a few elections are available for examination does not foreclose a vote dilution claim.” *Citizens for a Better Gretna v. City of Gretna*, 834 F.2d 496, 502 (5th Cir. 1987) quoting *Gingles*, 478 U.S. at 57 n.25).

⁴ See *Wright v. Sumter Cnty.*, 979 F.3d 1282, 1292-93 (11th Cir. 2020) (“[E]vidence drawn from elections involving black candidates is more probative in Section Two cases”); *Clark v. Calhoun Cnty., Miss.*, 88 F.3d 1393, 1397 (5th Cir. 1996) (“[E]xogenous elections—those not involving the particular office at issue—are less probative than elections involving the specific office that is the subject of the litigation.”).

In total, seventeen biracial elections of recent vintage were identified for this report. Two of these elections were Supreme Court contests held in 2012 and 2020. The 2012 election involved the unsuccessful bid by Earle Banks to win a Supreme Court District 1 seat and the 2020 election involved the unsuccessful effort of Latrice Westbrooks to win a Supreme Court District 1 seat. Both of those elections were non-partisan (that is, candidates not appear on the ballot with any partisan affiliation). In addition to these two contests, there have been five biracial general election contests for Public Service Commission and Transportation Commission in 2011, 2015, and 2019. These contests are noted as “quasi-endogenous” contests because they utilize the same lines as Supreme Court District 1. Another 10 exogenous statewide contests were also examined.

My focus on biracial elections is consistent with scholarly research, which finds that minority voters are particularly mobilized in elections involving a minority candidate running against White candidates.⁵ Biracial elections are particularly salient because, in the contest of potential racial polarization, these elections are more likely to satisfy the necessary conditions in which Black voters and non-Black voters had a realistic opportunity to vote for the candidate of their choice, which is not necessarily available in uni-racial elections involving only White candidates (or involving only Black candidates). In addition to elections from the Central District, elections included in this report consist of all biracial statewide contests for U.S. President, U.S. Senator, and various statewide offices (e.g., Governor or Secretary of State) since 2011. For those statewide contests, I analyzed RPV by examining election results in those precincts that are within Supreme Court District 1 lines. There is a total of ten such contests. I

⁵ Matt A. Barreto. 2012. *Ethnic Cues: The Role of Shared Ethnicity in Latino Political Participation*. University of Michigan Press; Karen M. Kaufmann. 2004. *The Urban Voter: Group Conflict and Mayoral Voting Behavior in American Cities*. University of Michigan Press.

focused on elections since 2011 because more recent contests are more relevant in determining the presence of racial polarization in the here and now.

VI. Data

To analyze voting patterns by race using aggregate level information, a database that combines election results with demographic information is required. This database is almost always constructed using election precincts as the unit of analysis. The demographic composition of the precincts is based on voter registration or turnout by race/ethnicity if this information is available; if it is not, then voting age population is used. Here, Mississippi does not collect voter registration data by race and therefore voting age population (VAP) by race and ethnicity as reported in the PL 94-171 U.S. Census redistricting data was used for ascertaining the demographic composition of the precincts.

In particular, VAP by race and ethnicity for each precinct and year was calculated by aggregating Census block-level population data to the precinct level. For 2020 and 2010, VAP by race and ethnicity for each precinct and year was calculated by aggregating 2020 and 2010 Census block-level population data to the precinct level. For years between 2010 and 2020, population for each precinct was calculated according to the following interpolation procedure:

- (a) the total population change between 2010 and 2020 for each racial group was calculated for each Census Block by subtracting 2010 population from 2020 population, with 2010 and 2020 Census Blocks matched using the U.S. Census Bureau's Block Relationship files;⁶

⁶ See U.S. Census Bureau, *Relationship Files*, <https://www.census.gov/geographies/reference-files/time-series/geo/relationship-files.html>.

(b) the resulting total change number for each Block was then multiplied by the fraction of the decade that had passed (e.g., the 2010-2020 change number was multiplied by 6/10 or .6 for the year 2016, 5/10 or .5 for 2015, etc.);

(c) that product, representing the marginal increase in population for a particular group in each Census Block at a given point of time, was then added to the 2010 baseline population for each Census Block to yield the block-level population in a given year;

(d) the block-level data for each year was then aggregated to the precinct level.

Analyzing voting patterns by race requires a database that combines population data by race (or registration or turnout by race if it is available) with election returns. To build the dataset in this instance, 2010 and 2020 official voting tabulation district (VTD) shapefiles were acquired from the U.S Census Bureau as part of the P.L. 94-171 file. In years near the decennial Census, VTDs are a close approximation to voting precincts. In addition, in-cycle precinct-level shapefile datasets for 2016, 2018, and 2019 were acquired from the Harvard dataverse website.⁷ These shapefiles were joined to precinct-level election returns, which were obtained from the Mississippi State Secretary of State's Office, processed, and cleaned (i.e., rendered in a machine-readable format) by More Equitable Democracy, a consultant for the attorneys in this case, with review by counsel. The precinct-level results were then joined with the precinct-level population data described above.

⁷ Voting and Election Science Team, 2018, "2016 Precinct-Level Election Results," <https://doi.org/10.7910/DVN/NH5S2I>, Harvard Dataverse, V86; Voting and Election Science Team, 2019, "2018 Precinct-Level Election Results," <https://doi.org/10.7910/DVN/UBKYRU>, Harvard Dataverse, V61; Voting and Election Science Team, 2020, "2019 Precinct-Level Election Results," <https://doi.org/10.7910/DVN/2AJUII>, Harvard Dataverse, V5.

The complete dataset used for this report, including the interpolated U.S. Census population data described above, was prepared and provided to me by counsel, and is being made available to Defendants.

VII. Analysis of Voting Patterns by Race

An analysis of voting patterns by race serves as the foundation of two of the three threshold elements of the “results test” as outlined in *Thornburg v. Gingles*: a racial bloc voting analysis is needed to determine whether the minority group is politically cohesive; and the analysis is required to determine if Whites are voting sufficiently as a bloc to usually defeat the candidates preferred by minority voters. The voting patterns of White and minority voters must be estimated using statistical techniques because direct information about the race of the voters is not, of course, available on the ballots cast.

To carry out an analysis of voting patterns by race, an aggregate level database must be constructed, usually employing election precincts as the units of observation. Information relating to the demographic composition and election results in these precincts is collected, combined, and statistically analyzed to determine if there is a relationship between the racial composition of the precincts and support for specific candidates across the precincts.

I used the following two-step operational rules to measure whether a particular election is racially polarized: First, I estimated the Black and White group support for the Black candidate in a given biracial election; and second, I further analyzed the extent of racial polarization by considering the gap between the level of Black support for Black preferred candidates, and the level of White support for Black-preferred candidates. Since voting in the United States takes place in privacy, the only way to determine the levels of Black and White group support is

through statistical procedures. In this report, I analyzed the set of biracial elections described above using the Ecological Inference (EI) method developed by Professor Gary King of Harvard University.⁸ EI is a statistical procedure for estimating voting results of voter groups (in this case racial groups).

Here, I use a more recently developed version of ecological inference software known as EI Compare to run the EI model. EI Compare software provides the results from estimates of the King EI model and a comparison estimate in what is known as the EI RxC model. EI RxC expands the analysis so that more than two racial/ethnic groups can be considered simultaneously. In the next section, I report estimates calculated using a two-group version of the King EI model, which is well suited to estimating voter results where the electorate is divided between two groups.⁹ That analysis is appropriate here because Mississippi's racial population

⁸ See Gary King, *A Solution to the Ecological Inference Problem: Reconstructing Individual Behavior from Aggregate Data* (Princeton University Press, 1997). This procedure is superior to the methodologies relied upon in the *Gingles* case itself, which were homogeneous precinct analysis and ecological regression analyses. Homogenous Precinct Analyses simply report the percentage of the votes received by a candidate or set of candidates within the precincts in which a particular group, Blacks or Whites, constitutes over 90 percent of the people receiving ballots. Voters in such precincts might not vote in a similar way to that of voters residing in mixed precincts, however. Ecological Regression (ER) derives estimates, based on all of the precincts, through a linear model premised on the notion that the percentages of Blacks that vote for a particular candidate or candidates are the same in every precinct, and likewise that the percentages of Whites that vote for a candidate or set of candidates are the same in every precinct. EI also takes into account every precinct, but does not rely on an assumption of linearity. Instead, it employs a "maximum likelihood" model for deriving estimates. The EI procedure further incorporates the method of bounds in the analysis, which precludes group estimates from exceeding real-world limits, for example preventing a group's estimated support for a candidate or group of candidates from being above 100.0 percent or below 0.0 percent, as can happen with ER. EI, which can also be used for other purposes, is now used widely in racially polarized voting analyses.

⁹ Here, the underlying demographic data functionally includes three racial groups: Black VAP, White VAP, and Other VAP, i.e., the difference between Total VAP and the sum of Black VAP and White VAP. The vast majority of voters fall into the Black VAP or White VAP categories, and the Other VAP number is small. However, because the EI model is sometimes said to be preferred when there are only two racial groups at issue, e.g., Collingwood, Loren et

is highly binary, i.e., Black and White. I also separately generated three-group (White, Black, and Other) King EI and EI RxC analyses using the EI Compare software, both of which produced similar estimates of racial group support (i.e., similarly high levels of racial polarization) which corroborate the results of the two-group King EI model.¹⁰ The full results of these analyses are reported in a summary table in **Appendix 2** and the raw results are included in **Appendix 3** and **Appendix 4** along with the scripts that were run to produce the results.

The methods employed here not only provide a specific, or point, estimate of a group's support for a particular candidate, but also provide confidence intervals for that estimate. These intervals identify the range of estimates within which we can be 95 percent confident, statistically, of where the actual value of a group's support for a candidate falls. The point estimate is the best estimate, in that it is most likely to be the actual value. EI has been widely

al. (2016). *eiCompare: Comparing Ecological Inference Estimates across EI and EI:RC*. The R Journal. 92-101, I reduced the number of race variables to two to employ a two-group EI model. The two-group EI estimates set forth in the body of this report were derived in the following manner: First, I estimated the Black vote by running the EI model with a Black VAP variable and a combined White VAP and Other VAP variable (i.e., I combined the White VAP and Other VAP data to create one variable). Second, I similarly estimated the White vote by running the EI model with a White VAP variable and a combined Black VAP and "Other VAP" variable. The scripts used to generate the two-group King EI analysis described above are included in **Appendix 3**.

As noted in text, and set forth in the Appendix 2 summary table, running the King EI model using all three groups, rather than reducing to two, produced nearly identical results to the two-group procedure.

¹⁰ Because the EI RxC method is designed to allow for the simultaneous estimation of support by more than two groups, the EI RxC analysis included in the Appendix 2 summary table and in Appendix 4 raw data estimates levels of candidate support for each of the three racial groups reflected in the demographic data (Black VAP, White VAP, and Other VAP). The scripts used to generate the RxC estimates are also included in **Appendix 4**. While the EI RxC analysis also shows racial polarization across the board, and generally produces estimates of Black support for Black candidates that are very close to the EI model estimates, the EI RxC analysis in a number of cases estimates levels of White support for Black candidates that are *even lower* than the estimates produced by the King EI models.

used as the most advanced and reliable statistical procedure for RPV estimates in not only academic research but also voting rights cases. To estimate support for candidates from different racial groups using an EI operation, precinct-level election return data for a given election is matched against demographic data regarding the voting-age population (VAP) of various racial groups (here, White, Black, and “all other” racial groups) typically also at the precinct level from the time of the election. These data are used to calculate coefficient estimates to determine racial bloc voting.

VIII. The Findings¹¹

As explained above, the selection of the elections for my RPV analysis is based on three criteria: (1) biracial elections involving at least one Black major candidate and one white major candidate¹²; (2) since 2011; (3) which are endogenous elections supplemented by “quasi-endogenous” elections and exogenous statewide elections. As set forth in Table 1, the two endogenous Supreme Court District 1 elections reveal high levels of racial polarized voting.

In particular, in the 2012 Supreme Court contest in that district, according to the table using 95% confidence limits around the estimated coefficients, we can expect the “true” value of the estimated Black support for Candidate Banks to lie between 80.80 and 81.80 percent, with 81.26 being our best estimate, while the 95% confidence limits around White support are such that we expect the “true” value of the estimate for the White vote to lie between 5.01 and 5.83 percent, with 5.44 being our best estimate. Likewise, for the 2020 Supreme Court election, when

¹¹ I used the eiCompare package from the library within the RStudio-software to derive the racial polarized voting estimates for EI.

¹² There was one other bi-racial contest that included a third party Black candidate. This contest was excluded because the Black candidate was not from a major party.

estimating the support for Candidate Westbrook by race, we can expect the “true” value of the estimated Black support for Westbrook to lie between 89.97 and 91.03 percent, with 90.46 being the best estimate. The best estimate for White support for Westbrook is 6.43%. As is indicated by the estimated coefficients, each of the Black candidates in these endogenous, non-partisan races received substantial Black support, but less than 10% of the White vote, leading to the defeat of Black voters’ candidates of choice. Notably, both of those biracial Supreme Court District 1 contests were non-partisan elections, and thus the high levels of racial polarization in those races cannot have been driven by political party affiliation.

Table 1. Estimated Racial Support for Black Candidates in Endogenous Elections

Election	Black Candidate	White Candidate	% Vote Black Candidate	Black Vote Black Candidate (CI) ¹³	White Vote Black Candidate (CI)	Black Candidate Won	RPV
2012 Supreme Court	Banks	Waller	44.4	81.26 (80.80-81.80)	5.44 (5.01-5.83)	No	Yes
2020 Supreme Court	Westbrook	Griffis	48.5	90.46 (89.97-91.03)	6.43 (5.89-6.88)	No	Yes

As set forth in Table 2, five additional “quasi-endogenous” biracial elections in Supreme Court District 1 corroborate the existence of high levels of racial polarization in that district, and corroborate that such polarization usually leads to the defeat of Black-preferred candidates. In each of those races, Black voters typically supported Black candidates at rates of around 90% or more, while White voters supported the Black candidate with less than 10% of the vote (typically around 8%). In four of the five elections, this high level of White bloc voting led to the defeat of the Black-preferred candidate despite high levels of Black support.

¹³ C.I. is the confidence interval for each of the estimates.

Table 2. Quasi-Endogenous Elections

Election	White Candidate	Black Candidate	% Black Candidate	Black Vote Black Candidate (CI)	White Vote Black Candidate (CI)	Black Candidate Won	RPV
2011 Central Public Service Commission	Posey	Green	44	90.94 (90.27-91.50)	8.16 (7.47-8.80)	No	Yes
2011 Central Transportation Commission	Hall	Crisler	47	91.04 (90.44-91.42)	8.29 (7.80-8.76)	No	Yes
2015 Central Transportation Commission	Hall	Coleman	45	89.36 (88.90-89.83)	4.87 (4.42-5.38)	No	Yes
2019 Central Public Service Commission	Bailey	Stamps	49	91.36 (91.52-92.83)	7.60 (7.07-8.51)	No	Yes
2019 Central Transportation Commission	Lee	Simmons	51	93.97 (93.33-94.44)	8.81 (8.12-9.79)	Yes	Yes

Finally, the results in Table 3, which shows exogenous statewide biracial contests since 2011, again reveal high levels of racially polarized voting, with Blacks overwhelmingly supporting the Black candidate with approximately 90% or more of their vote and Whites supporting the Black candidate with typically 15% or less of their vote (sometimes much less). Based on the data, even in these partisan statewide contests, half of the Black candidates were defeated in Supreme Court District 1, despite Black support in the high 80s or 90s due to the level of White bloc voting.

Table 3. Exogenous Elections

Election	White Candidate	Black Candidate	Percent Black Candidate	Black Vote Black Candidate	White Vote Black Candidate	Black Candidate Won	RPV
2011 Governor	Bryant	DuPree	53	90.94 (90.20-91.51)	8.11 (7.45-8.71)	No	Yes
2012 President	Romney	Obama	54	92.72 (92.13-93.32)	12.12 (11.13-13.38)	Yes	Yes
2015 Governor	Bryant	Gray	41	87.76 (87.06-88.17)	4.44 (4.04-5.01)	No	Yes
2015 Secretary of State	Hosemann	Graham	44	87.58 (87.12-87.97)	4.67 (4.11-5.21)	No	Yes
2018 U.S. Senate	Hyde-Smith	Espy	57	94.91 (94.27-95.49)	16.42 (15.70-17.36)	Yes	Yes
2019 Treasurer	McRae	Green	49	92.38 (92.20-93.49)	7.16 (6.48-7.76)	No	Yes
2019 Sec. of State	Watson	DuPree	51	94.35 (93.81-94.84)	8.73 (8.24-9.51)	Yes	Yes
2019 Insurance Commission	Chaney	Amos	49	92.08 (91.52-92.62)	6.66 (6.08-7.26)	No	Yes
2019 Attorney General	Fitch	Collins	53	94.54 (93.87-95.08)	10.82 (10.13-11.51)	Yes	Yes
2020 U.S. Senate	Hyde-Smith	Espy	55	96.34 (95.94-96.68)	13.5 (12.71-14.30)	Yes	Yes

IX. Conclusion

The empirical analyses clearly reveal that in 17 of 17 biracial elections in the last decade, Black voters expressed a strong, cohesive preference for Black candidates, but that preference was not shared by White voters, who voted cohesively against Black-preferred candidates every time. This clear RPV pattern is demonstrated by two endogenous biracial Supreme Court elections, which are non-partisan races and thus cannot be explained by party affiliation, as well as five additional quasi-endogenous contests, Transportation and Public Service Commissioner races, and ten more statewide biracial elections during the last decade. Despite Black voters uniting cohesively behind their preferred candidates, the White majority typically voted sufficiently as a bloc to defeat the Black candidates in these elections, including in both endogenous biracial Supreme Court elections, and four out of five “quasi endogenous” commissioner races.

Based on my empirical analysis of Mississippi's recent elections, I conclude that Mississippi's elections, particularly in Supreme Court District 1, exhibit a high level of polarization, and that the second and third threshold criteria involving racial polarization as set forth in *Gingles* are met.

As noted, I reserve the right to amend, modify, or supplement my analysis and opinions. Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the information and opinions contained in this report are true and correct to the best of my knowledge.

October 3, 2022

Dr. B. D'Andra Orey, Ph. D

APPENDIX 1: CURRICULUM VITAE

B. D'Andra Orey, PhD Curriculum Vitae

Office:

Department of Political Science
Jackson State University
1400 John R. Lynch St.
Jackson, MS 39217
(601) 979-2737
byron.d.orey@jsums.edu

Education

University of New Orleans
Ph. D., Political Science, 1999

State University of New York at Stony Brook,
M.A., Political Science, 1993

University of Mississippi, Oxford, MS
Master of Public Administration, August 1990

Mississippi Valley State University, Itta Bena, MS
B.S., Business Administration, May 1988

Continuing Education

**International Workshop on Statistical Genetic Methods for Human Complex
Traits.** March 3 –March 7, 2014. Boulder, Colorado

**International Workshop on Statistical Genetics and Methodology of Twin
and Family Studies.** February 28-March 6, 2010. Boulder, Colorado
-Received training in the area of structural equation modeling, using R and Mx
using twin data

Inter-University Consortium of Political and Social Research, University of
Michigan, 2006, Course: “Empirical Summer Program in Applied Multi-
Ethnic Research”

Institute for Professional Education, Virginia Tech University, 1995. Linear
and Nonlinear Regression with Applications

Inter-University Consortium of Political and Social Research, University of Michigan, 1993, Courses: Logit and Log-Linear Models; Regression Analysis, Maximum Likelihood Estimation; and Structural Equations (Causal) Models

Professional Training

Duke University Community Census and Redistricting Institute, August 2010.
-Received training to prepare redistricting plans using Geographical Information Systems.

Southern Regional Council, Voting Rights Expert Witness Training.
January-December 1993
-Received training in the areas of ecological regression and homogenous case analysis. Mentors included: James Loewen, Ph.D. University of Vermont, Bernard Grofman, Ph.D. University of California Irvine and Alan Lichtman, Ph.D., The American University, Washington D.C.

Southern Regional Council, Voting Rights Expert Witness Training.
January-December 1994
-Received training to prepare redistricting plans using Geographical Information Systems.

Academic Positions

Jackson State University, Jackson, MS
Professor, Political Science (Fall 2008-Present)

Jackson State University, Jackson, MS
Professor and Chair, Political Science (Fall 2008-2012)

The University of Nebraska, Lincoln, NE
Associate Professor, Political Science (Spring 2007-Spring 2008).

The University of Nebraska, Lincoln, NE
Assistant Professor, Political Science (Fall 2001-Spring 2007).

University of Mississippi, Oxford, MS
Assistant Professor, Political Science and Afro American Studies (1999-2001).

Professional Publications (Peer-Reviewed Articles)

“Racial Differences in Feelings of Distress during the COVID-19 Pandemic and John Henryism Active Coping in the United States: Results from a National

Survey.” 2022. *Social Science Quarterly*. (Jas Sullivan, Samaah Sullivan, Byron D’Andra Orey and Najja Baptist).

“Racial Identity and Emotional Responses to Confederate Symbols.” 2021. *Social Science Quarterly*. (**Byron D’Andra Orey**, Najja Baptist and Valeria Sinclair- Chapman).

“Melanated Millennials and the Politics of Black Hair.” 2019. *Social Science Quarterly*. (**Byron D’Andra Orey** and Yu Zhang)

“Race and Wellbeing in the US: The Psychological Toll of a Broken System.” 2019 **Byron D’Andra Orey** *Scientia*.

“Implicit Black Identification and Stereotype Threat Among African American Students.” 2017. *Social Science Research*. (Thomas Cramer and **Byron D’Andra Orey**).

“Mississippi and the Great White Switheroo.” April 2016, *PS Political Science and Politics*. (**Byron D’Andra Orey** and Ernest Dupree)

“The 50th Anniversary of the Voting Rights Act and the Quiet Revolution.” 2015, *National Political Science Review* (**Byron D’Andra Orey**, Gloria Billingsly and Athena King).

“Professional Conferences and the Challenges of Studying Black Politics.” April 2015, *PS Political Science and Politics* (Nikol Alexander-Floyd, **Byron D’Andra Orey** and Khalilah Brown-Dean)

“Black Women State Legislators: Electoral Trend Data 1995-2011.” 2014 *National Political Science Review* 2014 (**Byron D’Andra Orey** and Nadia Brown) Volume 16: 143-149.

“Black Opposition to Welfare in the Age of Obama” *Race, Gender, and Class*. 2013 (**Byron D’Andra Orey** Athena King, Shonda Lawrence and Brian E. Anderson)

“Using Black Samples to Conduct Implicit Racial Attitudes Research” *PS: Political Science and Politics* (July 2013) (**Byron D’Andra Orey**, Thomas Craemer and Melanye Price)

“Black Opposition to Progressive Racial Policies and the “Double (Non)Consciousness” Thesis. 2012 *Race & Policy* 8: 52-66. (**Byron D’Andra Orey**, Athena King, Leniece Titani-Smith)

- “Nature, Nurture, and Ethnocentrism in the Minnesota Twin Study” (**Byron D’Andra Orey** and Hyung Park). *Twin Research and Human Genetics. Volume 15, Number 1.* 2012
- “White Support for Racial Referenda in the South” *Politics & Policy* (**Byron D’Andra Orey**, Marvin Overby, Peter Hatemi and Baodong Liu). August 2011
- “The Politics of Race, Gender, Ethnicity and Representation in the Texas Legislature.” *Race & Policy* (Jessica L. Lavariega Monforti, **Byron D’Andra Orey** and Andrew Conroy) Spring/Summer 2009
- “Church Attendance, Social Capital, and Black Voting Participation.” *Social Science Quarterly* (Paul Liu, Sharon Austin and **Byron D’Andra Orey**) September 2009
- “Racial Threat Republicanism and the Rebel Flag: Trent Lott and the 2006 Mississippi Senate Race.” **Byron D’Andra Orey** *National Political Science Review*, Vol. 12, 2009
- “The Role of Race, Gender and Structure in State Policymaking.” *Race & Policy* (**Byron D’Andra Orey** and Chris Larimer) Spring/Summer 2008
- “The Politics of AIDS in the Black Community.” *Forum on Public Policy* (Oxford University) Summer 2007
- “African Americans in the State Legislative Power Structure: Committee Chairs.” **Byron D’Andra Orey**, Marvin Overby and Chris Larimer. *Social Science Quarterly*, September 2007
- “Accounting for “Racism: Responses to Political Predicaments in Two States.” **Byron D’Andra Orey** and Marvin Overby with Barbara J. Walkosz and Kimberly Walker. *State Politics and Policy Quarterly*, Fall 2007: 235-255
- “A Systematic Analysis of the Deracialization Concept.” **Byron D’Andra Orey** and Boris Ricks. *The National Political Science Review*. January 2007: 325-334
- “Deracialization or Racialization: The Making of a Black Mayor in Jackson, Mississippi” **Byron D’Andra Orey**, *Politics and Policy*. December 2006: 814-836
- “Race and Gender Matter: Refining Models of Legislative Policy Making in State Legislatures.” 2006. **Byron D’Andra Orey**, Wendy Smooth with Kimberly Adams and Kish Harris-Clark. *Journal of Women, Politics and Policy* 28: 97-119

“Framing the Issue, When the Issue is Race.” **Byron D’Andra Orey**
International Journal of Africana Studies. January 2005: 209-223

“Explaining Black Conservatives: Racial Uplift or Racial Resentment.” **Byron D’Andra Orey** *The Black Scholar*. 2004: 18-22.

“A Research Note on White Racial Attitudes and Support for the Mississippi State Flag.” **Byron D’Andra Orey** *American Politics Research*. January 2004: 102-116

“A New Racial Threat in the New South? (A Conditional) Yes!” **Byron D’Andra Orey** *American Review of Politics*, Summer 2001: 233-255

“Symbolic Racism in the 1995 Louisiana Gubernatorial Election,” Jonathan Knuckey and **Byron D’Andra Orey**. *Social Science Quarterly*, December 2000: 1027-1035

“Black Legislative Politics in Mississippi,” **Byron D’Andra Orey** *Journal of Black Studies*, July 2000.

“The Race Race in Black and White: An analysis of the 1995 Louisiana Gubernatorial Election,” **Byron D’Andra Orey** *Southeastern Political Review*, December 1998

Books

Mississippi Conflict and Change (forthcoming) 2023. Contracted with the University of Mississippi Press. James Loewen, Charles Sallis and **Byron D’Andra Orey**).

Professional Publications (Book Chapters)

“Learning the Lessons of History” in Robert Wood Johnson Foundation’s Culture of Health. (forthcoming) 2022. Cambridge Press. Madeline England, Cristy Johnston Limon, **Byron D’Andra Orey**, Jason Reece and Geoff K. Ward.

“The Liberal Arts Faculty and Writing Bootcamp” in Redefining Liberal Arts Education in the 21st Century Edited by Robert Lockett. University of Mississippi Press. (Preselfanie McDaniels, **Byron D’Andra Orey** Rico Chapman and Monica Flippin-Wynn.

“The Evolution of Racial Attitudes from Martin Luther King to Barack Obama” in Assessing Public Policy and Contemporary Social Developments: Through the Prism of Dr. Martin Luther King’s Dream. Edited by Michael Clemmons. University Press, 2017. (**Byron D’Andra Orey**, Lakeyta Bonnette and Athena King)

“Evolution and Devolution of the Voting Rights Act? Black Descriptive and Substantive Representation” **Byron D’Andra Orey** In Minority Voting in the United States. August 2015. Editors: Kyle Kreider and Thomas Balidino (Praeger).

“The Ascendency of Black Political Power in Mississippi.” **Byron D’Andra Orey** In The Civil Rights Movement in Mississippi, University of Mississippi Press, 2013. Edited by Ted Ownby

“Course Portfolio for POLS 100: Power and Politics.” In Inquiry into the Classroom: A Practical Guide for the Scholarship of Teaching and Learning, **Byron D’Andra Orey** Edited by Paul Savory, Amy Goodburn, and Amy Burnett Nelson. Boston: Anker Publishing, 2007

“Race and Gender Matter: Refining Models of Legislative Policy Making in State Legislatures.” 2006, Reprinted in Intersectionality and Politics Recent Research on Gender, Race, and Political Representation in the United States, Edited by Carol Hardy-Fanta

“Black and Brown Conflict? Intergroup Attitudes and their Impact on Policy Preferences.” **Byron D’Andra Orey** and Jessica Monfort 2006. In Jessica Perez-Monforti and William Nelson’s Black And Latina/o Politics: Issues In Political Development In The United States Barnhardt & Ashe Publishing Company

“Teaching the Politics of Race in a Majority White Institution.” **Byron D’Andra Orey** 2006. In C.A. Stanley (Ed.), Faculty of color teaching in predominantly white colleges and universities. Bolton, MA: Anker Publishing Company (2006)

“Participation in Electoral Politics”, **Byron D’Andra Orey** 2004. In African Americans and Political Participation, edited by K.C. Morrison (ABC-CLIO Press) with Reginald Vance

On-Line Publications

“Understanding the Important Role of Support Staff.” American Political Science Association.

Non-Peer Reviewed Articles/Manuscripts

“The Ascendency to Black Power: Mississippi State Legislators,” in Who’s Who in Black Mississippi. Mississippi Press. 2012

“The Cross-Cutting Issue of AIDS in the Black Community.” *Oracle*, Winter 2008

Newspaper Articles

“Is Black History Still Relevancy” Jackson Free Press, March 6, 2013.

<http://www.jacksonfreepress.com/news/2013/mar/06/relevance-black-history/>

Courses Taught

Undergraduate: Power and Politics (honors); Power and Politics; Public Issues The Black Experience; Minority Politics; Political Participation Polls, Politics, and Public Opinion; Elections; Blacks and the American Political System; and Political Parties and Interest Groups; Research, Scope and Methods; The Legislative Process

Graduate: Race and the U.S. Political System; Blacks in the American Political System; Research Scopes and Methods; Political Inquiry & Research

Personal Awards/Grants/Fellowships

Kellogg Foundation, \$500,000 Emmett Till Interpretative Center, Tougaloo College, B. D’Andra Orey and James Loewen. This grant will allow the PIs to disseminate their textbook, Mississippi Conflict and Change and to conduct a social justice institute at Tougaloo College in Summer 2023.

National Science Foundation, “The Intersection of Race, Exposure to Trauma, and Politics.” \$500,000. Grant #: 2128198 Pending Negotiation (2021).

University of Michigan, Minority Serving Institutions Outreach and Collaboration Grant \$30,000. This award will help build collaborations between faculty and students at Jackson State University and the University of Michigan. Received 2020

National Science Foundation Intern Grant, \$47,000. This grant is a supplement to NSF grant #1649960. It will provide an opportunity for two graduate students to conduct internships that will help them develop professional work skills related to their field of study. 2020

National Park Service, \$27,569 This grant provides funding for an oral history project. It includes one graduate assistant. 2019

National Science Foundation Intern Grant, \$35,000. This grant is a supplement to NSF grant #1649960. It will provide an opportunity for a graduate student to conduct an internship that would help her develop her professional skills. 2019

University of Michigan, \$8,000. This award will help build collaborations between faculty and students at Jackson State University and the University of Michigan. Received 2019

W. K. Kellogg Foundation Community Leadership Network Fellowship, \$25,000. Nominated and awarded out of 800 applicants only 80 were accepted. 2019

Anna Julia Cooper Teacher of the Year National Conference of Black Political Scientists. 2019

National Science Foundation. \$35,000. This award is a supplement to NSF grant #1649960.

Alpha Kappa Alpha. Teacher of the Year. 2017

National Science Foundation Grant, \$179,000. Awarded August 2016. Title: “Racial Biases and Physiological Responses.” # 1649960

National Science Foundation Grant, \$170,000. Awarded May 2015. Title: “The Impact of Racially Traumatic Events on African Americans? Physiological, Psychological and Political Responses.” #1541562

Academic Exchange Fellowship, August 2 – August 10, 2015—This is an invitation-only fellowship. I was nominated by Professor Judith Kelley, the Stephan Haggard, Krause Distinguished Professor at Duke University. This purpose of the program is to invite Political Scientists to Israel to attend meetings with prominent Israeli and Palestinian policymakers, scholars and opinion leaders, covering a wide range of topics and political perspectives on domestic, foreign policy and security issues. I attended the law section of the program.

Center for Undergraduate Research, Awarded 2014-2015—Received a grant in the amount of \$7,000 to conduct research in collaborations with a team of undergraduates on physiological responses to racially traumatic events. Experimental research will be conducted with students who will conduct the experiments and analyze the data. Students presented their findings at the Mississippi Political Science Association and the National Conference of Black Political Scientists.

2014 Jackson State University Faculty Excellence Award

2014 Liberal Art’s Outstanding Researcher Award

Center for Undergraduate Research, Awarded 2013-2014—Received a grant in the amount of \$7,000 to conduct research with undergraduate students in the area of experimental research. Students will conduct experiments and analyze data to examining the impact of hair texture on African-American political attitudes. Students will present their findings at three national, regional and local conferences.

Jackson State University Creative Arts Award, 2014-2015. “The Study of Hairtexture and Candidate Evaluation.” This award in the amount of \$5,000 was presented by the President of Jackson State University to provide seed money for innovative research.

Palestinian American Research Center Fellow, 2013

- The fellowship provided full funding to investigate Palestinian in-group subconscious attitudes. This project compares African-American attitudes in the United States to Palestinian attitudes (Travel Dates: May 15-May 27, 2013).

Center for Undergraduate Research, Awarded 2012-2013—Received a grant in the amount of \$7,000 to conduct research with undergraduate students in the area of survey research. Students conducted a random digit dialing survey of respondents from various counties in Mississippi using “landline only telephone numbers.” The results revealed that a bias existed due to the failure of employing cell phones. Students used this project to present at three conferences, including a national conference.

UC-HBCU Initiative, Awarded 2012-2013— Awarded \$28,090 grant from the University of California-Historically Black Colleges and Universities Initiative (UC-HBCU) for 2012-13, Belinda Robnett and Katherine Tate, co-PIs. The HBCU partners are Byron Orey (Jackson State University) and Desiree Pedescleaux (Spelman College).

Diamond Award for Outstanding Teaching—Undergraduate Chapter of Kappa Alpha Psi, Jackson State University Awarded 2012.

“Who’s Who in Black Mississippi.” 2012. Recognized for achievements in the field of education.

Service Learning Faculty Fellow, Jackson State University Service Learning, \$2,500, 2011-2012

Jewel Limar Prestage Mentorship Award, National Conference of Black Political Scientists, March 2011 (\$1,000)

Global Inquiry Faculty Teaching Seminar Fellow, Jackson State University, \$5,000. July 2011

Advisor of the Year, Jackson State University Political Science Club. 2011

Virginia Institute for Psychiatric and Behavioral Genetics, Virginia Commonwealth University. Was invited to participate in a working Group using Minnesota Twin Data, August 2010 (Travel Grant)

Fellow, Community Census and Redistricting Institute, Duke University. \$2,000.
August 2010

Global Inquiry Faculty Teaching Seminar Fellow, Jackson State University.
\$5,000. July 2010

Help America Vote Act, \$2,500. "Teaching students about Poll Working." Fall
2010

International Workshop on Statistical Genetics and Methodology of Twin and
Family Studies. February 28-March 6, 2010. Boulder, Colorado (Travel Grant
plus tuition waiver)

TESS: Time Sharing Experiments for the Social Sciences (2009): Winner of a
competition to collect data for the following project: "Trusted Sources and
Racial Attitudes" (with Lester Spence)

National Science Foundation Grant, \$69,000. "The 2008 Presidential Election."
1/09-12/31/09. SES-0905629

Mississippi Humanities Council, "Oral History Interviews of Members of the
Legislative Black Caucus." \$2,000, September 2008

Anna Julia Cooper National Teaching Award 2008, National Conference of Black
Political Scientists

Research Council, Visiting Scholar Grant, 2007 (\$800): Received funds to assist
in defraying the cost for the guest speaker of the Annual MLK Banquet
sponsored by the Afrikan People Union (student organization)

Senning Summer Faculty Fellowship. "African-American Legislative Chairs."
(2007): \$10,000

Initiative for Teaching and Learning Excellence III, UNL. "Sankofa: Challenging
Racial Mythologies Here and Abroad" (2006: \$16,500, Denied)

Emerging Scholars Summer Fellow, University of Michigan, 2006, "Empirical
Summer Program in Applied Multi-Ethnic Research at the Inter-University
consortium for Political and Social Research" \$2,500

Layman Fund Award 2006, "Black Intra-Cultural Attitudes Toward Race-based
Policies." (2006-2007): \$9,500

Senning Summer Faculty Fellowship, "The Intersection of Race and Gender in
examining descriptive and substantive representation." (2006): \$6,500

Department of Labor, Broad Agency Small Contract, "Race and the Uninsured," with Tina Mueller. (2006, \$25,000, denied)

Initiative for Teaching and Learning Excellence II, UNL. "Sankofa, a Return to the Middle Passage." (2005): \$15,000, denied

Senning Summer Faculty Fellowship, 2005, "Race, Gender and Structure Matter: Descriptive versus Substantive Representation." (2005): \$6,500

Summer Grant Writing Institute, 2005, "Opposition to Racially-Targeted Redistributive Programs." (\$2,750)

National Science Foundation, 2004, "Black Racial Conservatives: Racial Uplift or Racial Resentment?" (Denied, \$204,000)

Maude Hammond Fellowship, 2004, Research Council, University of Nebraska, Lincoln, "Black Conservatives and Intra-group resentment." (2004): \$10,000

Senning Summer Faculty Fellowship, "African Americans in the State Legislative Power Structure: Committee Chairs." (Summer 2004): \$6,500

Gallup Research Professorship 2003-2004, "Explaining Black Conservatives: Racial Resentment or Racial Uplift?" (Summer 2003): \$4,600

Faculty Research Small Grant, "Deracialization or Racialization: The Making of a Black Mayor," University of Mississippi, (Summer 2000): \$3,500

National Science Foundation/Quality Education for Minority Network (January 1993) Amount: \$2,500

-To conduct research on the Federal Government's financial contributions to Historically Black Colleges and Universities

Conference Participation

"Racial Bias and the Shooting of Unarmed Blacks." Invited Talk. Miniconference on inequality of public administration/policy, May 21-22, 2020. American University, Washington, D.C. **CANCELED**

"A System of Bad Apples: When Racial Identity Trumps Resentment in the Shooting of Unarmed Blacks by Black Officers," with Periloux Peay. National Conference of Black Political Scientists, March 12-14, 2020. Buckhead, GA

"How Culture Shapes Equity and Health." Invited Talk. 2020 Sharing Knowledge to Build a Culture of Health Conference. March 4-6, 2020 at the Jackson Convention Complex in Jackson, Mississippi.

“African Americans' Emotional Responses to the Mississippi State Flag.” Southern Political Science Association, San Juan Puerto Rico. January 9-11, 2020, Caribe Hilton Hotel, San Juan Puerto Rico.

“Intersection of Political Science and Other Disciplines.” College Day. Jackson State University, Student Center. April 15, 2019.

Roundtable, ‘NCOBPS History: An Overview of Presidential Administrations.’ National Conference of Black Political Scientists, Baton Rouge, LA. 2019.

“African Americans Emotional Responses to Trump, the Confederate Flag and Police.” American Political Science Association. Boston, MA. September 2018.

“African Americans Physiological Responses to Confederate Symbols.” Midwestern Political Science Association, Chicago, Illinois, April 7, 2017.

“Environmental Justice Policy, Intersectionality and Racial Context,” National Conference of Black Political Scientists, March 16, 2017.

“Understanding Black Political Attitudes and the Intersection of Hair Texture and Colorism,” Annual Conference of the Mississippi Political Science Association, Jackson, MS, February 10, 2017.

“The 50th Anniversary of the Voting Rights Act and the Quiet Revolution,” Mississippi Political Science Association, Jackson, MS. Gloria Billingsley, B. D'Andra Orey and Athena M. King. February 10, 2017.

“Accountability, Customization, Sustainability, & Production: The Interdisciplinary Faculty Writing Boot Camp” Mississippi Philological Association Annual Conference. February 11, 2017. Mississippi Valley State University, Itta Bena, MS.

“Author Meets Critics: Robert Mickey’s Paths Out of Dixie,” Southern Political Science Association, New Orleans, LA, January 14, 2017

“Accountability, Customization, Sustainability, & Production: Reflecting on Our Liberal Arts Faculty Writing Boot Camp.” College of Liberal Arts Conference, Jackson, MS. October 8, 2016.

“Teaching about Mississippi in Trying Times.” Roundtable, College of Liberal Arts Conference, Jackson, MS. October 7, 2016.

Paper: “HBCUs to Conduct Research on Black Political Attitudes and Behavior.” (Students: Kiescia Dickinson, Courtney Viverette and Jauan Knight). National

Conference of Black Political Scientist conference (March 17-19 2016). Hilton Garden Inn. Jackson, Mississippi.

Paper: "Southern White Legislative backlash to the Voting Rights Act of 1965." (Student: Ernest DuPree). Southern Political Science Association conference. (January 7-9, 2016 at the Caribe Hilton, San Juan Puerto Rico.

Round Table: "Reflections on Voting Rights in the South in the Age of *Shelby v. Holder*." Southern Political Science Association Southern Political Science Association conference. (January 7-9, 2016 at the Caribe Hilton, San Juan Puerto Rico.

"Blacks' Political Attitudes and Psychological Responses to Racially Traumatic Stressful Events." Southern Political Science Association Southern Political Science Association conference. (January 7-9, 2016 at the Caribe Hilton, San Juan Puerto Rico.

Paper: "Black Strategic Voting or Genuine Republican Support: The 2014 Mississippi Senate." (Student: Nafessa Edges). National Conference of Black Political Scientists conference (March 17-21, 2015). Double Tree Hotel. Atlanta, GA.

Paper: "Psychological and Physiological Responses to Traumatic Events: The Case of Ferguson, Missouri." (Students: Kyler Lee and Jasmine Jackson). Paper presented at the National Conference of Black Political Scientists conference (March 17-21, 2015). Double Tree Hotel, Atlanta, GA.

Paper: "The Evolution and Devolution of the Voting Rights Act (1965-2014). National Conference of Black Political Scientists Conference (March 17-21, 2015). Double Tree Hotel, Atlanta, GA.

Paper: "Sources We Can Believe In: The Effect of Elite Level Cueing on Black Attributions of Inequality." Mississippi Political Science Association (February 13, 2015). Jackson State University, Jackson, MS.

Roundtable: "(Non)Traditional Methods in the Study of Black Politics: Voices from the Field." American Political Science Association: Roundtable (August 30, 2014). Washington, D.C. Hilton.

Paper: "Candidate Evaluation of Black Women Candidates' Hair Style and Texture," (with Nadia Brown). Paper presented at the Southern Political Science Association's annual meeting. (January 9-11, 2014) New Orleans, Louisiana.

Paper: "Moving Beyond Race and Gender: An Intersectional Analysis of Bill Sponsorship in State Legislatures," (with Nadia Brown). Paper to be presented

at the Southern Political Science Association's annual meeting (January 9-11, 2014) New Orleans, Louisiana

Round Table: "The Status of the APSA Task Force on Political Science in the 21st Century." The Southern Political Science Association's annual meeting, (January 9-11, 2014) New Orleans, Louisiana

Panel: Author Meets Critics: "Black Mayors White Majorities The Balancing Act of Racial Politics." Ravi Perry Author. . The Southern Political Science Association's annual meeting, (January 9-11, 2014) New Orleans, Louisiana

Moderator: "New Mayor's Perspective of the First 100 Days." Mississippi Legislative Black Caucus Mayor's Summit (September 26, 2013), Jackson State University, Jackson, MS

Paper: "Environmental Justice Policy, Intersectionality and Racial Context" (with Athena King). Paper presented at the Midwestern Political Science Association's annual meeting, (April 11-13, 2013) Chicago, Illinois

Paper: "Intersectionality: Race, Gender and Party." Paper presented at the National Conference of Black Political Scientists, (March 14-16, 2013) Oak Brook, Illinois

Roundtable Participant: "Research Opportunities at Historically Black Colleges and Universities." National Conference of Black Political Scientists, (March 14-16, 2013) Oak Brook, Illinois

Paper: "Revisiting Black Racial Identity Using Subconscious Measures" Byron D'Andra Orey, Thomas Craemer and Melanye Price. Southern Political Science Association, (January 3-5, 2013) Orlando, FL

Roundtable: [Using ICPSR Data in Undergraduate Research](#), Southern Political Science Association, (January 3-5, 2013) Orlando, FL

Invited Panelists: Conference within a Conference--Gender, Race, & Intersectionality, Southern Political Science Association, (January 3-5, 2013) Orlando, FL

Discussant: "[The Representation and Presentation of Race and Gender](#)" Southern Political Science Association, (January 3-5, 2013) Orlando, FL

Paper: "Using Black Samples to Investigate the Validity of Implicit Racial Attitude Measures" (Paper nominated for Best Paper for Race and Ethnicity Section) (Paper written, however, Conference Cancelled), (September 2013), American Political Science Association, New Orleans, LA

Paper: Invited Participant: APSA Working Group on Implicit Attitudes, “Comparing AMP, IATs, Subliminal Priming and Black Identity” (Paper written, however, Conference Cancelled) Byron D’Andra Orey and Thomas Craemer, American Political Science Association, (September 2013) New Orleans, LA

Paper: “The Intersectionality of Race and Gender in State Legislatures,” Women for Progress Conference, (September 2012) Jackson, MS.

Paper: “Validating Implicit Racial Attitude Measures in Black HBCU Samples,” Midwestern Political Science Association, (April 12-15, 2012), Chicago, Illinois

Paper: “Black Conservatism and Opposition to Racial Policies,” National Conference of Black Political Scientist, (March 14-17, 2012, Las Vegas, Nevada

Paper: “Black Legislative Politics in Mississippi,” (with Rhonda Cooper), Southern Political Science Association, (January 11-14, 2012), New Orleans, LA

Chair, Panel: “Status of African Americans in the South,” Southern Political Science Association, (January 11-14, 2012), New Orleans, LA

Participant: “SPSA 2013 Program Committee,” Southern Political Science Association, (January 11-14, 2012), New Orleans, LA

Paper: “Intersections, Interactions, and Legislative Behavior,” (with Shoronda Wofford), Mississippi Political Science Association, Millsaps College, (November 11-12, 2011), Jackson, MS

Discussant: Local Politics in Mississippi, Mississippi Political Science Association, Millsaps College, (November 11-12, 2011), Jackson, MS

Invited Panelist: Chairs Luncheon and Workshop: “Unwitting Leader: How to be an Effective Department Chair, and Live to Tell About It” (Departmental Services Committee). **American Political Science Association, (September 1-4, 2011), Washington State Convention Center, Seattle Washington**

Paper: “Genetic Similarity, Ethnocentrism, and Political Attitudes.” **American Political Science Association, (September 1-4, 2011), Washington State Convention Center, Seattle Washington**

Chair, Panel: **Race, Immigration and Public Opinion, American Political Science Association, (September 1-4, 2011), Washington State Convention Center Seattle Washington**

Chair, Panel: "Racial Attitudes and the Role of Race in Electoral Politics."
Southern Political Science Association (January 6-8, 2011), Intercontinental
Hotel, New Orleans, LA

Paper: "Black Support for Racial Policies and The Double (Non)-Consciousness
Thesis." Southern Political Science Association (January 6-8, 2011),
Intercontinental Hotel. (with Leniece Davis and Byron Williams)

Paper: "Pro-Black Political Opinions, Participation and Stereotype Threat Among
African-American College Students." American Political Science Association,
(September 2010), Washington, D.C. (with Thomas Craemer and Hyung Park)

Paper: "Implicit Black Group-Identification and Stereotype Threat in the Age of
Obama." International Society of Political Psychology, (July 2010), San
Francisco, CA. (with Thomas Craemer)

Paper: "Implicit Racial Attitudes, Stereotype Threat, and Political Behavior
among Young African Americans in the Age of Obama," Midwestern Political
Science Association's Annual Meeting, (April 22, 2010), Chicago, IL, Palmer
House. (with Thomas Cramer and Hyung Park)

Paper: "Black Elite Rhetoric and System Justification Ideology." American
Political Science Association's Annual Meeting. Toronto, (September 5, 2009),
Ontario, Canada, (with Hyung Park)

Paper: "American Patriotism and the Reverend Wrights of the World." National
Conference of Black Political Scientists. Houston, TX (March 2009). (with
Najja Baptist)

Paper: "American Identity and Disillusioned Liberalism Among African
Americans." Midwestern Political Science Association's Annual Meeting.
Chicago, IL, Palmer House. (April 2-5, 2009). (with Najja Baptist)

Paper: "Public Opinion and Substantive Representation." *Discussant* Midwestern
Political Science Association's Annual Meeting. (April 2-5, 2009), Chicago, IL,
Palmer House

Paper: "[Political Socialization and Racial Conservatism](#)." Southern Political
Science Association's Annual Meeting, (January 9, 2009) New Orleans, LA
Intercontinental Hotel

Paper: "System Justification Ideology and Black Opposition to Affirmative
Action." (March 2007), National Conference of Black Political Scientists, San
Francisco, CA

Paper: "When Race, Party and Gender Matter: State Legislative Behavior."
Western Political Science Association, (March 2007), Las Vegas, Nevada

Chair, "Race and Fear." Hendricks Conference on Biology and Political Behavior,
(October 13-14, 2006), Lincoln, Nebraska

Paper: "Roundtable: A Retro and Prospective: The 10th Anniversary of Robert
Smith's *We Have No Leaders*." The National Conference of Black Political
Scientists' Annual Conference," (March 22-25, 2006), Atlanta, GA

Paper: "Roundtable: Representation and the Intersections of Gender, Race and
Ethnicity." The Southern Political Science Association's Annual Meeting,
(January 6-8, 2006), Atlanta, GA

Paper: "Mentoring Task Force Panel: Finding Mentors and Advocates in the Ivory
Tower." American Political Science Association, (September 2005,)
Washington, D.C.

Paper: "A Tale of Two Flags: The Mississippi and Georgia Flag Referenda."
Midwestern Political Science Association, (April 7-9, 2005), Chicago, IL

Paper: "Explaining Black Conservatives." Western Political Science Association,
(March 17-20, 2005), Oakland, CA

Paper: "Not Exactly What We Had in Mind for Inclusion: The Impact of Racial
Resentment on Latinos" (with Jessica Perez-Monforti). Western Political
Science Association, (March 17-20, 2005), Oakland, CA

Discussant: "Perspectives on Race and Ethnicity," (January 6-8, 2005), Southern
Political Science Association

Paper: "Teaching Race in a Majority White Place." People of Color at Traditional
White Institutions, (November 15-16, 2004), University of Nebraska, Lincoln,
Lincoln, Nebraska

Paper: "Black Conservatives and Black Nationalists: Convergence or
Divergence." National Conference of Black Political Science, (March 25-27,
2004), Chicago, Illinois, Hyatt- McCormick Place

Paper: "African American Racial Conservatives and Intra-group Resentment."
Southern Political Science Association, (January 2004), New Orleans, LA (with
LeKesha Harris)

Paper: "Race and Gender Matter: Black Legislative Politics in Mississippi" (with
Wendy Smooth), National Conference of Black Political Science, (March 25-
27, 2004), Chicago, Illinois, Hyatt- McCormick Place

Roundtable Participant: "The Role of College Faculty in AP Success." National AP Equity Colloquium, (March 20-21, 2004), Houston, TX, Houston Intercontinental Marriott

Paper: "Black Conservatives: A Systematic Analysis." African and Latino Conference, (January 2003), Lincoln, Nebraska

Paper: "Measuring Deracialization: A Systematic Analysis of the Deracialization Concept." Western Political Science Association, March 27-29, 2003

Paper: "Explaining Black Conservatives: Racial Uplift or Racial Resentment?" National Conference of Black Political Scientists, Oakland, California

Discussant, Southern Political Science Association, (November 6-10, 2002), Savannah, GA

Paper: "Black Legislative Politics in Mississippi: Gender Matters," Southern Political Science Association, (November 6-10, 2002), Savannah, GA

Paper: "Racial Uplift or Racial Resentment," Midwest Political Science Association, (April 2002), Chicago, IL

Paper: "Racial Attitudes toward the Confederate Flag," Southern Political Science Association, (November 7-10, 2001) Atlanta, GA, with Khalilah Brown

Paper: "White Opposition to Affirmative Action," Southern Political Science Association, (November 7-10, 2001) Atlanta, GA

Paper: "The New Black Conservative: Rhetoric or Reality?" National Conference of Black Political Scientists, (March 8-10, 2001)

Paper: "New Racial Attitudes in the New South." Race in America (Hendricks Symposium), University of Nebraska, (November 2-3, 2000) Lincoln, NE

Paper: "African Americans in the State Legislative Power Structure: Committee Chairs," American Political Science Association, (August 2000, Washington, D.C.)

Paper: "One Person-N Votes: An empirical analysis of Proportional representation in Cincinnati, Ohio," Midwest Political Science Association, (April 2000, Chicago, Illinois), with Kimberly Adams

Paper: "From Protest to Politics: A look at the success of black legislators in Mississippi," Midwest Political Science Association, (April 2000, Chicago, Illinois), with Kimberly Adams

Paper: "Framing the Issue, When the Issue is Race." American Political Science Association, (September 2-5, 1999), Atlanta, GA

Poster: "Racialization or Deracialization: The Making of a Black Mayor in Jackson, Mississippi," American Political Science Association, (September 2-6, 1998), Boston, MA

Paper: "The Race Race in Black and White: The 1995 Louisiana Gubernatorial Election," Southwest Political Science Association, (March 26-29, 1997), New Orleans, LA

Paper: "Mississippi Legislative Politics in Mississippi," Southern Political Science Association, (November 7-9, 1996), Atlanta, GA.

Paper: "Dispelling the Myth and Revealing the Truth: the Overrepresentation of Whites on City Councils," American Political Science Association, (September 1996) San Francisco, CA.

Roundtable Participant: "The Impact of Alternative Voting Systems" National Conference of Black Political Scientists, (March 1996), Norfolk, VA.

Paper: "Mississippi Black Legislators," National Conference of Black Political Scientists, (March 1996) Savannah, GA.

Paper: "Black Representation in the South," The Southern Regional Council=s Annual Voting Rights Seminar, Fall 1995 New Orleans, LA.

Paper: "One Person, N-Votes: In Search of a Remedy for Vote Dilution Claims in the Absence of Geographical Compactness," American Political Science Association, (September 1995) Chicago, Ill.

Paper: "Status Crow Politics and the Under-Representation of Black Women on the Bench" Southern Political Science Association, (November 3-5, 1994) Atlanta, GA

Paper: "One Person, N-Votes: Minority Representation on the Bench," The National Conference of Black Political Scientists (March 1994) Hampton, VA

Panel Chair: "The Politics of Electoral Reform," American Political Science Association, (September, 1994) New York, NY.

Discussant: Race and Reapportionment after *Shaw v. Reno*, Southern Political Science Association, (November 3-5, 1994) Atlanta, GA.

Participant: Mock Voting Rights Trial, The Southern Regional Council, Annual Voting Rights Seminar (October 1993), Peachtree City, Georgia

Paper: “When Excess Creates Progress: An Assessment of the Federal Government’s Financial Contribution to HBCUs,” The Southern Political Science Association (Fall 1993) Savannah, GA.

Paper: “When Excess Creates Progress: An Assessment of the National Science Foundation’s Financial Contribution to HBCUs,” The National Black Graduate Student Association's Annual Conference (May 1993) University of Minnesota

Paper: “The Disparity of Federal Expenditures received by Historically Black Colleges and Universities (HBCUs) compared to Non-HBCUs,” The Quality Education for Minority Network's Annual Education Conference (August 1992), Georgetown University, Washington, D.C.

Paper: “The Purpose of Cognitive Inventories for Secondary Students,” Southern Association for Educational Opportunity Program Personnel (1990), Tupelo, MS

Invited Presentations

“Mississippi Conflict and Change,” University of Michigan, May 10, 2022.

“The Power of Perseverance: Black Politics of American Democracy Workshop, Facilitator. Princeton University, March 31, 2022.

Intersectionality and Intersections: Race, Gender and Legislative Behavior. Princeton University, March 30, 2022.

Trusted Sources, University of Tennessee, Knoxville, March 8 2022

MLK Convocation, Creighton University, January 18, 2022.

“Does the Confederate Flag Make You Sick?” University of Mississippi, April 12, 2017.

“The Impact of Race and Gender on the 2016 Presidential Election,” Metropolitan Community College, Omaha, Nebraska. February 2, 2017.

“The Strange Career of Black Politics,” Florida State University, January 26, 2017.

“New Developments in the Study of Race and Politics,” Buffalo State University, November 1, 2016.

- “Contemporary Topics in the Study of Race and Politics,” Annual Joseph T. Taylor Symposium at Indiana University, Purdue University Indiana (IUPUI), February 25, 2014
- “A Dare to Be Great: Honoring our Ancestors.” National Association for the Advancement of Colored People’s Annual Banquet. Lincoln, Nebraska. November 9, 2013.
- “Alumni Given at HBCUs.” The Douglas T. Porter Athletic Scholarship Banquet. October 25, 2013. Mississippi Valley State University, Itta Bena, MS.
- “One Man’s Journey to African, the Middle East and the Caribbean.” Metropolitan Community College September 12, 2013.
- “Reflecting on the Life and Work of Attorney Isaiah Madison.” Isaiah Madison Memorial Symposium on Higher Education, April 18, 2013
- “Voter Suppression in the United States,” Mississippi Valley State University’s Pi Sigma Alpha Honor Society April 8, 2013
- “Research Opportunities at Historically Black Colleges and Universities.” University of California, Irvine February 27, 2013
- Roundtable discussion, “Has the Dream Been Fulfilled?” February 19, 2013, Jackson State University Political Science Club, Jackson, MS
- Mississippi Valley State University Black History Month Convocation, Guest Speaker February 18, 2013
- “New Developments in Race and Politics.” St Andrews High School, December 12, 2013
- “Voting and Democracy,” St. Andrews High School, Ridgeland, MS, November 15, 2011
- Robert Clark Symposium, “2011 Election Day: Implication and Analysis, What does it Really Mean?” Jackson State University, November 9, 2011
- Emerging Scholars Conference, (with mentee JaLisa Jordan). “Black Political Attitudes and Obama as a Trusted Source: Is it the Message or the Messenger?” University of Michigan, September 29-October 1, 2011
- “Mentoring Graduate Assistants.” Workshop: Activity 7 Program, May 18, 2011. Jackson State University Student Center

Conference on Laboratory Experiments in Political Science, Stereotype Threat Among African-American College Students, Vanderbilt University, May 4-6, 2011

University Development Foundation Board Meeting. Invited by the President of the University to make a presentation on the research agenda in the Department of Political Science, MS e-Center, December 10, 2010

Hendrick's Symposium (with mentees JaLisa Jordan and Ebou Sowe). "Elites as Trusted Sources: Do Blacks Believe Everything President Obama Says?" November 3-5, 2010. University of Nebraska, Lincoln

Terry High School. "To Thine Own Self Be True." October 19, 2010. Terry Mississippi

Porter L. Fortune, History Symposium: Future of the South Conference. "Substantive Representation and the Mississippi Legislative Black Caucus." University of Mississippi, Oxford, MS. February 18, 2010

"Obama Administration: One Year Later." Roundtable Participant. Medgar Evers/Ella Baker Lecture Series, Tougaloo College, Tougaloo, MS. November 16, 2009

"Presidential Approval Ratings." Lecture at St. Andrews High School's Advanced Placement U.S. Government course, November 10, 2009

Matthew Holden, Jr. Symposium Lecture. "A Response to Glen Loury." November 5, 2009. Jackson State University

University of Nebraska, Lincoln. Keynote Speaker: **Hurricane Katrina: A Remembrance in Three Acts, September 25, 2007**

New York University, John Jost's Psychology Laboratory. "System Justification and Black Opposition to Affirmative Action." September 13, 2007

Oxford University (Oxford, England), Oxford Roundtable, "Religion and Politics." July 2007

Williams College, Voting Rights Roundtable, February 9-10, 2007

Emory University School of Law Public Interest Committee, "Annual Public Interest Conference." October 7, 2006

Yale University, Presenter: "Lessons from the Past, Prospects for the Future: A Conference in honor the Fortieth Anniversary of the Voting Rights Act of 1965." April 21-23, 2005

University of Nebraska, Lincoln. "From Selma to Washington," April 18, 2005

University of Nebraska, Lincoln. "Martin Luther King Forum on Reparations." (January 20, 2005)

University of Mississippi. "Race and the Mississippi State Flag." February, 2005

University of Southern Illinois. "Explaining Black Racial Conservatives." December 9, 2004

Middle Tennessee State University. "The Year of the Ballot or the Bullet." April 22, 2004

The College Board, Arranged a Panel on "The Role of College Faculty in AP Success." *National AP Equity Colloquium*. March 20-21, 2004

Washington University, Lecture: "Racial Uplift or Racial Resentment: Explaining Black Conservatives?" February 6, 2004

University of Winneba, Winneba, Ghana (West Africa). June 2004

University of Mississippi, "Retaining Black Faculty and about Tenure," Panelist. January 23, 2004

University of Nebraska, Lincoln. "What does it take to get elected in the United States?" Round Table, sponsored by Pi Sigma Alpha. February 20, 2003

Southern Association for College Student Affairs, Panelists: "Town Hall Meeting on Symbols," November 2002

University of Nebraska, Lincoln. "Post Election Roundtable Panelists," sponsored by Pi Sigma Alpha. November 2002

November 2-3, 2000. "New Racial Attitudes in the New South" Hendricks Symposium on Race, University of Nebraska

September 2000. Lecture, "A New Racism in the New South." Center for the Study of Southern Culture, University of Mississippi

Ph. D. Committees

Rob Denne, Jackson State University, Department of Education

Ronella Gollman, Jackson State University, Department of Psychology

Princeton Smith, Jackson State University, Department of Psychology
Daphne Foster, Public Policy, Jackson State University (member)
Peter Hatemi, Political Science, University of Nebraska, Lincoln. Defense: Spring 2007 (member)
Reginald Vance, Southern University, Baton Rouge, Defense: December 2006 (Chair)
James H. Moore, Howard University (Economics), Defense: December 2004 (member)
Kimberly Adams, University of Mississippi, Defense: Spring 2003 (outside member)
Mitch Herring, University of Nebraska, Lincoln Defense: Spring 2008 (Political Science, member)
Yolanda Johnson, University of Nebraska, Lincoln (Sociology, member)
Eric Whitaker, University of Nebraska, Lincoln (Political Science, member)

Master's Theses:

Communications

Janeya Smith, Jackson State University, Department of Political Science (Chair, Completion date: December 2018)
Spencer McClenty, Jackson State University, Department of Communication (Completion October 2018)
Caleb Smith, Jackson State University, Department of History (Completion date: October 2017)
Sharonda Woodford, Jackson State University, Department of Political Science (Completion date: summer 2013)
Alfonso Franklin, Jackson State University, Department of History (Completion date: May 2013)
Emmitt Riley, Jackson State University (Chair, Completion date: May 2010)
Najja Baptist, Jackson State University (Chair, Completion: August 2010)
Matthew Hastings, University of Nebraska, Lincoln. (Chair, Thesis Completion: Spring 2007)

Honor's Thesis:

Andy Conroy (Co-Advisor), Completed: Spring, 2006

University Services

Promotion and Tenure Committee Psychology 2018
Mentor, Ronald E. McNair Summer Program, Jackson State University (Mentee: Keirrah Wheeler)
Promotion and Tenure Committee Psychology 2017
Political Science Club Advisor, 2014-2015
Pi Sigma Alpha Advisor, 2017-Present
Pi Sigma Alpha Advisor, 2014-2015
Member of the Faculty Senate, 2014-2015

Faculty Third Year Review, Department of Political Science, Chair Spring of 2015
Faculty Third Year Review, Department of Political Science, Chair Fall of 2014
Faculty Third Year Review, Department of History Fall 2013
Search Committee for the Bachelor of Social Work and Masters of Social Work Program Directors. Fall 2013
University Think Tank Committee, Jackson State University (appointed Fall 2013)
Advisory Board, Center for Excellence in Minority Health and Health Disparities (appointed Spring 2013)
Tenure Committee, Department of History Fall 2012
Promotion Committee, Department of Public Policy Fall 2012
Conference Coordinator for the National Bar Association—Served as the Coordinator in hosting the NBA’s annual meeting at Jackson State University. September 2012
Promotion Committee, Department of Music Fall 2011
College of Liberal Arts Promotion and Tenure Committee. 2011-2012 (elected position)
Jackson State University, Advisory Board, Advance Project (National Science Foundation Grant), appointed by PI. 2011-present
Symposia Subcommittee of the Presidential Inaugural Planning Committee Fall 2011
Research Advisory Council, 2011-present, appointed by Vice President for Research
Employment/Hiring Committee Public Policy Spring 2011
Search Committee for Office of Student Life, January 2011
Promotion Committee, Department of Business Fall 2010
Promotion Committee, Department of Psychology Fall 2010
Promotion Committee, Department of Public Health Fall 2010
College of Liberal Arts Promotion and Tenure Committee. 2010-2011 (elected position)
Quality Enhancement Plan, Jackson State University, 2008-2011
40th Gibbs-Green Anniversary Observance Planning Committee, Jackson State University, 2010
Executive Committee, University of Nebraska, Division of Arts and Sciences, 2007-2008
Diversity Committee, University of Nebraska, 2007-2008
Executive Committee, University of Nebraska, Department of Political Science, 2006-2007 and 2002-2003
Undergraduate Creative Activities and Research Experiences (UCARE), Student Advisor, University of Nebraska, 2006 (Amanda Ponce)
Mentor, Ronald E. McNair Summer Program, University of Nebraska, Lincoln, Summer, 2006 (Mentee: Amanda Ponce)
Graduate Committee, Department of Political Science, (2005-2006)
Political Science Unit Review Committee, University of Nebraska (2005-2008)

University of Nebraska Marshal Corp: Appointed by the dean of Arts and Sciences (Summer 2004-Present)
Member, Undergraduate Committee (2003-Present)
Mentor, Ronald E. McNair Summer Program, University of Nebraska, Lincoln, 2003 (Mentees: Donald McCauley and Potso Byndon)
Member, Executive Committee, University of Nebraska, Department of Political Science, 2002-present
Mentor, Ronald E. McNair Summer Program, University of Mississippi, 1999 (Mentee: Kimberly Walker, Alcorn State University)

Professional Services and Activities

Conference Program Chair, Southern Political Science Association, 2023
Vice President, Southern Political Science Association. 2022

Commissioner, Mississippi Civil Rights Education Commission
Executive Council, Southern Political Science Association 2014-2015
American Political Science Association: Committee for Best Book in the Race, Ethnicity and Politics section. 2014
American Political Science Association's Minority Fellows Program Selection Committee 2013
Dianne Blair Award Committee, Southern Political Science Association. 2013
Section Chair, Professional and Career Development, Midwestern Political Science Association. 2013 (Conference to be held in 2014).
External Reviewer, Tenure and Promotion, Southern Illinois University, Fall 2013.
Section Chair, National Conference of Black Political Scientists: Undergraduate Research 2013.
Section Chair: Teaching Political Science, Southern Political Science Association, Orlando, Florida January 3-5, 2013
Member of the Status of Blacks in the Discipline, American Political Science Association (appointed 2012-present)
Section Chair, Southern Political Science Association: Teaching Political Science, 2012
Member of the Membership Committee for the Southern Political Science Association (appointed 2012)
External Reviewer, Tenure and Promotion Committee, September 2012, University of Houston, Clearwater
External Reviewer, Third Year Review, Clark University, November 2011
External Reviewer, Tenure and Promotion Committee, Rutgers University, Newark, September 2011
Section Chair: The Status of Blacks in the South, Southern Political Science Association, 2012
Section Chair: Public Opinion, Midwestern Political Science Association, 2009
Lucius Barker Award Committee, 2008 Midwestern Political Science Association.

Executive Committee (member), National Conference of Political Science (2007-2010)

Section Chair: **Identity Politics: Gender, Class, Ethnicity, Sexuality, and Religion**, National Conference of Black Political Scientists, 2007.

Section Chair: Race and Politics, National Conference of Black Political Scientists 2005.

Jewell Prestage Awards Committee, Southwestern Political Science Association 2004.

Section Chair: Race and Ethnicity, Southwest Political Science Association. 2004.

Section Chair: Race and Ethnicity, Midwestern Political Science Association, 2002.

University of Nebraska, Lincoln. "What does it take to get elected in the United States?" Round Table, sponsored by Pi Sigma Alpha. February 20, 2003.

Southern Association for College Student Affairs, Panelists: "Town Hall Meeting on Symbols," Biloxi, Mississippi. November 2002.

University of Nebraska, Lincoln. "Post Election Roundtable Panelists," sponsored by Pi Sigma Alpha. November 2002.

Other Professional Activities

Education Consultation:

Testing Development Committee (member) 2008-2011, Education Testing Services (Princeton, New Jersey): Assist in writing objective questions for the Advanced Placement Exam (Government and Politics).

College Board Consultant—Conduct workshops to High School Government Instructors on teaching Advanced Placement Government and Politics (April 2002-Present).

Question Leader for the Advance Placement Exam, in U.S. Government and Politics (Summers 2007-Present).

Table Leader for the Advance Placement Exam, in American Government, Educational Testing Services (Summers 1996-2003).

Reader for the Advance Placement Exam, in American Government, Educational Testing Services (Summers 1996-1998).

Expert Witness Work:

Mark A. Anderson v. City of McComb, Mississippi, Gregory Martin and John Does 1-5.

Voting Rights Expert Witness Work:

Cecil Cantrell v. Monroe County, Mississippi (Deposition given)

Testified before the Mississippi Legislative Reapportionment Committee (April 2001)

Lewis, et al. v. Alamance County, et al. (Deposition given).

Rose Johnson, et al. v. The City of Gainesville, GA (Testified)
Jackson v. Nassau County Board of Supervisors
City of Hampton, Virginia

**Editorial
Review
Boards**

American Political Science Review
The Ralph Bunche Journal of Public Affairs
Journal of Race and Policy
Pi Sigma Alpha Undergraduate Journal (Faculty Advisory Board)
State Politics and Policy Quarterly

Reviewer

American Political Science Review; Journal of Politics; American Journal of Political Science; Legislative Studies Quarterly; Women, Politics and Policy; National Political Science Review; American Politics Research; Political Research Quarterly; Politics and Policy; Oxford University Press; Lynne Rienner Publishers; Journal of Race and Policy; Social Science Quarterly; Urban Affairs Quarterly; SUNY PRESS; Political Communication, University of Michigan Press; TESS (Time-Sharing Experiences for the Social Sciences); National Science Foundation; the Social Science Journal; Routledge Press; Journal of African American Studies; Social Psychological and Personality Science; Pi Sigma Alpha Undergraduate Journal.

Community Services

Mentor, Empowering Males to Build Opportunities for Developing Independence (EMBODI)
Mentor, New Focus for Youth after-school program
Board of Directors of the PERICO Institute for Youth Development and Entrepreneurship (PRIYDE), Jackson, MS (November 1, 2011-Present)
Member, Charter Revision Commission, Lincoln, Nebraska 2002-2006
Member, Nebraska's Help America Vote Act (Secretary of State's Office) 2002-2006

Professional Organizations

American Political Science Association
National Conference of Black Political Scientists
Southern Political Science Association
Midwestern Political Science Association
Mississippi Political Science Association

APPENDIX 2: Summary Table of Two Group EI and Three-Group EI and EI RxC

	Two-Group EI (Black vs. White and Others)	Two-Group EI (White vs. Black and Others)	EI Compare Three-Group EI	EI Compare Three-Group EI	EI Compare Three-Group EI RxC	EI Compare Three-Group EI RxC
Election	Black Support for Black Candidate	White Support for Black Candidate	Black Support for Black Candidate	White Support for Black Candidate	Black Support for Black Candidate	White Support for Black Candidate
Westbrooks 2020	90.46	6.43	90.46	6.36	90.22	6.37
Espy 2020	96.34	13.5	96.38	13.39	98	10.99
Amos 2019	92.08	6.66	92.05	6.66	94.43	4.6
DuPree 2019	94.35	8.73	94.31	8.7	96.46	6.24
Collins 2019	94.54	10.82	94.55	10.76	96.81	8.27
Simmons 2019	93.97	8.81	94.05	8.59	96.67	6.01
Stamps 2019	92.22	7.6	93.3	7.65	94.96	5.52
Green 2019	92.83	7.16	92.82	6.9	95.42	4.89
Espy 2018	94.91	16.42	94.89	16.31	97.6	12.48
Graham 2015	87.58	4.67	87.7	4.49	89.78	2.69
Coleman 2015	89.36	4.87	89.38	4.85	91.16	3.15
Gray 2015	87.76	4.44	87.74	4.52	89.88	2.72
Banks 2012	81.26	5.44	81.34	5.45	79.92	7.27
Obama 2012	92.72	12.12	92.72	12.14	93.65	5.53
Crisler 2011	91.04	8.29	90.98	8.37	92.35	7.52

DuPree 2011	90.88	8.11	90.89	8.12	93.65	5.53
Green 2011	90.94	8.16	90.88	8.08	93.67	5.56

APPENDIX 3: TWO-GROUP EI RAW RESULTS AND SCRIPT**Raw Results****Westbrooks
2020****\$pBlackVAP**

mean_iterative.EI	sd_iterative.EI		
ci_95_lower_iterative.EI			
pVoteA	90.46	0.27	89.97
pVoteB	9.53	0.24	9.09
ci_95_upper_iterative.EI			
pVoteA	91.03		
pVoteB	10.01		

\$pWhiteVAP

mean_iterative.EI	sd_iterative.EI		
ci_95_lower_iterative.EI			
pVoteA	6.43	0.25	5.89
pVoteB	93.59	0.28	92.95
ci_95_upper_iterative.EI			
pVoteA	6.88		
pVoteB	94.03		

\$pWhite_Other

mean_iterative.EI	sd_iterative.EI		
ci_95_lower_iterative.EI			
pVoteA	10.64	0.20	10.25
pVoteB	89.38	0.24	88.88
ci_95_upper_iterative.EI			
pVoteA	11.06		
pVoteB	89.76		

\$pBlack_Other

mean_iterative.EI	sd_iterative.EI		
ci_95_lower_iterative.EI			
pVoteA	87.39	0.26	86.91
pVoteB	12.56	0.21	12.22
ci_95_upper_iterative.EI			
pVoteA	87.97		
pVoteB	13.08		

Espy 2020**\$pBlackVAP**

mean_iterative.EI	sd_iterative.EI		
ci_95_lower_iterative.EI			
pVoteA	96.34	0.20	95.94
pVoteB	3.65	0.21	3.18
ci_95_upper_iterative.EI			
pVoteA	96.68		
pVoteB	4.02		

\$pWhiteVAP

mean_iterative.EI	sd_iterative.EI		
ci_95_lower_iterative.EI			
pVoteA	13.50	0.37	12.71
pVoteB	86.51	0.36	85.84
ci_95_upper_iterative.EI			
pVoteA	14.30		
pVoteB	87.21		

\$pWhite_Other

mean_iterative.EI	sd_iterative.EI		
ci_95_lower_iterative.EI			
pVoteA	18.15	0.23	17.77
pVoteB	81.87	0.18	81.52
ci_95_upper_iterative.EI			
pVoteA	18.67		
pVoteB	82.20		

\$pBlack_Other

mean_iterative.EI	sd_iterative.EI		
ci_95_lower_iterative.EI			
pVoteA	93.88	0.30	93.30
pVoteB	6.09	0.29	5.56
ci_95_upper_iterative.EI			
pVoteA	94.44		
pVoteB	6.68		

Collins 2019**\$pBlackVAP****\$pWhiteVAP**

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	94.54	0.30	93.87
pVoteB	5.46	0.26	4.98
ci_95_upper_iterative.El			
pVoteA	95.08		
pVoteB	5.99		

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	10.82	0.32	10.13
pVoteB	89.21	0.28	88.60
ci_95_upper_iterative.El			
pVoteA	11.51		
pVoteB	89.72		

\$pWhite_Other

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	15.14	0.23	14.67
pVoteB	84.83	0.22	84.42
ci_95_upper_iterative.El			
pVoteA	15.67		
pVoteB	85.31		

\$pBlack_Other

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	92.06	0.29	91.53
pVoteB	7.95	0.28	7.48
ci_95_upper_iterative.El			
pVoteA	92.69		
pVoteB	8.56		

DuPree
2019

\$pBlackVAP

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	94.31	0.28	93.77
pVoteB	5.67	0.24	5.19
ci_95_upper_iterative.El			
pVoteA	94.81		
pVoteB	6.18		

\$pWhiteVAP

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	8.73	0.32	8.16
pVoteB	91.27	0.30	90.64
ci_95_upper_iterative.El			
pVoteA	9.32		
pVoteB	91.80		

\$pWhite_Other

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	12.89	0.25	12.48
pVoteB	87.11	0.21	86.71
ci_95_upper_iterative.El			
pVoteA	13.44		
pVoteB	87.53		

\$pBlack_Other

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	91.46	0.32	90.84
pVoteB	8.53	0.31	8.04
ci_95_upper_iterative.El			
pVoteA	92.12		
pVoteB	9.26		

Amos 2019

\$pBlackVAP

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	92.04	0.30	91.39
pVoteB	7.94	0.33	7.30

\$pWhiteVAP

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	6.63	0.38	5.71
pVoteB	93.34	0.38	92.80

ci_95_upper_iterative.El
 pVoteA 92.52
 pVoteB 8.59

\$pWhite_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 9.69 0.25 9.20
 pVoteB 90.21 0.25 89.75

ci_95_upper_iterative.El
 pVoteA 10.25
 pVoteB 90.79

ci_95_upper_iterative.El
 pVoteA 7.27
 pVoteB 93.98

\$pBlack_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 88.13 0.34 87.49
 pVoteB 11.88 0.33 11.21

ci_95_upper_iterative.El
 pVoteA 88.77
 pVoteB 12.49

Green 2019

mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 92.83 0.31 92.20
 pVoteB 7.64 0.36 6.88

ci_95_upper_iterative.El
 pVoteA 93.49
 pVoteB 8.35

mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 7.16 0.33 6.48
 pVoteB 92.90 0.32 92.24

ci_95_upper_iterative.El
 pVoteA 7.76
 pVoteB 93.44

\$pWhite_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 11.55 0.29 11.03
 pVoteB 88.23 0.27 87.66

ci_95_upper_iterative.El
 pVoteA 12.20
 pVoteB 88.77

\$pBlack_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 87.68 0.26 87.09
 pVoteB 12.40 0.29 11.84

ci_95_upper_iterative.El
 pVoteA 88.12
 pVoteB 12.98

Simmons
 2019

\$pBlackVAP
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 93.97 0.30 93.33
 pVoteB 6.10 0.28 5.60

ci_95_upper_iterative.El
 pVoteA 94.44
 pVoteB 6.56

\$pWhiteVAP
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 8.81 0.44 8.12
 pVoteB 91.21 0.37 90.56

ci_95_upper_iterative.El
 pVoteA 9.79
 pVoteB 91.97

\$pWhite_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El

\$pBlack_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El

pVoteA 13.56 0.27 13.13
 pVoteB 86.42 0.25 85.82
 ci_95_upper_iterative.El
 pVoteA 14.23
 pVoteB 86.85

pVoteA 89.15 0.38 88.28
 pVoteB 10.78 0.35 10.08
 ci_95_upper_iterative.El
 pVoteA 89.88
 pVoteB 11.49

**Stamps
 2019**

\$pBlackVAP
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 92.22 0.33 91.52
 pVoteB 7.64 0.30 7.09
 ci_95_upper_iterative.El
 pVoteA 92.83
 pVoteB 8.30

\$pWhiteVAP
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 7.60 0.37 7.07
 pVoteB 92.38 0.36 91.64
 ci_95_upper_iterative.El
 pVoteA 8.51
 pVoteB 93.04

\$pWhite_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 12.39 0.25 11.86
 pVoteB 87.62 0.28 87.13
 ci_95_upper_iterative.El
 pVoteA 12.89
 pVoteB 88.16

\$pBlack_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 87.67 0.31 87.04
 pVoteB 12.36 0.33 11.83
 ci_95_upper_iterative.El
 pVoteA 88.20
 pVoteB 13.15

Espy 2018

\$pBlackVAP
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 94.91 0.29 94.27
 pVoteB 5.04 0.30 4.46
 ci_95_upper_iterative.El
 pVoteA 95.49
 pVoteB 5.64

\$pWhiteVAP
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 16.42 0.43 15.70
 pVoteB 83.56 0.44 82.59
 ci_95_upper_iterative.El
 pVoteA 17.36
 pVoteB 84.52

\$pWhite_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 19.83 0.26 19.40
 pVoteB 80.17 0.29 79.53
 ci_95_upper_iterative.El
 pVoteA 20.28
 pVoteB 80.67

\$pBlack_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 92.16 0.40 91.18
 pVoteB 7.81 0.42 6.84
 ci_95_upper_iterative.El
 pVoteA 92.73
 pVoteB 8.56

**Graham
2015**

Black

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	87.58	0.22	87.12
pVoteB	12.42	0.26	11.83
ci_95_upper_iterative.El			
pVoteA	87.97		
pVoteB	12.90		

White

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	4.67	0.26	4.11
pVoteB	95.35	0.28	94.80
ci_95_upper_iterative.El			
pVoteA	5.21		
pVoteB	95.87		

\$pWhite_Other

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	5.91	0.25	5.39
pVoteB	94.11	0.23	93.61
ci_95_upper_iterative.El			
pVoteA	6.44		
pVoteB	94.52		

\$pBlack_Other

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	83.13	0.23	82.50
pVoteB	16.94	0.23	16.43
ci_95_upper_iterative.El			
pVoteA	83.48		
pVoteB	17.39		

**Coleman
2015**

\$pBlackVAP

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	89.36	0.26	88.90
pVoteB	10.61	0.25	10.16
ci_95_upper_iterative.El			
pVoteA	89.83		
pVoteB	11.06		

White

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	4.87	0.24	4.42
pVoteB	95.11	0.28	94.52
ci_95_upper_iterative.El			
pVoteA	5.38		
pVoteB	95.65		

\$pWhite_Other

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	6.18	0.20	5.79
pVoteB	93.83	0.18	93.43
ci_95_upper_iterative.El			
pVoteA	6.54		
pVoteB	94.16		

\$pBlack_Other

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	84.92	0.28	84.35
pVoteB	15.06	0.27	14.52
ci_95_upper_iterative.El			
pVoteA	85.42		
pVoteB	15.62		

Gray 2015

\$pBlackVAP

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	87.76	0.25	87.06

\$pWhiteVAP

	mean_iterative.El	sd_iterative.El	
ci_95_lower_iterative.El			
pVoteA	4.44	0.26	4.04

```
pVoteB      12.21      0.25      11.66
  ci_95_upper_iterative.El
pVoteA      88.17
pVoteB      12.75
```

```
pVoteB      95.55      0.26      94.95
  ci_95_upper_iterative.El
pVoteA      5.01
pVoteB      96.06
```

```
$pWhite_Other
  mean_iterative.El sd_iterative.El
ci_95_lower_iterative.El
pVoteA      5.80      0.25      5.39
pVoteB      94.17      0.25      93.69
  ci_95_upper_iterative.El
pVoteA      6.34
pVoteB      94.62
```

```
$pBlack_Other
  mean_iterative.El sd_iterative.El
ci_95_lower_iterative.El
pVoteA      83.38      0.26      82.86
pVoteB      16.61      0.25      16.16
  ci_95_upper_iterative.El
pVoteA      83.86
pVoteB      17.17
```

Banks 2012

```
$pBlackVAP
  mean_iterative.El sd_iterative.El
ci_95_lower_iterative.El
pVoteA      81.26      0.26      80.80
pVoteB      18.66      0.26      18.15
  ci_95_upper_iterative.El
pVoteA      81.80
pVoteB      19.22
```

```
$pWhiteVAP
  mean_iterative.El sd_iterative.El
ci_95_lower_iterative.El
pVoteA      5.44      0.21      5.01
pVoteB      94.58      0.25      94.08
  ci_95_upper_iterative.El
pVoteA      5.83
pVoteB      95.03
```

```
$pWhite_Other
  mean_iterative.El sd_iterative.El
ci_95_lower_iterative.El
pVoteA      9.41      0.25      8.94
pVoteB      90.59      0.29      89.91
  ci_95_upper_iterative.El
pVoteA      9.88
pVoteB      91.11
```

```
$pBlack_Other
  mean_iterative.El sd_iterative.El
ci_95_lower_iterative.El
pVoteA      80.53      0.24      80.06
pVoteB      19.47      0.29      18.89
  ci_95_upper_iterative.El
pVoteA      81.06
pVoteB      20.05
```

Obama 2012

> summary(iter)

```
$pBlackVAP
  mean_iterative.El sd_iterative.El
ci_95_lower_iterative.El
pVoteA      92.72      0.34      92.13
pVoteB      6.59      0.29      6.05
  ci_95_upper_iterative.El
pVoteA      93.32
pVoteB      7.08
```

```
$pWhiteVAP
  mean_iterative.El sd_iterative.El
ci_95_lower_iterative.El
pVoteA      12.12      0.58      11.13
pVoteB      87.27      0.51      86.31
  ci_95_upper_iterative.El
pVoteA      13.38
pVoteB      88.40
```

\$pWhite_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 15.30 0.29 14.68
 pVoteB 83.88 0.30 83.06
 ci_95_upper_iterative.El
 pVoteA 15.92
 pVoteB 84.46

\$pBlack_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 87.16 0.42 86.36
 pVoteB 11.99 0.39 11.24
 ci_95_upper_iterative.El
 pVoteA 87.90
 pVoteB 12.88

Crisler 2011

\$pBlackVAP
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 91.04 0.26 90.44
 pVoteB 8.93 0.28 8.36
 ci_95_upper_iterative.El
 pVoteA 91.42
 pVoteB 9.39

\$pWhiteVAP
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 8.29 0.27 7.80
 pVoteB 91.69 0.31 91.06
 ci_95_upper_iterative.El
 pVoteA 8.76
 pVoteB 92.23

\$pWhite_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 10.56 0.26 10.03
 pVoteB 89.41 0.23 88.94
 ci_95_upper_iterative.El
 pVoteA 11.04
 pVoteB 89.91

\$pBlack_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 88.86 0.27 88.24
 pVoteB 11.21 0.28 10.68
 ci_95_upper_iterative.El
 pVoteA 89.34
 pVoteB 11.67

**DuPree
 2011**

\$pBlackVAP
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 90.88 0.33 90.20
 pVoteB 9.14 0.29 8.57
 ci_95_upper_iterative.El
 pVoteA 91.51
 pVoteB 9.76

\$pWhiteVAP
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 8.11 0.34 7.45
 pVoteB 91.87 0.33 91.25
 ci_95_upper_iterative.El
 pVoteA 8.71
 pVoteB 92.48

\$pWhite_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 9.76 0.21 9.38
 pVoteB 90.18 0.26 89.62

\$pBlack_Other
 mean_iterative.El sd_iterative.El
 ci_95_lower_iterative.El
 pVoteA 88.00 0.38 87.12
 pVoteB 11.97 0.35 11.35

	ci_95_upper_iterative.EI	
pVoteA	10.22	
pVoteB	90.61	

	ci_95_upper_iterative.EI	
pVoteA	88.67	
pVoteB	12.75	

Green 2011**\$pBlackVAP**

	mean_iterative.EI	sd_iterative.EI	
	ci_95_lower_iterative.EI		
pVoteA	90.94	0.32	90.27
pVoteB	9.09	0.31	8.47

\$pWhiteVAP

	mean_iterative.EI	sd_iterative.EI	
	ci_95_lower_iterative.EI		
pVoteA	8.16	0.34	7.47
pVoteB	91.91	0.25	91.23

	ci_95_upper_iterative.EI	
pVoteA	91.50	
pVoteB	9.62	

	ci_95_upper_iterative.EI	
pVoteA	8.80	
pVoteB	92.37	

\$pWhite_Other

	mean_iterative.EI	sd_iterative.EI	
	ci_95_lower_iterative.EI		
pVoteA	9.72	0.23	9.36
pVoteB	90.31	0.27	89.89

\$pBlack_Other

	mean_iterative.EI	sd_iterative.EI	
	ci_95_lower_iterative.EI		
pVoteA	87.96	0.30	87.42
pVoteB	11.97	0.33	11.35

	ci_95_upper_iterative.EI	
pVoteA	10.18	
pVoteB	90.87	

	ci_95_upper_iterative.EI	
pVoteA	88.65	
pVoteB	12.62	

Script

```
## Ecological Inference Analyses
##USE this one
# Outline:
#   Loading libraries & importing data
#   King's iterative EI
#   Row by Columns (RxC) EI
#   Summarizing results
#   DataVis

# Data files:

# Libraries and Data -----
library(eiCompare) # Use from latest release, which was summer 2020
dat <- read.csv("C:/Users/J00584364/Downloads/Simmons2019_b.csv", sep=",")
dat$pVoteA <- dat$pVoteA/100
dat$pVoteB <- dat$pVoteB/100
#dat$pBlackVAP <- dat$pBlackVAP/100
dat$pWhiteVAP <- dat$pWhiteVAP/100
#dat$pWhite_Other <- dat$pWhite_Other/100
dat$pBlack_Other <- dat$pBlack_Other/100
```

```
# Iterative EI (King's EI) -----  
iter <- ei_iter(  
  data = dat,  
  cand_cols = c("pVoteA", "pVoteB"),  
  # race_cols = c("pBlackVAP", "pWhite_Other"),  
  race_cols = c("pWhiteVAP", "pBlack_Other"),  
  totals_col = "total_votes",  
  name = "Iterative EI"  
)  
  
#summary(iter)  
summary(iter)
```


APPENDIX 4: THREE-GROUP EI COMPARE RAW RESULTS AND SCRIPT

Raw Results

**2020
Westbrooks**

```
> dat <-
read.csv("C:/Users/J00584364/Downloads/Westbrook2020BW.csv",
sep=",")
```

```
mean_iterative.EI sd_iterative.EI ci_95_lower_iterative.EI
pVoteA      90.46      0.26
89.98
pVoteB      9.52      0.23
9.04
ci_95_upper_iterative.EI mean_RxC.EI sd_RxC.EI ci_95_lower_RxC.EI
pVoteA      91.01      90.22      0.32      89.55
pVoteB      9.90      9.78      0.32
9.14
ci_95_upper_RxC.EI
pVoteA      90.86
pVoteB      10.45
```

```
$pWhiteVAP
mean_iterative.EI sd_iterative.EI ci_95_lower_iterative.EI
pVoteA      6.36      0.27
5.87
pVoteB      93.61      0.25
93.21
ci_95_upper_iterative.EI mean_RxC.EI sd_RxC.EI ci_95_lower_RxC.EI
pVoteA      6.95      6.37      0.43
5.59
pVoteB      94.20      93.63      0.43      92.70
ci_95_upper_RxC.EI
pVoteA      7.30
pVoteB      94.41
```

```
$pOtherVAP
mean_iterative.EI sd_iterative.EI ci_95_lower_iterative.EI
pVoteA      47.43      3.96
39.67
pVoteB      52.26      4.22
44.38
ci_95_upper_iterative.EI mean_RxC.EI sd_RxC.EI ci_95_lower_RxC.EI
pVoteA      55.44      58.73      4.68      48.56
pVoteB      60.11      41.27      4.68      32.33
ci_95_upper_RxC.EI
pVoteA      67.67
```

pVoteB 51.44

2012 Banks

dat <- read.csv("C:/Users/J00584364/Downloads/BanksGW1.csv", sep=",")

\$pBlackVAP

	mean_iterative.El	sd_iterative.El	ci_95_lower_iterative.El	
pVoteA	81.34	0.27		
	80.89			
pVoteB	18.64	0.26		
	18.18			
	ci_95_upper_iterative.El	mean_RxC.El	sd_RxC.El	ci_95_lower_RxC.El
pVoteA	81.91	79.92	0.43	79.03
pVoteB	19.24	20.08	0.43	19.23
	ci_95_upper_RxC.El			
pVoteA	80.77			
pVoteB	20.97			

\$pWhiteVAP

	mean_iterative.El	sd_iterative.El	ci_95_lower_iterative.El	
pVoteA	5.45	0.26		
	4.99			
pVoteB	94.58	0.25		
	94.10			
	ci_95_upper_iterative.El	mean_RxC.El	sd_RxC.El	ci_95_lower_RxC.El
pVoteA	6.00	7.27	0.51	
	6.19			
pVoteB	95.11	92.73	0.51	91.75
	ci_95_upper_RxC.El			
pVoteA	8.25			
pVoteB	93.81			

\$pOtherVAP

	mean_iterative.El	sd_iterative.El	ci_95_lower_iterative.El	
pVoteA	44.35	4.52		
	34.67			
pVoteB	56.01	3.68		
	48.12			
	ci_95_upper_iterative.El	mean_RxC.El	sd_RxC.El	ci_95_lower_RxC.El
pVoteA	51.95	33.68	4.48	25.35
pVoteB	62.20	66.32	4.48	56.45
	ci_95_upper_RxC.El			
pVoteA	43.55			
pVoteB	74.65			

2011 Green dat <- read.csv("C:/Users/J00584364/Downloads/Green2011.csv", sep=",")

\$pBlackVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El

pVoteA 90.88 0.29

90.31

pVoteB 9.06 0.30

8.52

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El

pVoteA 91.48 93.67 0.31 93.02

pVoteB 9.65 6.33 0.31

5.74

ci_95_upper_RxC.El

pVoteA 94.26

pVoteB 6.98

\$pWhiteVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El

pVoteA 8.08 0.32

7.48

pVoteB 91.93 0.28

91.49

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El

pVoteA 8.69 5.56 0.28

5.01

pVoteB 92.53 94.44 0.28 93.83

ci_95_upper_RxC.El

pVoteA 6.17

pVoteB 94.99

\$pOtherVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El

pVoteA 46.97 5.66

37.51

pVoteB 51.54 3.98

43.45

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El

pVoteA 60.77 43.23 4.66 33.18

pVoteB 59.79 56.77 4.66 47.60

ci_95_upper_RxC.El

pVoteA 52.40

pVoteB 66.82

2011 Crisler dat <- read.csv("C:/Users/J00584364/Downloads/Crisler2011b.csv", sep=",")

\$pBlackVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El

```

pVoteA      90.98      0.27
90.46
pVoteB      8.99      0.30
8.46
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      91.54      92.35      0.34      91.63
pVoteB      9.65      7.65      0.34
6.99
  ci_95_upper_RxC.El
pVoteA      93.01
pVoteB      8.37

```

\$pWhiteVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      8.37      0.31
7.77
pVoteB      91.62      0.28
91.04
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      9.02      7.52      0.36
6.80
pVoteB      92.21      92.48      0.36      91.74
  ci_95_upper_RxC.El
pVoteA      8.26
pVoteB      93.20

```

\$pOtherVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      46.05      18.35
3.13
pVoteB      52.75      6.89
40.41
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      75.96      46.39      5.44      35.20
pVoteB      68.60      53.61      5.44      42.32
  ci_95_upper_RxC.El
pVoteA      57.68
pVoteB      64.80

```

**Coleman
2015**

```
dat <- read.csv("C:/Users/J00584364/Downloads/Coleman2015.csv", sep=",")
```

\$pBlackVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      89.38      0.27
88.86

```

```

pVoteB      10.66      0.26
10.16
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      89.94      91.16      0.3      90.55
pVoteB      11.14      8.84      0.3
8.27
  ci_95_upper_RxC.El
pVoteA      91.73
pVoteB      9.45

```

\$pWhiteVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      4.85      0.28
4.41
pVoteB      95.13      0.29
94.66
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      5.48      3.15      0.26
2.65
pVoteB      95.63      96.85      0.26      96.30
  ci_95_upper_RxC.El
pVoteA      3.70
pVoteB      97.35

```

\$pOtherVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      36.90      6.24
25.89
pVoteB      62.14      5.76
50.18
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      49.17      27.23      3.76      19.81
pVoteB      72.81      72.77      3.76      64.61
  ci_95_upper_RxC.El
pVoteA      35.38
pVoteB      80.19

```

Stamps 2019

```
dat <- read.csv("C:/Users/J00584364/Downloads/Stamps20191.csv", sep=",")
```

\$pBlackVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      92.30      0.33
91.62
pVoteB      7.67      0.35
6.96
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      92.95      94.96      0.33      94.25

```

pVoteB 8.34 5.04 0.33
4.41

ci_95_upper_RxC.El
pVoteA 95.59
pVoteB 5.75

\$pWhiteVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA 7.65 0.37
6.94

pVoteB 92.36 0.36
91.69

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA 8.39 5.52 0.39
4.76

pVoteB 93.15 94.48 0.39 93.65

ci_95_upper_RxC.El
pVoteA 6.35
pVoteB 95.24

\$pOtherVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA 54.87 3.56
48.13

pVoteB 45.26 3.19
38.36

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA 61.08 47.25 3.52 40.25
pVoteB 50.26 52.75 3.52 45.66

ci_95_upper_RxC.El
pVoteA 54.34
pVoteB 59.75

**Simmons
2019**

dat <- read.csv("C:/Users/J00584364/Downloads/Simmons20191.csv", sep=",")

\$pBlackVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA 94.05 0.3
93.41

pVoteB 6.00 0.3
5.37

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA 94.58 96.67 0.29 96.01

pVoteB 6.67 3.33 0.29
2.81

ci_95_upper_RxC.El
pVoteA 97.19
pVoteB 3.99

\$pWhiteVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA 8.59 0.35
7.97
pVoteB 91.45 0.36
90.61

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA 9.35 6.01 0.37
5.29
pVoteB 92.03 93.99 0.37 93.22

ci_95_upper_RxC.El
pVoteA 6.78
pVoteB 94.71

\$pOtherVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA 58.52 4.75
48.71
pVoteB 41.22 4.62
33.74

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA 67.58 51.87 3.22 45.17
pVoteB 51.27 48.13 3.22 41.79

ci_95_upper_RxC.El
pVoteA 58.21
pVoteB 54.83

DuPree 2011

dat <- read.csv("C:/Users/J00584364/Downloads/DuPree2011.csv", sep=",")

\$pBlackVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA 90.89 0.34
90.25
pVoteB 9.14 0.35
8.55

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA 91.51 93.65 0.3 93.01
pVoteB 9.80 6.35 0.3
5.79

```

    ci_95_upper_RxC.El
pVoteA      94.21
pVoteB      6.99

```

\$pWhiteVAP

```

    mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      8.12      0.31
7.53
pVoteB      91.80      0.29
91.19

```

```

    ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      8.69      5.53      0.28
5.00
pVoteB      92.33      94.47      0.28      93.89

```

```

    ci_95_upper_RxC.El
pVoteA      6.11
pVoteB      95.00

```

\$pOtherVAP

```

    mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      47.76      6.19
37.32
pVoteB      52.88      5.23
43.72

```

```

    ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      60.81      44.13      4.84      34.05
pVoteB      64.20      55.87      4.84      45.65

```

```

    ci_95_upper_RxC.El
pVoteA      54.35
pVoteB      65.95

```

```

Obama 2012 dat <- read.csv("C:/Users/J00584364/Downloads/Obama2012.csv", sep=",")

```

```

    mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      92.72      0.28
92.25
pVoteB      6.59      0.31
6.06

```

```

    ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      93.37      93.65      0.3      93.01
pVoteB      7.24      6.35      0.3
5.79

```

```

    ci_95_upper_RxC.El
pVoteA      94.21

```

pVoteB 6.99

\$pWhiteVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El

pVoteA 12.14 0.49

11.22

pVoteB 87.34 0.51

86.37

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El

pVoteA 13.27 5.53 0.28 5.00

pVoteB 88.32 94.47 0.28 93.89

ci_95_upper_RxC.El

pVoteA 6.11

pVoteB 95.00

\$pOtherVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El

pVoteA 80.85 2.15

76.26

pVoteB 14.55 1.70

11.72

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El

pVoteA 84.38 44.13 4.84 34.05

pVoteB 18.14 55.87 4.84 45.65

ci_95_upper_RxC.El

pVoteA 54.35

pVoteB 65.95

Gray 2015

\$pBlackVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El

pVoteA 87.74 0.30

87.10

pVoteB 12.24 0.28

11.73

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El

pVoteA 88.26 89.88 0.31 89.23

pVoteB 12.78 10.12 0.31 9.54

ci_95_upper_RxC.El

pVoteA 90.46

pVoteB 10.77

\$pWhiteVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El

```

pVoteA      4.52      0.26
4.04
pVoteB      95.48      0.22
95.12
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      4.96      2.72      0.23
2.28
pVoteB      95.95      97.28      0.23      96.80
  ci_95_upper_RxC.El
pVoteA      3.20
pVoteB      97.72

```

\$pOtherVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      44.31      5.24
35.10
pVoteB      56.17      4.38
47.21
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      53.75      23.75      3.23      17.78
pVoteB      64.56      76.25      3.23      69.19
  ci_95_upper_RxC.El
pVoteA      30.81
pVoteB      82.22

```

Espy 2018

```
dat <- read.csv("C:/Users/J00584364/Downloads/Espy20182.csv", sep=",")
```

\$pBlackVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      94.89      0.30
94.31
pVoteB      5.05      0.29
4.47
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      95.42      97.6      0.33      96.83
pVoteB      5.63      2.4      0.33
1.79
  ci_95_upper_RxC.El
pVoteA      98.21
pVoteB      3.17

```

\$pWhiteVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      16.31      0.40
15.42

```

```

pVoteB      83.76      0.41
82.90
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      17.12     12.48     0.4      11.73
pVoteB      84.59     87.52     0.4      86.64
  ci_95_upper_RxC.El
pVoteA      13.36
pVoteB      88.27

```

\$pOtherVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      68.38      0.25
67.84
pVoteB      31.66      0.22
31.18
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      68.98     69.01     4.21     60.17
pVoteB      32.07     30.99     4.21     22.72
  ci_95_upper_RxC.El
pVoteA      77.27
pVoteB      39.83

```

**Graham
2015**

```
<- read.csv("C:/Users/J00584364/Downloads/Graham20151.csv", sep=",")
```

\$pBlackVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      87.70      0.28
87.17
pVoteB      12.29      0.27
11.83
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      88.20     89.78     0.29     89.17
pVoteB      12.79     10.22     0.29     9.66
  ci_95_upper_RxC.El
pVoteA      90.34
pVoteB      10.83

```

\$pWhiteVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      4.49      0.26
4.03
pVoteB      95.52      0.25
95.04
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El

```

```

pVoteA      4.97   2.69   0.22
2.28
pVoteB      96.03  97.31   0.22   96.84
  ci_95_upper_RxC.El
pVoteA      3.16
pVoteB      97.72

```

\$pOtherVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      44.32   4.76
35.59
pVoteB      55.47   4.39
48.10
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      55.99   24.32   3.04   18.55
pVoteB      64.14   75.68   3.04   69.08
  ci_95_upper_RxC.El
pVoteA      30.92
pVoteB      81.45

```

Green 2019

```
dat <- read.csv("C:/Users/J00584364/Downloads/Green20191.csv", sep=",")
```

\$pBlackVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      92.82   0.30
92.27
pVoteB      7.24   0.31
6.48
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      93.47   95.42   0.31   94.76
pVoteB      7.71   4.58   0.31
4.00
  ci_95_upper_RxC.El
pVoteA      96.00
pVoteB      5.24

```

\$pWhiteVAP

```

  mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
pVoteA      6.90   0.35
6.21
pVoteB      93.09   0.34
92.39
  ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
pVoteA      7.54   4.89   0.35
4.21
pVoteB      93.75   95.11   0.35   94.37

```


ci_95_upper_RxC.El
 pVoteA 5.63
 pVoteB 95.79

\$pOtherVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
 pVoteA 51.88 3.14
 45.08
 pVoteB 47.93 4.08
 39.40

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
 pVoteA 56.96 44.64 3.08 38.35
 pVoteB 55.32 55.36 3.08 49.05

ci_95_upper_RxC.El
 pVoteA 50.95
 pVoteB 61.65

DuPre 2019

\$pBlackVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
 pVoteA 94.31 0.30
 93.72
 pVoteB 5.64 0.25
 5.14

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
 pVoteA 94.96 96.46 0.26 95.92
 pVoteB 6.10 3.54 0.26
 3.04

ci_95_upper_RxC.El
 pVoteA 96.96
 pVoteB 4.08

\$pWhiteVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El
 pVoteA 8.70 0.32
 8.16
 pVoteB 91.27 0.32
 90.60

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El
 pVoteA 9.40 6.24 0.37
 5.54
 pVoteB 91.88 93.76 0.37 92.97

ci_95_upper_RxC.El
 pVoteA 7.03

pVoteB 94.46

\$pOtherVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El

pVoteA 52.35 5.03

43.18

pVoteB 46.61 6.04

36.67

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El

pVoteA 61.32 63.87 3.87 55.55

pVoteB 59.24 36.13 3.87 28.59

ci_95_upper_RxC.El

pVoteA 71.41

pVoteB 44.45

Amos 2019

dat <- read.csv("C:/Users/J00584364/Downloads/Amos20191.csv", sep=",")

\$pBlackVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El

pVoteA 92.05 0.30

91.48

pVoteB 7.98 0.29

7.43

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El

pVoteA 92.63 94.43 0.29 93.83

pVoteB 8.53 5.57 0.29

5.00

ci_95_upper_RxC.El

pVoteA 95.00

pVoteB 6.17

\$pWhiteVAP

mean_iterative.El sd_iterative.El ci_95_lower_iterative.El

pVoteA 6.66 0.34

5.93

pVoteB 93.37 0.33

92.77

ci_95_upper_iterative.El mean_RxC.El sd_RxC.El ci_95_lower_RxC.El

pVoteA 7.32 4.6 0.34

3.91

pVoteB 94.08 95.4 0.34 94.69

ci_95_upper_RxC.El

pVoteA 5.31

pVoteB 96.09

\$pOtherVAP

	mean_iterative.El	sd_iterative.El	ci_95_lower_iterative.El	
pVoteA	45.38	5.73		
	34.50			
pVoteB	52.84	4.68		
	42.47			
	ci_95_upper_iterative.El	mean_RxC.El	sd_RxC.El	ci_95_lower_RxC.El
pVoteA	55.11	42.49	3.92	34.54
pVoteB	60.60	57.51	3.92	49.15
	ci_95_upper_RxC.El			
pVoteA	50.85			
pVoteB	65.46			

Collins 2019

collins20191

\$pBlackVAP

	mean_iterative.El	sd_iterative.El	ci_95_lower_iterative.El	
pVoteA	94.55	0.3		
	93.97			
pVoteB	5.44	0.3		
	4.85			
	ci_95_upper_iterative.El	mean_RxC.El	sd_RxC.El	ci_95_lower_RxC.El
pVoteA	95.13	96.81	0.25	96.26
pVoteB	6.02	3.19	0.25	
	2.71			
	ci_95_upper_RxC.El			
pVoteA	97.29			
pVoteB	3.74			

\$pWhiteVAP

	mean_iterative.El	sd_iterative.El	ci_95_lower_iterative.El	
pVoteA	10.76	0.33		
	10.00			
pVoteB	89.24	0.30		
	88.67			
	ci_95_upper_iterative.El	mean_RxC.El	sd_RxC.El	ci_95_lower_RxC.El
pVoteA	11.40	8.27	0.36	7.58
pVoteB	89.81	91.73	0.36	90.92
	ci_95_upper_RxC.El			
pVoteA	9.08			
pVoteB	92.42			

\$pOtherVAP

	mean_iterative.El	sd_iterative.El	ci_95_lower_iterative.El	
pVoteA	60.19	6.11		
	48.64			
pVoteB	40.28	6.58		
	28.13			
	ci_95_upper_iterative.El	mean_RxC.El	sd_RxC.El	ci_95_lower_RxC.El
pVoteA	71.87	66.92	3.84	58.77
pVoteB	52.42	33.08	3.84	25.86
	ci_95_upper_RxC.El			
pVoteA	74.14			
pVoteB	41.23			

Espy 2020

\$pBlackVAP

	mean_iterative.El	sd_iterative.El	ci_95_lower_iterative.El	
pVoteA	96.38	0.18		
	96.05			
pVoteB	3.63	0.23		
	3.14			
	ci_95_upper_iterative.El	mean_RxC.El	sd_RxC.El	ci_95_lower_RxC.El
pVoteA	96.75	98	0.24	97.48
pVoteB	4.02	2	0.24	
	1.57			
	ci_95_upper_RxC.El			
pVoteA	98.43			
pVoteB	2.52			

\$pWhiteVAP

	mean_iterative.El	sd_iterative.El	ci_95_lower_iterative.El	
pVoteA	13.39	0.28		
	12.79			
pVoteB	86.60	0.28		
	85.90			
	ci_95_upper_iterative.El	mean_RxC.El	sd_RxC.El	ci_95_lower_RxC.El
pVoteA	13.99	10.99	0.38	10.26
pVoteB	87.00	89.01	0.38	88.21
	ci_95_upper_RxC.El			
pVoteA	11.79			
pVoteB	89.74			

\$pOtherVAP

	mean_iterative.El	sd_iterative.El	ci_95_lower_iterative.El	
--	-------------------	-----------------	--------------------------	--

pVoteA	72.78	5.24		
61.98				
pVoteB	27.67	4.09		
18.81				
	ci_95_upper_iterative.EI	mean_RxC.EI	sd_RxC.EI	ci_95_lower_RxC.EI
pVoteA	80.88	75.91	3.53	68.79
pVoteB	34.54	24.09	3.53	17.16
	ci_95_upper_RxC.EI			
pVoteA	82.84			
pVoteB	31.21			

Script

```
## Ecological Inference Analyses
##USE this one
# Outline:
#   Loading libraries & importing data
#   King's iterative EI
#   Row by Columns (RxC) EI
#   Summarizing results
#   DataVis

# Data files:

# Libraries and Data -----
library(eiCompare) # Use from latest release, which was summer 2020
###dat <- read.csv("C:/Users/J00584364/Downloads/PracticeData-ReCoded.csv", sep=",")###
dat <- read.csv("C:/Users/J00584364/Downloads/Espy2020.csv", sep=",")

summary(dat$Espy)

dat$pVoteA <- dat$pVoteA/100
dat$pVoteB <- dat$pVoteB/100
dat$pBlackVAP <- dat$pBlackVAP/100
dat$pWhiteVAP <- dat$pWhiteVAP/100
dat$pOtherVAP <- dat$pOtherVAP/100

# Iterative EI (King's EI) -----
iter <- ei_iter(
  data = dat,
  #cand_cols = c("pVoteA", "pVoteB"),
  cand_cols = c("pVoteA", "pVoteB"),
  race_cols = c("pBlackVAP", "pWhiteVAP", "pOtherVAP"),
  #race_cols = c("pBlackVAP", "pWhiteVAP", "pOtherVAP"),
  totals_col = "total_votes",
  name = "Iterative EI"
)
```

```
# Rows by Columns (RxC) -----  
rxc <- ei_rxc(  
  data = dat,  
  cand_cols = c("pVoteA", "pVoteB"),  
  race_cols = c("pBlackVAP", "pWhiteVAP", "pOtherVAP"),  
  totals_col = "total_votes",  
  name = "RxC EI",  
)  
# Summary Table -----  
summary(iter, rxc)  
  
# Plot out Results -----  
plot(iter, rxc)
```


**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF MISSISSIPPI
GREENVILLE DIVISION**

DYAMONE WHITE,
et al.,

Plaintiffs,

vs.

STATE BOARD OF ELECTION
COMMISSIONERS,
et al.,

Defendants.

No. 4:22cv62-MPM-JMV

DECLARATION OF BYRON D'ANDRA OREY

I, Byron D'Andra Orey, make the following declaration based on personal knowledge:

1. I have been retained by the Plaintiffs in the above referenced matter as expert.
2. I submit that the foregoing report from me dated October 3, 2022 is a true and accurate copy of the report I provided to Plaintiffs in this matter. I declare that the information and opinions contained in the report are true and correct to the best of my knowledge.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

October 3, 2022


BYRON D'ANDRA OREY

Expert Report of David A Swanson, Ph.D.
Expert in Demography for the Defendants.

White et al. v. Mississippi State Board of Election Commissioners et al.

5 January 2023

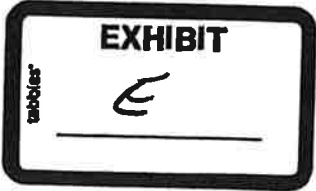


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I, David A. Swanson, affirm the conclusions I express in this report are provided to a reasonable degree of professional certainty.

EXPERT QUALIFICATIONS

1. I am an expert in demography with more than 50 years of experience. I have been retained on behalf of the State Board of Election Commissioners, Tate Reeves, in his official capacity as Governor of Mississippi, Lynn Fitch, in her official capacity as Attorney General of Mississippi, and Michael Watson, in his official capacity as Secretary of State of Mississippi, (hereinafter collectively “the Defendants”) as an expert to provide analysis related to State Supreme Court redistricting litigation in the matter of *DYAMONE WHITE; DERRICK SIMMONS; TY PINKINS; CONSTANCE OLIVIA SLAUGHTER HARVEY-BURWELL, v. STATE BOARD OF ELECTION COMMISSIONERS; TATE REEVES in his official capacity as Governor of Mississippi; LYNN FITCH in her official capacity as Attorney General of Mississippi; MICHAEL WATSON in his official capacity as Secretary of State of Mississippi.*
2. I graduated with a Bachelor of Science in Sociology (with a minor in mathematics) from Western Washington University in 1972. I earned a graduate diploma in social sciences from the University of Stockholm in 1974, an M.A. in Sociology/Population Studies from the University of Hawai’i Mānoa in 1976 and a Ph.D. in Sociology/Population Studies from the University of Hawai’i Mānoa in 1985.
3. I have served in a number of professional association roles, including: general editor for Springer’s Applied Demography series; member of the mortality expert panel of the Society of Actuaries Research Institute; Secretary-Treasurer (1995-7 and 2003-7) of the Southern Demographic association; and editor of *Population Research and Policy Review* (2004-7). More recently, I have been on the program committee for the 2022 annual meeting of the Population Association of America and also the program committees for the 2019 Conference on Population and Public Policy and both the 2020 and 2017 annual meetings of the Population Association of America. I have produced 115 refereed sole- and co-authored journal articles, and nine books. I also have edited or co-edited four additional books, with another on the COVID-19 pandemic forthcoming. Google Scholar shows more than 6,000 citations to my work (<https://scholar.google.com/citations?user=t7P6qoYAAAAJ&hl=en&oi=ao>).
4. My first demographic consulting job was in the spring and summer of 1972 with KVOS TV in Bellingham, Washington. While a graduate student at the Mānoa campus of the University of Hawai’i, I was employed as a staff researcher with the East-West Population Institute, a unit of the Congressionally funded East-West Center, which adjoins the Mānoa campus. In late 1976, I accepted a position with the Population,

Economic, and Enrollment Studies Division of the Washington State Office of Financial Management in Olympia, Washington (The Governor's Budget Office), and in 1981, I became the first State Demographer of Alaska. This was followed by private sector, government, and academic positions, to include serving as the State Demographer of Arkansas, Senior Scientist at Science Applications International Corporation, Dean at the Helsinki School of Economics and Business Administration (now part of Aalto University), and Professor & Chair of the Sociology/Anthropology Department at the University of Mississippi. I retired as Emeritus Professor of Sociology at the University of California Riverside in 2018 and was recognized as a "Dickson Professor Emeritus" in 2020-21. I have received a number of awards for my work, including two Fulbrights, and the 2022 "Terrie Award" for presenting the best paper (co-authored with two colleagues) on state and local demography at the annual meeting of the Southern Demographic Association (an award I also won in 1999 and 2016). I also have testified before Congress and State Legislatures and served on the U.S. Census Bureau's Scientific Advisory Committee, 2004-10, chairing it for two years. In November of 2022, I was nominated as one of the candidates to stand for election as the President of the Southern Demographic Association. I am currently a Research Associate (.25 FTE) with the Population Research Center, Portland State University.

5. Not only have I lived and worked in Mississippi, but my 115 refereed journal articles include studies dealing with demography, race, socio-economic status, and mortality in Mississippi (see, e.g., Swanson, 2008; Swanson and Cossman, 2020; Swanson and McGehee, 2009; Swanson and Sanford, 2012; Swanson and Verdugo, 2019). I also gave a recent paper describing the effect on the 2020 census of Mississippi of the Census Bureau's new Disclosure Avoidance System, "Differential Privacy" (Swanson and Cossman, 2021) and was a co-principal investigator on a 2005-6 grant funded by the National Science Foundation to study "Perceptions of Disaster Relief and Recovery: Analyzing the Importance of Social and Kinship Networks Among Hurricane Katrina Refugees on the Mississippi Gulf Coast," which led to a number of refereed journal articles (see, e.g., Chapel et al., 2007; Forgette et al., 2009; Henderson, et al., 2009; Swanson, 2008; Swanson, et al., 2007). I am a lifetime member of the Mississippi Academy of Sciences.
6. I have worked on redistricting cases (see paragraph 9 in this report for a list of these cases) as well as on revising school (K-12) attendance zones, an activity, which while lacking the legal underpinnings of legislative redistricting, shares similarities with the latter in terms of public consequences, analytical methods, GIS mapping, and variables such as age, race and socio-economic status as criteria of interest (Swanson et al., 1997; Swanson et al., 1998). Furthermore, as indicated in the dedication and

acknowledgments, respectively (Morrison and Bryan, 2019: viii, xi), I also played an active role in the development of *Redistricting: A Manual for Practitioners, Analysts, and Citizens*.

7. I been involved in the following court cases as a testifying and/or deposed expert witness:

- Deposed Expert Witness (testimony expected to be given in April, 2023). 2022. Case No. CV 6417-300, Superior Court of Arizona in and for the County of Apache, General Adjudication of All Rights in the Little Colorado River System and Source, Phoenix, AZ (On behalf of the Hopi Tribe, Review of Population Forecasts done by a Demographer hired by the Navajo Nation). Osborne Maledon, P.A., Phoenix, AZ;
- Deposed and Testifying Expert Witness. 2022. Case A-17-762364-C. Estate of Joseph P. Schrage Jr & Kristina. D. Schrage v. Allan Stahl. Eighth Judicial Court, Clark County, Las Vegas, Nevada (life expectancy, working life expectancy and present value of lost earnings and benefits). O'Reilly Law Group, Las Vegas, NV;
- Deposed and Testifying Expert Witness. 2021. Case No. CV 6417-203, Superior Court of Arizona in and for the County of Apache, General Adjudication of All Rights in the Little Colorado River System and Source, Phoenix, AZ (Forecast of Hopi Tribal Population). Osborne Maledon, P.A., Phoenix, AZ;
- Deposed and Testifying Expert Witness. 2012. Board of Education, Shelby County, Tennessee et al. v. Memphis City Board of Education et al. / Board of County Commissioners, Shelby County, Tennessee (third party plaintiff) v. Robert E. Cooper et al (third party defendant).” (Constitutionality of a Tennessee state law). (School District Enrollment Forecasts). Baker, Donelson, Bearman, Caldwell and Berkowitz, PC. Memphis, TN;
- Deposed Expert Witness. 2009. “Quest Medical Services v. FMIC.” (Demographic Effects of Hurricane Katrina on New Orleans in a case involving a Medical Service Provider). Podvey, Meanor, Catenacci, Hildner, Coccoziello, and Chattman, P.C., Newark, NJ;
- Deposed and Testifying Expert Witness. 2007. “Spring Hill Hospital, Inc. v. Williamson Medical Center and Maury Regional Hospital.” (Evaluation of population forecasts in a case involving a proposed hospital). Miller and Martin, PLLC, Nashville;
- Deposed and Testifying Expert Witness. 1994. Arkansas Supreme Court. (Statistical evaluation of the accuracy of the number of qualified signatures on a public referendum as determined by a sample); and
- Deposed Expert Witness. 1983. “Anchorage, et al., vs. J. Hammond et al.” (Lawsuit brought by local governments against the state of Alaska on how populations are determined for purposes of state revenue sharing to local governments).

8. I produced the following expert reports as a consultant/potential expert witness in other court cases:
 - o Expert Report, Estimated Life Expectancy and Present Value of Household Costs, Z. Kirkson, O'Reilly Law Group, Las Vegas, Nevada. (2019);
Expert Report, The Potential Number of Claimants in regard to the 2010 Gulf of Mexico Oils Spill and its Sequellae. Watts Guerra, LLC. San Antonio, TX. (2016);
 - o Expert Report in the matter of Conseil scolaire francophone de la Colombie-Britannique, Fédération des parents francophones de Colombie-Britannique, et al. v. Her Majesty the Queen in Right of the Province of British Columbia, and the Minister of Education of the Province of British Columbia, Vancouver Registry S103975 in the Supreme Court of British Columbia. Prepared for the Office of the Attorney General, Ministry of Justice, Province of British Columbia, Canada (2014);
 - o Expert Report re Title Insurance Loss Model, First American Title Insurance Company, Miller and Martin PLLC, Nashville, TN (2008);
 - o Expert Report re Patient Population in the matter of Ochsner Clinical Foundation versus Continental Casualty Company. Fisher and Kanaris PC, Chicago, IL (2008); and
 - o Expert Report re Hurricane Katrina: Its Impacts on the Population and Candidates for Endovascular Surgery in the Primary and Secondary Service Areas of Garden Park Hospital as Defined by Hospital Corporation of America. Salloum and Brawley LLP, Nashville, TN (2007).

9. I have served as a consultant to BryanGeoDemographics (BGD) in regard to the following redistricting cases:
 - o Singleton v. Morrill, Case 2:21-CV-01291-SGC;
 - o Robinson v. Ardoin, Civil Action Nos. 22-211-SDD-SDJ, 22-214-SDD-SDJ;
 - o McConchie v. State Board of Elections, No. 1:21-CV-03091; and
 - o Caster v. Merrill, Case No. 2:21-CV-1535-AMM.

10. Because of its expertise and experience, I have used the services of Bryan Geodemographics, which under my direction has assembled data, maps and other work products.

11. My full Curriculum Vitae, including my 50 years of demography experience, is attached as Appendix 6.

12. I am being compensated at a rate of \$400/hour.

I. EXECUTIVE SUMMARY

13. The *White et al.* case has been brought with the support of numerous expert reports. One of these reports was authored by Mr. William Cooper, whose report included a demographic analysis of the existing SCOMS districts, plus four new proposed alternative districts (including analysis of their characteristics). I will be referring to Mr. Cooper's report throughout my paper. Mr. Cooper's report relies on the use of 2020 voting age population (VAP) – a measure which he uses to argue that MS SCOMS District 1 is a *minority* Black district at 49.3% (see Cooper report at p.19). The appropriate measure would actually be the *citizen* voting age population (or CVAP). That is, the population actually eligible to vote. In regard to the existing Supreme Court of Mississippi (SCOMS) Districts, as shown in Table III.E.2 2020 Census Voting Age Population for Existing SCOMS Districts District 1 already has a Black (Citizens of Voting age Population) CVAP majority at 51.0% APB, a fact Mr. Cooper fails to note in his report. Cooper's Illustrative Plan 1 would increase the Black (Any Part Black, "APB") CVAP majority in District 1 to 57.0%, while Illustrative Plan 2 would raise the CVAP %APB to 55.4%, Least Change Plan 1 would raise the CVAP %APB to 54.4%, and Least Change Plan 2 would raise the CVAP %APB to 53.8%. Each of Cooper's plans yield a similar result: an already Black CVAP APB majority in District 1 is increased to a higher level.
14. When compared to the existing Supreme Court Districts, all four of Cooper's alternative plans serve to lessen the diversity of both the White non-Hispanic (WNH) and the APB CVAP populations across the three districts relative to the distribution of the Citizens of Voting Age Population (CVAP) as a whole. As such, the existing Supreme Court districts provide more diversity than do any of Cooper's plans.
15. Cooper does not analyze the existing SCOMS districts or his own alternative districts by traditional redistricting criteria. However, I use two of them to analyze the existing districts and those proposed by Cooper: core retention and compactness. Briefly, core retention is the principle that the core (population) of prior districts be maintained in a redistricting plan and Compactness is the principle that the distance between all parts of a district is minimized (Gallagher, Kreye and Duros, 2020: 14). Core retention is a critical measure in assessing alternate redistricting plans, because it reveals the *gross* changes in each population that was made to achieve the *net* change of the plan. In the case of Cooper's illustrative plans, I find that significant gross amounts of population are moved around the state in order to achieve the minimal increase in % Black he proposes in his two new illustrative District 1 scenarios. Core retention of the APB CVAP population in Cooper's two illustrative plans is low, only 72.0% overall and 76.9% of APB VAP in District 1 are retained in his Illustrative Plan I and 65.7% overall and 68.6% of APB VAP are retained in his Illustrative Plan II. These core retention

statistics differ from those of the WNH population and the population as a whole. This finding is consistent with my finding that Cooper's plans serve to decrease diversity across the Supreme Court districts. Cooper's two "least change" plans provide higher levels of retention: 89.2% overall and 91.7% in District 1 of APB VAP in his Least Change Plan 1; and 93.6% overall and 97.0% of District 1 in his Least Change Plan II.

16. Concurrent with the requirement to use counties to build districts for legislative districts, Mississippi law also requires legislative districts to be compact (See Paragraph 60 in this report). Cooper implicitly acknowledges the importance of compactness by asserting that his proposed plans meet compactness criteria. His plans are compact because he asserts they are. However, he fails to calculate and show any compactness measures supporting this assertion. Using the Reock, Polsby-Popper, Schwartzberg and Convex Hull measures, I calculated the compactness of each district under the existing plan and each of Cooper's four plans. At an aggregate level, the existing SCOMS plan is the most compact among the five plans analyzed. SCOMS existing District 1 is the most compact District 1 configuration. Cooper's Least Change Plan 1 District 2 yields the most compact District 2 configuration, and Cooper's Least Change Plan 2 District 3 is the most compact District 3 configuration. While there are individual districts that are more compact in Cooper's plans by different compactness measures, each of the alternate plans suggested by Cooper range from somewhat less compact to substantially less compact overall than is offered by the existing SCOMS plan.
17. The boundaries of the existing SCOMS districts not only serve as the geographic basis for elections to the state's Supreme Court, they serve as the geographic basis for elections to the State Transportation Commission and the Public Service Commission. They also serve as the geographic basis for appointments to both the Mississippi Board of Bar Admissions and the Board of Trustees for the State Institutions of Higher Learning (IHL), as well as a number of other boards, to include, per a list provided by the State Attorney General's Office: ABLE Board of Directors (MISS. CODE ANN. § 43-28-7); State Board of Banking Review (MISS. CODE ANN. § 81-3-12); Charter School Authorizer Board (MISS. CODE ANN. § 37-28-7); Board of Cosmetology (MISS. CODE ANN. § 73-7-1); Board of Education (MISS. CODE ANN. § 37-1-1); Electronic Protection Licensing Advisory Board (MISS. CODE ANN. § 73-69-21); Board of Licensure for Professional Engineers and Surveyors (MISS. CODE ANN. § 73-13-5); State Board of Funeral Service (MISS. CODE ANN. § 73-11-43); Mississippi Home Corporation (MISS. CODE ANN. § 43-33-704); Hospital Equipment and Facilities Authority (MISS. CODE ANN. § 41-73-7); Land, Water and Timber Resources Board (MISS. CODE ANN. § 69-46-3); State Board of Medical Licensure (MISS. CODE ANN. § 73-43-3); Board of Nursing Home Administrators

(MISS. CODE ANN. § 73-17-7); Oil and Gas Board (MISS. CODE ANN. § 53-1-5); MS State Personnel Board (MISS. CODE ANN. § 25-9-109); State Board of Veterinary Medicine (MISS. CODE ANN. § 73-39-55. The IHL has a policy that acknowledges the value of diversity for Mississippi, as does an opinion written by Judge William Barbour in the “Magnolia Bar” case and, in addition, a statement by the ACLU in regard to this case. Using indices from the Mississippi Health and Hunger Atlas, I find that the existing Supreme Court Districts provide more population diversity than do any of Cooper’s four alternative plans and that Cooper’s plans serve to decrease population diversity across the Supreme Court districts.

18. In the Plaintiffs’ expert report by Dr. Traci Burch, it is asserted that Mississippi’s Black voters are currently disenfranchised. A general assertion in Dr. Burch’s report (Figure 4 and accompanying text in her report and [Exhibit IV.A.4 Racial Differences in Voter Turnout and by Education Level herein](#)) is that White Mississippians turned out to vote in the 2020 election at a higher rate than Black Mississippians, 56.1% to 53.0%, respectively. Dr. Burch’s finding is the result of a flawed analysis in which she employed the incorrect “universe” as the denominator in her calculations (the entire population, which includes those under age 18) rather than the correct “universe,” the population eligible to vote (“Citizens of Voting Age Population” - CVAP). In referencing the officially published US Census Bureau tables published from the same source she cites (the 2020 Current Population Survey, November Voting supplement found in [Table IV.A.2 2020 Mississippi Voting by Race and Ethnicity](#)), I find that that when the correct universe, CVAP, is used as the denominator, APB Mississippians turned out at a *higher* rate in the 2020 election than WNH Mississippians: 72.9% to 69.8%. Additionally, I find her estimate of 53.0% “Black Alone or in Combination, non-Hispanic” to be incorrectly calculated.
19. As shown by data from past November Voting Supplements in the Current Population Survey (taken in the even numbered years when federal elections are held, starting in 1964), my finding is consistent with the trend of voting seen in Mississippi since 2004. Except in 2010, both the percent of Black CVAP registered and the percent of Black CVAP voting have been higher in *every survey year* than the percent of WNH CVAP registration and voting, respectively (see *Figures IV.A.1 and IV.A.2* in this report). In conjunction with this 21st century trend, my finding in regard to the 2020 election also reveals that Dr. James T. Campbell’s implication (p. 51 of his report) that Black Mississippians currently register and vote at lower rates than White Mississippians also is mistaken:

“Under the circumstances prevailing in Mississippi today, and in light of the history from which those circumstances originate, it is my opinion that Black

Mississippians are not afforded an equal opportunity to elect candidates of their choice in Supreme Court elections.”

20. The Voting Supplements of the Current Population Survey (CPS) from 2004 to 2020 do not support Dr. Campbell’s opinion. Moreover, the voter registration data in the Voting Supplements of the CPS are consistent with voting registration data collected for Mississippi in sample surveys conducted annually from 2015 to 2021 by the Survey Research Laboratory, Social Science Research Center, Mississippi State University (SSRC). These sample surveys show that for each year, 2015 to 2021, the percent of Black Mississippians age 18 and over who are registered to vote is higher than the percent of White Mississippians age 18 and over who are registered to vote. In addition, the SSRC sample surveys show that for each year, 2015 to 2021, the percent of Black Mississippians aged 18 and over who report “Always Vote” is higher than the percent of White Mississippians age 18 and over who report “Always Vote.” Both the CPS and the SSRC data are consistent with a finding reported for the first time in this report: Statewide, a higher share of the Black population of potential and actual voters is within a quarter mile of a polling place than is the case for the White population of potential and actual voters, an indicator of opportunity for actual and potential Black voters. Moreover, the CPS shows that Black Voter turnout is higher than that of White Voters, a finding consistent with SSRC data.

II. ASSIGNMENT

21. On behalf of the Defendants, I have been asked to independently review and assess the features and characteristics of Mississippi's Supreme Court voting district plan along with plans and reports submitted by White et al. (Plaintiffs), as appropriate to my training, experience and background.
22. In **Section III**, I analyze Supreme Court Districts as well as the state as a whole in terms of population and voting data. I provide an assessment of: First, compliance of the Mississippi Supreme Court plan with redistricting requirements; then, second, core retention, and compactness as outcomes. I also assess the population diversity of the districts using health and hunger indices developed by the University of Mississippi for the state's counties. These indices are themselves correlated with socio-economic status and race.
23. In **Section IV**, I provide an in-depth analysis of Mississippi voter registration and voter turnout statistics and trends using:
 - November Voting Supplement of the U.S. Census Bureau's Current Population Survey;
 - Mississippi county-specific voter registration and voting frequency data by race from annual statewide surveys conducted from 2015 to 2021 by the Survey Research Laboratory of the Social Science Research Center (SSRC) at Mississippi State University.
24. In **Section V**, I provide Appendices.
25. In forming my opinions, I have considered all materials cited in this report and the appendices. I have also considered some pleadings and other filings in this matter; materials, to include, P. Morrison & T. Bryan, *Redistricting: A Manual for Analysts, Practitioners, & Citizens* (Springer 2019); and U.S. DOJ, Guidance under Section 2 of the Voting Rights Act, 52 U.S.C. 1301, for redistricting and methods of electing government bodies (Sept. 1, 2021). The population, voter registration, and voter turnout, data I use in this report are from standard sources used by demographers, to include census and survey data from the U.S. Census Bureau, as well as survey data from the Social Science Research Center, Mississippi State University. In using these data, I engaged the services of Bryan Geodemographics, an organization experienced in the assembly, summarization, and visualization of demographic and related data, which performed these activities under my direction.
26. I reserve the right to further supplement my report and opinions.

III. CHARACTERISTICS OF MISSISSIPPI SUPREME COURT DISTRICTS

A. Decennial Census

27. The Decennial Census counts people in the United States on a De Jure basis (Wilmoth, 2004: 65) and the U.S. Census Bureau attempts to count everybody once, only once, and in the right place (Cork and Voss, 2006). It is mandated by the Constitution to occur every 10 years, in years ending in zero, to provide the numbers needed to reapportion the House of Representatives, which also results in a reapportionment of the Electoral College. The decennial census numbers also are used by state governments to redraw legislative districts, and the federal government uses the numbers in various funding formulas to distribute some \$1.504 trillion in funding for highways, hospitals, schools, and many other purposes (Sullivan, 2020: 1).
28. In order for states to redraw legislative and other districts, the U.S. Census Bureau issues the “PL 94-171 “redistricting data” file in conjunction with the decennial census.¹ Because the decennial census itself does not ask a “citizenship” question and also does not include questions about voting activities, other sources of data produced by the U.S. Census Bureau for itself or for other federal agencies are often used in redistricting activities, to include the PL 94-171 redistricting file, the American Community Survey and the Current Population Survey (Morrison and Bryan, 2019). It is not always the case that the counts or percentages of the same conceptual variables across these different sources will match exactly (Swanson and Van Patten, 1987; U.S. Census Bureau, 2020b: 17-19).

B. Mississippi Population Characteristics

29. Compared to the U.S. as a whole, Mississippi is not as diverse in terms of race and ethnicity. According to the U.S. Census Bureau², Mississippi has a 2020 population of 2,961,279 of which: 1,084,481 are Black Alone (36%); 1,658,893 are White Alone (56%); 32,701 are Asian (1%); 16,450 are American Indian or Alaskan Native (0.5%); and 56,860 are “Other” (1.9%). In the 2020 Census, 110,732 Mississippians reported being “two or more races” (3.7%) and 105,220 reported being Hispanic or Latino (3.6%). For the U.S. as a whole: approximately 12.4% of its 2020 population of 331,449,281 is “Black Alone;” 62% is “White Alone;” 5.9% is Asian; 1.1% is American Indian or Alaskan Native; and 8.4% is “other.” In the 2020 Census, 33,898,993 Americans reported being “two or more races” 10.2%) and 62,080,044 reported being Hispanic or Latino (18.7%). In Mississippi, 92% of its 2020 population

¹ <https://www.census.gov/programs-surveys/decennial-census/about/rdo/summary-files.html>

² <https://data.census.gov/cedsci/profile/Mississippi?g=0400000US28>

is either “Black Alone” or “White Alone,” while in the U.S, 74% of its 2020 population is either “Black Alone” or “White Alone,” making Mississippi less racially diverse than the U.S. as a whole. With only 3.6% of its population identifying themselves as Hispanic or Latino, Mississippi is less ethnically diverse than the U.S. as a whole, where 18.7% identify themselves as Hispanic or Latino.

C. Mississippi Supreme Court Geography

30. Mississippi’s three Supreme Court election districts are designated along county boundaries, with 22 counties in Supreme Court District 1, 27 counties in District 2, and 33 counties in Supreme Court District 3 – as shown in Appendix 4 Map A. There are 82 counties in Mississippi. Each county is of varying population, ranging from a high of 222,679 in Hinds County, to a low of 1,280 in Issaquena County.³ All counties in Mississippi are functioning governmental entities, each governed by a board of supervisors and 10 of them have two county seats.⁴ Counties appear to have been foundational in the development and maintenance of MS Supreme Court Districts since their inception.⁵ Three justices are elected for eight year terms in staggered fashion from each of the three Supreme Court Judicial Districts.⁶ An inventory of county assignments to districts from different plans and the cluster analysis herein may be found in Appendix 1A.

31. Appendix 4 Map A shows the current SCOMS District boundaries. These districts serve more than one purpose. They not only form the geographic basis for elections to the Mississippi State Supreme Court, but also for elections regarding the Transportation Commission and the Public Service Commission (Campbell, 2022): In addition they serve as the geographic basis for (1) appointments to the Board of Bar Admissions⁷; (2) the Board of Trustees for the State Institutions of Higher Learning (IHL); and (3) boards identified in paragraph 17. In regard to IHL, four of the 12 Member Board of Trustees for the State Institutions of Higher Learning are appointed by the Governor from each of the three Supreme Court districts.⁸ The IHL Board Office is responsible for policy and financial oversight of the eight public institutions of higher learning in

³ https://www.mississippi-demographics.com/counties_by_population

⁴ <https://www.mssupervisors.org/mississippi-counties>

⁵ [Provided by MS Attorney General’s Office: a copy of “The Code of Mississippi, 1848, Article 11, An Act to Regulate the Districts for the Election of Judges of the High Court of Errors and Appeals and to Change the Terms of Said Court.”](#)

⁶ <https://courts.ms.gov/appellatecourts/sc/sc.php>

⁷ <https://courts.ms.gov/news/2020/10.12.20Board%20of%20Bar%20Admissions.php>

⁸ <http://www.mississippi.edu/board/>

Mississippi.⁹ The Board's policy statement 102.06 acknowledges the value of diversity for Mississippi.¹⁰ Given that Mississippi is less racially and ethnically diverse than the U.S. as a whole, this is an important policy statement for the state, one not only in line with a statement by the ACLU (2022) in regard to this case but also the 1992 "Magnolia Bar" case concerning the SCOMS districts, in which Judge William Barbour's decision acknowledged the defendants claim that the existing SCOMS districts foster political and socio-economic diversity (Barbour, 1992: line 1417). Any changes that impact the SCOMS districts would have implications not only for the elections regarding the Supreme Court, but also elections for the Transportation Commission and Public Service Commission. In addition, they will impact appointments to the Board of Bar Admissions and the Board of Trustees for the State Institutions of Higher Learning.

D. Mississippi Supreme Court Census Population

32. Using the 2020 Census, there are three important population definitions I use to characterize each of the districts. I start with the voting age population (VAP), within which is the White, non-Hispanic population (WNH) and then the any part Black population (APB). Other minority populations such as Asian, Native Hawaiian and Pacific Islander, American Indian Alaskan Native and "Other" are relatively small in Mississippi and, therefore, not central to this report.¹¹ The Hispanic population is relevant only insofar as they own a disproportionately large share of non-citizen population, and therefore largely explain the differences between VAP and CVAP estimates. As part of its demographic reporting, the US Census Bureau provides numerous statistics for each race alone and in combination, and also by ethnicity (whether an individual is of Hispanic origin or not). Therefore, an individual could be Black Alone, Black and White or any number of other combinations with other races and ethnicity. For the purpose of this examination, I am using the "Any Part Black" (the "APB" definition). The APB population is used in the plaintiffs' analysis and is outlined by the Department of Justice in their guidance for defining populations in VRA cases.¹² The DOJ Guidance on Federal Statutes Regarding Redistricting and Methods for Electing Public Officials states:

"The Department of Justice will follow both aggregation methods defined in Part II of the Bulletin. The Department's initial review will be based upon allocating any response that includes White and one of the five other race categories identified in the response. Thus, the total numbers for "Black/African American,"

⁹ <http://www.mississippi.edu/board/>

¹⁰ <http://www.mississippi.edu/board/downloads/policiesandbylaws.pdf>

¹¹ <https://data.census.gov/table?q=pl&g=0400000US28>

¹² <https://www.justice.gov/opa/press-release/file/1429486/download>

“Asian,” “American Indian/Alaska Native,” “Native Hawaiian or Other Pacific Islander,” and “Some other race” reflect the total of the single-race responses and the multiple responses in which an individual selected a minority race and White race.”

The Department will then move to the second step in its application of the census data by reviewing the other multiple-race category, which is comprised of all multiple-race responses consisting of more than one minority race. Where there are significant numbers of such responses, the Department will, as required by both the OMB guidance and judicial opinions, allocate these responses on an iterative basis to each of the component single-race categories for analysis. *Georgia v. Ashcroft*, 539 U.S. 461, 473, n.1 (2003)¹³

33. In *Table III.D.1* (below) one can see that Mississippi’s 2020 Voting Age Population (VAP) was 2,277,599 per the 2020 PI 94-171 redistricting file and when divided into the three SCOMS districts shows 716,402 in District 1 (31% of the total VAP), 796,767 in District 2 (35% of the total VAP), and 764,430 in District 3 (34% of the total VAP), a fairly equitable distribution. As can be seen in this table, approximately 45% of the VAP in District 1 is made up of WNH total and 49.3% of APB total. It is this number, 49.3%, that the Plaintiffs are relying on to characterize D1 as being minority Black. In District 2, approximately 65% of VAP is made up of WNH total while 28% is made up of APB total. In District 3, 62% of the VAP is made up of WNH total with 33% made up of APB total. Clearly, District 1 has the highest percent of APB total of the three while Districts 2 and 3 are clearly majority WNH total.

Table III.D.1 2020 Census Voting Age Population for Existing SCOMS Districts¹⁴

Existing Districts	VAP	WNH Total	APB Total	% WNH	% APB
1	716,402	324,908	353,091	45.4%	49.3%
2	796,767	517,385	220,412	64.9%	27.7%
3	764,430	473,158	249,577	61.9%	32.6%
Total	2,277,599	1,315,451	823,080	57.8%	36.1%

Source: 2020 Census PL94-171; calculations by Bryan GeoDemographics for author.

¹³ <https://www.justice.gov/opa/pr/justice-department-issues-guidance-federal-statutes-regarding-redistricting-and-methods>

¹⁴ These statistics correspond in part to those presented in Mr. Cooper’s expert declaration: Figure 2: Mississippi – 1990 to 2020 Census Percent Voting Age Population by Race and Ethnicity on P.9.

34. A useful way to look at the distribution of WNH total and APB total across the three districts is to use the coefficient of variation (*CV*). Because the *CV* is a dimensionless number, it can be used to make comparisons across populations with different means (Swanson, 2012: 86). To get to this measure, one starts by computing the mean VAP and its standard deviation across the three districts, which yields 759,199.67 (where $759,199.67 = 2,277,599/3$) and a standard deviation of 33,016.67. If each of the three districts had the same number of VAP (approximately 759,200), the standard deviation would be essentially zero. The actual population standard deviation is 33,016.67. When the standard deviation is divided by the mean, one obtains the coefficient of variation (*CV*), which shows the extent of variation relative to the mean. In this case, the *CV* is approximately 0.04 (where $0.04 = 33,016.6/759,199.67$). In this regard, I compare the *CVs* for VAP (0.04), WNH total (0.19), and APB total (0.21). The WNH total is about four times higher than that seen for VAP and the APB total is approximately five times higher than that that seen for VAP, which serves to confirm that WNH total and APB total population are less equally distributed across the three districts than the total VAP, irrespective of their means.
35. The plaintiffs put forth four potential alternative plans,¹⁵ each with different features. Using the same procedure I applied to the existing plan (*Table III.D.1* above), I summarize the demographic characteristics of each of these four alternative plans. As shown in *Table III.D.2* (below) for Cooper's Illustrative Plan 1, one can see that Mississippi's 2020 Voting Age Population (VAP) is 2,277,599 per the 2020 P1 94-171 redistricting file (consistent with the VAP reported in *Table III.D.1* above) . The new District 1 has 40.9% WNH and 55.3 % of APB. This represents an increase of +6.0 percentage points (55.3% - 49.3%) APB in this district over the existing plan. In District 2, 68.3% of VAP is made up of WNH while 23.5% is made up of APB. In District 3, 63.4% of the VAP is made up of WNH with 30.3% made up of APB. Clearly, District 1 has the highest percent of APB of the three while Districts 2 and 3 are clearly majority WNH.

¹⁵ Mr. Cooper's expert declaration:

- Figures 10 and 11: Illustrative Plan 1 on P.27
- Figures 13 and 14: Illustrative Plan 2 on P.30
- Figures 15 and 16: Least Change Plan 1 on P.33 and P.34
- Figures 17 and 18: Least Change Plan 2 on P.35

Table III.D.2 2020 Census Voting Age Population for Cooper Illustrative Plan 1 Districts

Illustrative 1	VAP	WNH Total	APB Total	% WNH	% APB
1	737,689	301,664	407,999	40.9%	55.3%
2	757,569	517,762	178,124	68.3%	23.5%
3	782,341	496,025	236,957	63.4%	30.3%
Total	2,277,599	1,315,451	823,080	57.8%	36.1%

Source: 2020 Census PL94-171; calculations by Bryan GeoDemographics for author.

36. As shown in *Table III.D.3* (below) for Cooper's Illustrative Plan 2, one can see that the new District 1 has 41.4% WNH and 54.2 % of APB. This represents an increase of +4.9 percentage points (54.2% - 49.3%) APB in this district over the existing plan. In District 2, 65.9% of VAP is made up of WNH while 26.4% is made up of APB. In District 3, 65.5% of the VAP is made up of WNH, with 28.3% made up of APB. Again, District 1 has the highest percent of APB of the three while Districts 2 and 3 are clearly majority WNH.

Table III.D.3 2020 Census Voting Age Population for Cooper Illustrative Plan 2 Districts

Illustrative 2	VAP	WNH Total	APB Total	% WNH	% APB
1	746,385	309,225	404,440	41.4%	54.2%
2	760,360	500,934	200,715	65.9%	26.4%
3	770,854	505,292	217,925	65.5%	28.3%
Total	2,277,599	1,315,451	823,080	57.8%	36.1%

Source: 2020 Census PL94-171; calculations by Bryan GeoDemographics for author.

37. As shown in *Table III.D.4* (below) for Cooper's Least Change Plan 1, one can see the new District 1 has 42.1% WNH and 53.0 % of APB. This represents an increase of +3.7 percentage points (53.0% - 49.3%) APB in this district over the existing plan. In District 2, 66.0% of VAP is made up of WNH while 26.5% is made up of APB. In District 3, 64.1% of the VAP is made up of WNH with 30.1% made up of APB. Again, District 1 has the highest percent of APB of the three while Districts 2 and 3 are clearly majority WNH.

Table III.D.4 2020 Census Voting Age Population for Cooper Least Change Plan 1 Districts

Least Change 1	VAP	WNH Total	APB Total	% WNH	% APB
1	722,892	304,436	383,099	42.1%	53.0%
2	766,360	505,954	202,788	66.0%	26.5%
3	788,347	505,061	237,193	64.1%	30.1%
Total	2,277,599	1,315,451	823,080	57.8%	36.1%

Source: 2020 Census PL94-171; calculations by Bryan GeoDemographics for author.

38. As shown in *Table III.D.5* (below) for Cooper's Least Change Plan 2, one can see the new District 1 has 43.3% WNH and 52.0 % of APB. This represents an increase of +2.7 percentage points (52.0% - 49.3%) APB in this district over the existing plan. In District 2, 64.9% of VAP is made up of WNH while 27.7% is made up of APB. In District 3, 64.5% of the VAP is made up of WNH with 29.5% made up of APB. Again, District 1 has the highest percent of APB of the three while Districts 2 and 3 are clearly majority WNH.

Table III.D.5 2020 Census Voting Age Population for Cooper Least Change Plan 2 Districts

Least Change 2	VAP	WNH Total	APB Total	% WNH	% APB
1	738,384	319,492	383,997	43.3%	52.0%
2	796,767	517,385	220,412	64.9%	27.7%
3	742,448	478,574	218,671	64.5%	29.5%
Total	2,277,599	1,315,451	823,080	57.8%	36.1%

Source: 2020 Census PL94-171; calculations by Bryan GeoDemographics for author.

E. ACS Citizen Voting Age Population Characteristics of Mississippi

39. Each of the plans put forth by the plaintiffs are as remarkable for their features and what they say about them, as what they do not. Conventionally, when a Gingles 1 analysis is done, it includes an analysis not just of the VAP, but of the Citizen VAP (or, “CVAP”) as well. Conceptually, the CVAP is a refined measure, withdrawing those who may be of voting age – but by virtue of not being citizens are ineligible to vote. In recent cases, Mr. Cooper includes this important measure.¹⁶ In this case, however, Mr. Cooper does not. Why, one must ask is this the case? As noted in the executive summary, the APB Black CVAP is already a majority at 51.0%. This fact that District 1 is an existing “majority-minority district is contrary to plaintiffs’ claim that the SCOMS District 1 is a minority district in need of remediation.
40. The American Community Survey (ACS) is the source of record for CVAP data. The survey is a set of “rolling” sample surveys conducted by the U.S. Census Bureau (Morrison and Bryan, 2019; US Census Bureau, 2020a). It is distinct and different from the Decennial Census and the Current Population Survey, which also are conducted by the U.S. Census Bureau. The ACS provides data that the US Department of Justice commissions and relies on for adjudicating VRA cases.¹⁷ For the purposes of cases just like these, the US Census Bureau began tabulating CVAP data starting back in 2002, and currently produces a new specially tabulated CVAP dataset each year at the request of the US DOJ.¹⁸ The output of this file is composed of estimates of the CVAP by race and ethnicity for different levels of Census geography, as follows:¹⁹

“This is a special tabulation of the citizen voting age population and other data from the 2016-2020 5-year American Community Survey (ACS). This is the twelfth release of this special tabulation of ACS data. The first release used the 2005-2009 5-year ACS data, and the data are re-released every year using each subsequent year’s 5-year ACS data. These special tabulations provide citizenship voting age data to assist the redistricting process. Data from this and all previous releases are available through the Voting Rights link on the Census Bureau’s Redistricting Data Office web site, www.census.gov/rdo.”

¹⁶ See Second Declaration of William S. Cooper in *Alabama Caster v. Merrill* and Exhibit 1 - Decl. of William S. Cooper in *Robinson v. Ardoin* and *Galmon v. Ardoin* and related Louisiana redistricting litigation in 2022 both current SCOTUS cases where he reports and discusses CVAP alongside VAP and its importance in measuring minority populations.

¹⁷ Morrison, P. and T. Bryan (2019). *Redistricting: A Manual for Analysts, Practitioners, and Citizens*. Springer. Cham, Switzerland

¹⁸ <https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/CVap.html>

¹⁹ https://www2.census.gov/programs-surveys/decennial/rdo/technical-documentation/special-tabulation/CVAP_2016-2020_ACS_documentation_v3.pdf

41. The US Census Bureau reports a variety of CVAP statistics as part of this special tabulation, including data in total as well as by select racial and ethnic groupings – as seen in *Exhibit III.E.1* (below).

Exhibit III.E.1 American Community Survey DOJ VRA Race and Ethnicity Reporting Classifications

1	Total CVAP
2	Not Hispanic or Latino (NH)
3	American Indian or Alaska Native Alone (NH)
4	Asian Alone (NH)
5	Black or African American Alone (NH)
6	Native Hawaiian or Other Pacific Islander Alone (NH)
7	White Alone (NH)
8	American Indian or Alaska Native and White (NH)
9	Asian and White (NH)
10	Black or African American and White (NH)
11	American Indian or Alaska Native and Black or African American (NH)
12	Remainder of Two or More Race Responses (NH)
13	Hispanic or Latino

Source: https://www2.census.gov/programs-surveys/decennial/rdo/technical-documentation/special-tabulation/CVAP_2016-2020_ACS_documentation_v3.pdf.

42. As discussed in the Mississippi Supreme Court Census Population section above, the DOJ directs that two levels of minority population be produced. In order to create the first-level required DOJ estimate of the Black or African American population, group 5 Black or African American Alone (NH) and group 10 Black or African American and White (NH) are aggregated. In recent cases, this level has proven just to be a demographic exercise. Plaintiffs in cases such as these are commonly going straight to the second-level definition, as follows.

43. In order to create the second-level required DOJ estimate of the any-part Black or African American population, the following are aggregated, group 5 Black or African American Alone (NH) and group 10 Black or African American and White (NH) and group 11 American Indian or Alaska Native and Black or African American (NH). The American Indian or Alaska native combination is the only other Black or African American combination reported.

44. The DOJ does not outline which one of numerous demographic methods they recommend to “allocate these (multi-race) responses on an iterative basis” nor do they

provide the multi-race granularity of reporting afforded by the Decennial Census. While there are more Black or African American population in the ACS in the “Remainder of Two or More Race Responses” category – there is no way to estimate this from the data that the DOJ requests from the Census Bureau to fulfill their own definitions. In this regard, one can think of the estimates provided by Black or African American Alone (NH) and Black or African American and White (NH) and American Indian or Alaska Native and Black or African American as a lower bound of the actual any-part Black CVAP being reported.

45. Again, we have two sources of population data: (1) the Decennial Census from 2020 (Total and Voting Age Population, or “VAP”); and (2) the most recent ACS from 2016-2020 (Citizen Voting Age Population, or “CVAP”). Plaintiffs claim the existing District 1 is a minority district based on 2020 Census VAP data – at 49.3%. Plaintiffs do not present the measure used by their own expert in other cases to measure actual voting strength: CVAP. Cooper’s analysis only reports results from the 2020 Decennial Census, which shows a 49.3% VAP bare minority share in existing Supreme Court District 1. When you remove the non-Citizens then examine APB as a share of CVAP the conclusion is different - Supreme Court District 1 is an APB CVAP majority at 51.0% as shown in *Table III.E.2* (below).
46. As long as I am focusing on the population eligible to vote, I need to acknowledge and address the prison populations in Mississippi, where many of the residents are ineligible to vote. It is important to note that the ACS Citizen Voting Age Population, or “CVAP” includes group quarters (e.g. prisons) populations, some of whom are ineligible to vote. The state of Mississippi has three large correctional facilities, which house overwhelmingly Black populations. The Mississippi State Penitentiary, “Parchman” (MSP in Sunflower County), Central Mississippi Correctional Facility (CMCF in Rankin County); and the Southern Mississippi Correctional Institution (SMCI in Greene County) – as shown in Appendix 4 Map B. It is my opinion that because of the size of these facilities, and the share of them that are Black, any analysis is at risk of the misrepresenting CVAP members who are actually eligible to vote. In order to give the Plaintiffs every benefit of the doubt using the CVAP measure – my analysis excludes the estimated Black prisoner population of each of these three facilities – and the districts in which they respectively reside. This exclusion serves to *reduce* the APB CVAP statistic to an estimate of the size of this population that is actually eligible to vote. Retaining and including these three large populations would run the risk of artificially inflating the Black CVAP who are eligible to vote in Mississippi in particular. While it is widely recognized that Mississippi has numerous felons ineligible to vote who are not currently incarcerated, there is no practical way to measure or locate these demographically by district in a meaningful way.

47. For the purpose of demographic measurement of prisoners, it is important to note two things. First, the decennial census often reports estimates of “GQ_Corr” or Group Quarters – Correctional populations that are different from the current actual prisoner populations. For the Mississippi State Penitentiary (MSP), for example, the Decennial Census reported 304 prisoners in Census Block 281339501005056 (with 88 WNH and 212 APB), and 2,790 prisoners in adjacent Census Block 281339501005057 (1,179 WNH and 1,416 APB). This totals 3,094, with 1,267 (41%) WNH and 1,628 (52.6%) APB. For the Census Block Group (BG) 281339501005 containing MSP reported by the ACS CVAP file for the DOJ, there are a reported 4,585 CVAP – 3,165 of which are reported as Black CVAP. Neither the 2020 Decennial Census nor the ACS statistics for the Black population here are consistent with official MS DOC reports. At the time of the writing of this paper, Mississippi Department of Corrections (MS DOC) had published prisoner statistics through March of 2022 – and is on these numbers our analysis relies. As shown in *Table III.E.1* (below) MS DOC reported 1,283 Black prisoners, 665 White prisoners and 20 “other” prisoners at MSP. I use the MS DOC numbers in the analysis – removing them from our CVAP in order to estimate an accurate voter-eligible population. MS DOC reported 1,435 Black prisoners and 1,301 White and 43 other prisoners at the Central Mississippi Correctional Facility (CMCF). MS DOC reported 1,476 Black prisoners, 751 White and 29 other prisoners at the South Mississippi Correctional Institution (SMCI). My analysis includes these three facilities but does not include smaller facilities such as county or youthful offender facilities, private prisons or regional correctional facilities both because of their size and the fact the MS DOC does not break out the prisoners in each of those facilities individually.

Table III.E.1 Mississippi Prisoner Analysis by Race and Ethnicity, March 2022 by Facility

LOCATION	Black		White		Hispanic		Native American		Asian		Data Unavailable		TOTAL
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
MSP	1,283	0	665	0	11	0	1	0	7	0	1	0	1,968
CMCF	1,098	337	763	538	17	7	8	5	4	2	0	0	2,779
SMCI	1,476	0	751	0	24	0	4	0	1	0	0	0	2,256
County Jail (Approved)	492	7	448	21	10	1	1	0	2	0	4	0	988
County Jail (Unapproved)	444	14	610	23	10	1	0	0	4	0	4	1	1,128
Youthful Offender Facility	11	0	9	0	1	0	0	0	1	0	0	0	22
Private Prisons	2,102	0	661	0	20	0	8	0	4	0	1	0	2,996
Regional Correctional Facilities	2,518	40	1,350	55	60	2	6	1	0	0	0	0	4,050
Community Work Centers	167	0	100	81	2	1	1	0	1	0	0	0	378
Community Trustee	0	0	0	0	0	0	0	0	0	0	0	0	0
TWC	40	0	30	0	0	0	0	0	0	0	0	0	70
Transitional Housing	8	1	4	4	0	0	0	0	0	0	0	0	17
Prisoner Fair Review	100	5	57	12	1	0	0	0	1	0	0	0	176
BPB	7	0	15	5	0	0	0	0	0	0	0	0	37
Centennial	0	0	0	1	0	0	0	0	0	0	0	0	1
Debut Order	96	0	97	6	0	0	0	0	1	0	0	0	192
TOTAL	10,788	527	6,182	929	267	13	33	7	44	3	13	1	18,747
% OF TOTAL OFFENDERS	57.55%	2.81%	32.98%	4.96%	1.10%	.07%	.18%	.04%	.23%	.02%	.07%	.01%	100.00%

Source: Mississippi Department of Corrections <https://www.mdoc.ms.gov/Admin-Finance/MonthlyFacts/03-01-2022.1.pdf>.

48. The statistics in *Table III.E.1* show there are both large *absolute* numbers of Black prisoners in these facilities, and that there is also a higher *proportionate* number of Black prisoners in the three major prisons in Mississippi than White prisoners overall and by gender. While not all of these prisoners are ineligible to vote, for purposes of this analysis, I assume that they are. I use the MS DOC numbers in my estimates of those eligible to vote by race and ethnicity – removing Black prisoners from APB CVAP in the counties where they are located in order to place a lower boundary on the voter-eligible Black population.

49. *Table III.E.2* (below) shows the CVAP analysis with these prisoners excluded for the existing Supreme Court Districts. In the first row, for District 1, one can see that the CVAP is 705,555. The WNH population is 324,204 and the APB population is 360,356. The percent Black CVAP is shown in the last two columns. The “%APB” column reports the % APB CVAP *without adjustment* for Black prisoners. The “%APB – “Prison Adjusted” column reports the % APB CVAP *with adjustment* for Black prisoners. The numbers shaded in green are higher % Black, and the numbers shaded in red are lower %Black.

50. The % APB CVAP for District 1 (shown in the % APB column) is 51.1%. District 1 in the existing plan contains both MSP and CMCF (combined for 2,718 Black prisoners and 2,029 other prisoners). District 2 contains SMCI (with 1,476 Black prisoners and 780 other prisoners). The % APB CVAP Prison Adjusted for District 1 (shown in the % APB – Prison Adj. column) is 51.0%. That is – under the assumption that all of the prisoners are ineligible to vote, the adjustment for Black prisoners reduces the % Black CVAP eligible to vote by approximately 0.1%. It is clear from this analysis that

regardless of whether you include Black prisoners or not – the APB CVAP in District 1 in the existing plan is currently a “majority minority” population. Further investigation revealed that even if I used the most conservative, restrictive definition of Black (Black Alone, non-Hispanic) of which there are 358,072 in District 1 – one would still find a majority of 50.8%.

Table III.E.2 2020 Census Voting Age Population for Existing SCOMS Districts

Existing Districts	CVAP	WNH	APB	Black Prisoners	Other Prisoners	% APB	%APB - Prison Adj.
1	705,555	324,204	360,256	2,718	2,029	51.1%	51.0%
2	781,300	527,524	218,180	1,476	780	27.9%	27.6%
3	751,245	479,855	250,322			33.3%	33.3%
Grand Total	2,238,100	1,331,583	828,758	4,194	2,809	37.0%	37.0%

Source: Calculations for author by Bryan GeoDemographics using 2016-2020 ACS DOJ CVAP and MS DOC Reported Prisoner Populations.

51. Table III.E.3 (below) shows the % APB CVAP under Cooper’s Illustrative Plan 1. The % APB CVAP for District 1 (shown in the % APB column) is an *overwhelming* majority of 57.1%. District 1 in this plan contains MSP (with 1,283 Black prisoners and 685 other prisoners). District 2 contains SMCI and CMCF (with 2,911 Black prisoners and 2,124 other prisoners). The % APB CVAP Prison Adjusted for District 1 (shown in the “% APB – Prison Adj.” column) is 57.0%. That is, the adjustment for prisoners reduces the % Black CVAP eligible to vote by approximately 0.1%. In this table, it is also interesting to note that the D1 APB population of 414,130 is exactly half of the total APB population of 828,758.

Table III.E.3 2020 Census Voting Age Population for Cooper Illustrative Plan 1 Districts

Illustrative 1	CVAP	WNH	APB	Black Prisoners	Other Prisoners	% APB	%APB - Prison Adj.
1	725,645	295,443	414,130	1,283	685	57.1%	57.0%
2	740,350	529,260	175,711	2,911	2,124	27.9%	27.6%
3	772,105	506,880	238,917			30.9%	30.9%
Grand Total	2,238,100	1,331,583	828,758	4,194	2,809	37.0%	37.0%

Source: Calculations for author by Bryan GeoDemographics using 2016-2020 ACS DOJ CVAP and MS DOC Reported Prisoner Populations.

52. Table III.E.4 (below) shows the % APB CVAP under Cooper’s Illustrative Plan 2. The % APB CVAP for District 1 (shown in the % APB column) is again an *overwhelming* majority of 55.4%. District 1 in this plan contains MSP (with 1,283 Black prisoners and 685 other prisoners). District 2 contains SMCI (with 1,476 Black prisoners and 780 other prisoners). District 3 contains CMCF (with 1,435 Black prisoners and 1,344

other prisoners). The % APB CVAP Prison Adjusted for District 1 (shown in the % APB – Prison Adj. column) is 55.4%. That is – the adjustment for prisoners reduces the % Black CVAP eligible to vote is negligible.

Table III.E.4 2020 Census Voting Age Population for Cooper Illustrative Plan 2 Districts

Illustrative 2	CVAP	WNH	APB	Black Prisoners	Other Prisoners	% APB	% APB - Prison Adj.
1	734,095	308,563	406,542	1,283	685	55.4%	55.4%
2	747,610	513,335	199,460	1,476	780	26.7%	26.6%
3	756,395	509,685	222,756	1,435	1,344	29.4%	29.4%
Grand Total	2,238,100	1,331,583	828,758	4,194	2,809	37.0%	37.0%

Source: Calculations by Bryan GeoDemographics for author using 2016-2020 ACS DOJ CVAP and MS DOC Reported Prisoner Populations.

53. Table III.E.5 (below) shows the % APB CVAP under Cooper’s Least Change Plan 1. The % APB CVAP for District 1 (shown in the % APB column) is still an *overwhelming* majority of 54.4%. District 1 in this plan contains both MSP and CMCF (combined for 2,718 Black prisoners and 2,029 other prisoners). District 2 contains SMCI (with 1,476 Black prisoners and 780 other prisoners). The % APB CVAP Prison Adjusted for District 1 (shown in the % APB – Prison Adj. column) is 54.4%. That is – the adjustment for prisoners reduces the % Black CVAP eligible to vote is negligible.

Table III.E.5 2020 Census Voting Age Population for Cooper Least Change Plan 1 Districts

Least Change 1	CVAP	WNH	APB	Black Prisoners	Other Prisoners	% APB	% APB - Prison Adj.
1	718,485	305,683	390,711	2,718	2,029	54.4%	54.4%
2	751,875	516,885	201,241	1,476	780	26.8%	26.6%
3	767,740	509,015	236,806			30.8%	30.8%
Grand Total	2,238,100	1,331,583	828,758	4,194	2,809	37.0%	37.0%

Source: Calculations by Bryan GeoDemographics for author using 2016-2020 ACS DOJ CVAP and MS DOC Reported Prisoner Populations.

54. Table III.E.6 (below) shows the % APB CVAP under Cooper’s Least Change Plan 2. The % APB CVAP for District 1 (shown in the % APB column) is still a majority of 53.8%. District 1 in this plan contains both MSP and CMCF (combined for 2,718 Black prisoners and 2,029 other prisoners). District 2 contains SMCI (with 1,476 Black prisoners and 780 other prisoners). The % APB CVAP Prison Adjusted for District 1 (shown in the % APB – Prison Adj. column) is 53.8%. That is – the adjustment for prisoners reduces the % Black CVAP eligible to vote is negligible.

Table III.E.6 2020 Census Voting Age Population for Cooper Least Change Plan 2 Districts

Least Change 2	CVAP	WNH	APB	Black Prisoners	Other Prisoners	% APB	%APB - Prison Adj.
1	728,555	318,494	392,118	2,718	2,029	53.8%	53.8%
2	781,300	527,524	218,180	1,476	780	27.9%	27.8%
3	728,245	485,565	218,460			30.0%	30.0%
Grand Total	2,238,100	1,331,583	828,758	4,194	2,809	37.0%	37.0%

Source: Calculations by Bryan GeoDemographics for author using 2016-2020 AVS DOJ CVAP and MS DOC Reported Prisoner Populations.

55. *Table III.E.7* (below) shows the percent APB CVAP over time as estimated from the American Community Survey over three segments of time. First from the 2014-2018 5-year ACS DOJ dataset, then from the 2015-2019 5-year ACS DOJ dataset, then from the most recent 2016-2020 5-year ACS DOJ dataset. One can see in the first row of this table that the %APB CVAP population in the current plan was already a majority in the 2014-2018 dataset – and has since grown to 51% in the most recent 2016-2020 ACS DOJ dataset. As expected, in each of Cooper’s alternative plans - the %APB CVAP population in the current plan were all already significant majorities in the 2014-2018 ACS DOJ dataset – and has since grown even more significant majorities in the most recent 2016-2020 ACS DOJ dataset. Under each of Cooper’s alternative plans, the %APB CVAP grows from an existing majority to a larger majority.

Table III.E.7 CVAP analysis over time: District 1 % APB CVAP under Current Plan compared to Cooper’s Plans for 2014-2018, 2015-2019 and 2016-2020

	<u>2014-2018</u>	<u>2015-2019</u>	<u>2016-2020</u>
Current Plan	50.8%	51.0%	51.0%
Illustrative 1	56.8%	57.1%	57.0%
Illustrative 2	54.9%	55.3%	55.4%
Least Change 1	54.1%	54.4%	54.4%
Least Change 2	53.4%	53.7%	53.8%

Source: ACS, as described and discussed in the text; calculations by BryanGeoDemographics for author.

F. Performance of Mississippi Districts Using Traditional Redistricting Principles

56. The state of Mississippi does not have legally required periodic updates to their Supreme Court Districts. As such, Mississippi does not have laws or rules to direct how its Supreme Court districts should be drawn other than what is found in Sec 9-3-1 of the State Code. If plans are put forward to re-draw the SCOMS districts, however, it would be appropriate to follow traditional redistricting principles in general as well as redistricting laws found in Mississippi in evaluating them, as was the situation in the “Magnolia Bar” case (Barbour, 1992).

57. Different states consider and implement different criteria. For example, in some states, including Texas, state constitutions *require* the use of counties to draw certain legislative boundaries, while others just require them to be considered. The Congressional Research Service explains:

“Many of the ‘rules’ or criteria for drawing congressional boundaries are meant to enhance fairness and minimize the impact of gerrymandering. These rules, standards, or criteria include assuring population equality among districts within the same state; protecting racial and language minorities from vote dilution while at the same time not promoting racial segregation; promoting geographic compactness and contiguity when drawing districts; minimizing the number of split political subdivisions and ‘communities of interest’ within congressional districts; and preserving historical stability in the cores of previous congressional districts.”²⁰

Following the general path found in Cooper’s report, I continue under the assumption that these same principles apply to redistricting of the state’s Supreme Court districts.

58. The National Conference of State Legislatures (NCSL) is widely recognized as the nation’s independent, objective, and bipartisan authority on redistricting matters.²¹ The NCSL has published a series of principles that reflect traditional districting principles (or criteria) have been both informed by and adopted by many states. This guidance

²⁰ <https://crsreports.congress.gov/product/pdf/R/R42831/3>

²¹ <https://www.ncsl.org/aboutus/ncslservice/facts-about-ncsl.aspx>:

- NCSL is the only organization that advocates solely for states’ interests in Washington, D.C.
- NCSL is the only organization that provides support services to legislators and legislative staff.
- NCSL is the only bipartisan organization of its kind with leadership and participation from both sides of the aisle.
- NCSL presents all sides of the issues and provides information based on facts, not politics.
- NCSL promotes the legislative institution as a whole and works to make it stronger and more efficient.
- NCSL’s legislator members vote on policy issues that direct the organization’s activities on Capitol Hill.
- NCSL’s annual Legislative Summit is the largest and most important gathering of the year for legislators and legislative staff.

from the NCSL is the basis of any assessment I make as an expert of individual states or organization's criteria and redistricting plans.

59. These traditional districting principles (or criteria) have been adopted by many states:

- **Compactness:** Having the minimum distance between all the parts of a constituency (a circle, square or a hexagon is the most compact district).
- **Contiguity:** All parts of a district being connected at some point with the rest of the district.
- **Preservation of counties and other political subdivisions:** This refers to not crossing county, city, or town, boundaries when drawing districts.
- **Preservation of communities of interest:** Geographical areas, such as neighborhoods of a city or regions of a state, where the residents have common political interests that do not necessarily coincide with the boundaries of a political subdivision, such as a city or county.
- **Preservation of cores of prior districts:** This refers to maintaining districts as previously drawn, to the extent possible. This leads to continuity of representation.
- **Avoiding pairing incumbents:** This refers to avoiding districts that would create contests between incumbents.

60. Mississippi specifically has codified many of these principles into law for redistricting their legislature and congressional districts. For legislative districts, Mississippi requires districts to be compact, contiguous and to preserve political subdivisions.²²

Mississippi Code § 5-3-101 states:

In accomplishing the apportionment, the committee shall follow such constitutional standards as may apply at the time of the apportionment and shall observe the following guidelines unless such guidelines are inconsistent with constitutional standards at the time of the apportionment, in which event the constitutional standards shall control:

(a) Every district shall be compact and composed of contiguous territory and the boundary shall cross governmental or political boundaries the least number of times possible; and

(b) Districts shall be structured, as far as possible and within constitutional standards, along county lines; if county lines are fractured, then election district lines shall be followed as nearly as possible.²³

²² <https://www.ncsl.org/research/redistricting/redistricting-criteria.aspx>

²³ <https://law.justia.com/codes/mississippi/2016/title-5/chapter-3/standing-joint-legislative-committee-on-reapportionment/section-5-3-101>

For congressional districts, Mississippi requires districts to be to be compact, contiguous, to preserve political subdivisions and to preserve communities of interest.²⁴

61. For the purpose of drawing alternate SCOMS districts, plaintiffs' expert Mr. William Cooper has applied the law and principles selectively. He has followed the precedent of SCOMS districting and legislative law using entire counties as the building blocks for SCOMS districts (see Mississippi Code § 5-3-101 part (b), "Districts shall be structured, as far as possible and within constitutional standards, along county lines."). He also has used Mississippi's established Planning and Development Districts ("PDDs" as shown in Appendix 4 Map C) as communities of interest to organize and report demographic features of the state (but does not use these in a meaningful way to actually inform the design of his districts).²⁵ In fact, Mr. Cooper does *not* even attempt to analyze the SCOMS districts using the traditional redistricting principles of core retention and compactness. I, however, analyze the existing districts and each of his proposed four plans using these principles.

Core Retention

62. Courts have recognized the need to preserve the core of a prior established district as a legitimate redistricting criterion,²⁶ as well as the avoidance of contests between incumbents.²⁷ Core retention fosters the continuity of political representation. A *Core Retention Analysis* (CRA) also known as a constituency report is simply a demographic accounting of the addition and subtraction of persons that would be brought about by a proposed realignment of a district's existing boundaries, a process consistent with determining core retention (see paragraph 15). A CRA is a way of quantifying precisely how a proposed realignment would affect the continuity of representation among a district's current residents and eligible voters.

63. Core Retention Analysis has usually considered only the total populations of districts in comparisons across plans. Here, I have also broadened this standard demographic model, using standard methodology to present comparisons to alternative redistricting plans, and by also analyzing the core retention of protected group. I refer to this as "differential" CRA. The "differential" being the findings it generates by district between the total population and the Black population. In the matters of voting rights and redistricting – another population besides total can and does frequently yield

²⁴ <https://www.ncsl.org/research/redistricting/redistricting-criteria.aspx>

²⁵ See Cooper expert report at P.10.

²⁶ *Abrams v. Johnson*, 521 U.S. 74, 84 (1997).

²⁷ *Bush v. Vera*, 517 U.S. 952 (1996).

significant differences in CRA findings: race and ethnicity. While race cannot be the prevailing factor in drawing a district - in the state of Mississippi and beyond the impact of redistricting on race and ethnic groups is still of significant legal concern. Are there differential impacts to the total population and by race and ethnicity?

64. In each of the following tables, I show the population from each of the original SCOMS districts distributed into each of Cooper's alternative plan districts. In each column, I show the total population impact, the White, non-Hispanic (WNH) impact, and the any part Black (APB) impact. Below the table, I show core retention diagnostics for District 1 (D1) and then the plan as a whole.

DISTRICT 1 (D1) Core Retention Metrics

- The first row (Existing D1 VAP) shows the VAP in D1 of the existing SCOMS plan.
- The second row (Pop Retained in D1) shows the size of the population that was unperturbed by the new plan. As I move forward, this is the population that I will refer to as "retained".
- The third row (Pop Sent Out of D1) is the size of the population that was originally in D1 but was moved to either D2 or D3.
- The fourth row (Pop Added to D1) is the size of the population that was originally in D2 or D3 but was moved in to D1.
- The fifth row (Net Change to D1) is the net of the population sent out of and added to D1. This is the change in population that drives the change in population behind Mr. Cooper's new alternate district estimates.
- The sixth row (D1 core retention) is the percent of the population from the original D1 plan who are retained in the new plan's D1.

Total Plan Core Retention Metrics

- The seventh row (Pop Retained in Original Districts) is the sum of the population left unperturbed in all 3 districts by the new plan.
- The eighth row (Pop Changing Districts) is the sum of the population moved in all 3 districts by the new plan.
- The ninth row (Plan Core Retention) is the percent of the population from the original plan who are retained in the same district under the new plan.
- In *Table III.F.1* (below) one can see the core retention results for Cooper's Illustrative Plan 1. In District 1 (D1), 63.1% of the total population is retained in District 1, but

the drivers of this differ significantly by race and ethnicity. Only *half* (49.7%) of the WNH population from D1 is retained, while 76.9% of the APB population is retained. Across the entire plan, 74.3% of Mississippi's total population is retained in their original district. 75.2% of WNH and 72.0% of APB are retained in their original districts. 585,817 Mississippians, 325,945 WNH and 230,591 APB are moved. While there is no established threshold for core retention, I argue a move of 25.7% of the population (585,817) to a different judiciary in order to change the APB population in D1 by 54,908 is substantial.

Table III.F.1 Core Retention of Illustrative Plan 1

Row	Original SCOMS	III Plan 1	2020 VAP	2020 WNH VAP	2020 APB VAP
A	⊖1	1	452,017	161,498	271,547
B		2	120,310	87,901	24,869
C		3	144,075	75,509	56,675
D	1 Total		716,402	324,908	353,091
E	⊖2	1	123,748	65,155	54,562
F		2	637,259	429,861	153,255
G		3	35,760	22,369	12,595
H	2 Total		796,767	517,385	220,412
I	⊖3	1	161,924	75,011	81,890
J		3	602,506	398,147	167,687
K	3 Total		764,430	473,158	249,577
L	Grand Total		2,277,599	1,315,451	823,080
		Existing D1 VAP (D)	716,402	324,908	353,091
		Pop Retained in D1 (A):	452,017	161,498	271,547
		Pop Sent Out of D1 (B + C):	264,385	163,410	81,544
		Pop Added to D1 (E + I):	285,672	140,166	136,452
		Net Change to D1 (sent out + added):	21,287	-23,244	54,908
		New D1 VAP:	737,689	301,664	407,999
		D1 Core Retention:	63.1%	49.7%	76.9%
		Pop Retained in Original Districts (A + F + J)	1,691,782	989,506	592,489
		Pop Changing Districts (B + C + E + G + I):	585,817	325,945	230,591
		Plan Core Retention (Pop Retained / Total Pop):	74.3%	75.2%	72.0%

Source: data discussed in text; calculations by Bryan GeoDemographics for author.

65. In *Table III.F.2* (below) one can see the core retention results for Cooper's Illustrative Plan 2. The results are even more significant than in Illustrative Plan 1. In D1, 51.5% of the total population is retained in D1, but the drivers of this again differ significantly by race and ethnicity. *One-thirds* (35.1%) of the WNH population from D1 is retained, while only 68.6% of the APB population is retained. Across the entire plan, 66.8% of Mississippi's total population is retained in their original district. 67.5% of WNH and 65.7% of APB are retained in their original districts. In this plan, 755,429

Mississippians, 426,938 WNH and 281,962 APB are moved. Again while there is no established threshold for core retention, I argue a move of 33.2% of the population (755,429) to a different judiciary in order to change the APB population in D1 by only 51,349 is substantial.

Table III.F.2 Core Retention of Illustrative Plan 2

Row	Original SCOMS	III Plan 2	2020 VAP	2020 WNH VAP	2020 APB VAP
A	⊖1	1	369,056	114,033	242,268
B		2	71,738	39,631	28,703
C		3	275,608	171,244	82,120
D	1 Total		716,402	324,908	353,091
E	⊖2	1	77,391	35,211	39,433
F		2	688,622	461,303	172,012
G		3	30,754	20,871	8,967
H	2 Total		796,767	517,385	220,412
I	⊖3	1	299,938	159,981	122,739
J		3	464,492	313,177	126,838
K	3 Total		764,430	473,158	249,577
L	Grand Total		2,277,599	1,315,451	823,080

Existing D1 VAP (D)	716,402	324,908	353,091
Pop Retained in D1 (A):	369,056	114,033	242,268
Pop Sent Out of D1 (B + C):	347,346	210,875	110,823
Pop Added to D1 (E + I):	377,329	195,192	162,172
Net Change to D1 (sent out + added):	29,983	-15,683	51,349
New D1 VAP:	746,385	309,225	404,440
D1 Core Retention:	51.5%	35.1%	68.6%

Pop Retained in Original Districts (A + F + J)	1,522,170	888,513	541,118
Pop Changing Districts (B + C + E + G + I):	755,429	426,938	281,962
Plan Core Retention (Pop Retained / Total Pop):	66.8%	67.5%	65.7%

Source: data discussed in text; calculations by Bryan GeoDemographics for author

66. In *Table III.F.3* (below) one can see the core retention results for Cooper's Least Change Plan 1. The core retention results here are much better than in Illustrative Plans 1 and 2. In D1, 88.4% of the total population is retained. 85.4% of WNH and 91.7% of APB are retained. Across the entire plan, 92.4% of Mississippi's total population is retained in their original district. 94.3% of WNH and 89.2% of APB are retained in their original districts. In this plan, 172,412 Mississippians, 74,458 WNH and 88,566 APB are moved. I would characterize these changes as minimal and not substantially differentiated by race and ethnicity.

Table III.F.3 Core Retention of Least Change Plan 1

Row	Original SCOMS	LC Plan 1	2020 VAP	2020 WNH VAP	2020 APB VAP
A	31	1	633,441	277,443	323,812
B		3	82,961	47,465	29,279
C	1 Total		716,402	324,908	353,091
D	32	1	30,407	11,431	17,624
E		2	766,360	505,954	202,788
F	2 Total		796,767	517,385	220,412
G	33	1	59,044	15,562	41,663
H		3	705,386	457,596	207,914
I	3 Total		764,430	473,158	249,577
J	Grand Total		2,277,599	1,315,451	823,080

Existing D1 VAP (C)	716,402	324,908	353,091
Pop Retained in D1 (A):	633,441	277,443	323,812
Pop Sent Out of D1 (B):	82,961	47,465	29,279
Pop Added to D1 (D + G):	89,451	26,993	59,287
Net Change to D1 (sent out + added):	6,490	-20,472	30,008
New D1 VAP:	722,892	304,436	383,099
D1 Core Retention:	88.4%	85.4%	91.7%

Pop Retained in Original Districts (A + E + H)	2,105,187	1,240,993	734,514
Pop Changing Districts (B + D + G):	172,412	74,458	88,566
Plan Core Retention (Pop Retained / Total Pop):	92.4%	94.3%	89.2%

Source: data discussed in text; calculations by Bryan GeoDemographics for author.

67. Table III.F.4 (below) one can see the core retention results for Cooper's Least Change Plan 2. The core retention results here are again much better than in Illustrative Plans 1 and 2. In D1, 94.8% of the total population is retained. 93.5% of WNH and 97.0% of APB are retained. Across the entire plan, 95.8% of Mississippi's total population is retained in their original district. 97.2% of WNH and 93.6% of APB are retained in their original districts. In this plan, 96,106 Mississippians, 36,540 WNH and 52,420 APB are moved. I would characterize these changes as minimal and not substantially differentiated by race and ethnicity.

Table III.F.4 Core Retention of Least Change Plan 2

Row	Original SCOMS	LC Plan 2	2020 VAP	2020 WNH VAP	2020 APB VAP
A	⊖1	1	679,340	303,930	342,334
B		3	37,062	20,978	10,757
C	1 Total		716,402	324,908	353,091
D	⊖2	2	796,767	517,385	220,412
E	2 Total		796,767	517,385	220,412
F	⊖3	1	59,044	15,562	41,663
G		3	705,386	457,596	207,914
H	3 Total		764,430	473,158	249,577
I	Grand Total		2,277,599	1,315,451	823,080

Existing D1 VAP (C)	716,402	324,908	353,091
Pop Retained in D1 (A):	679,340	303,930	342,334
Pop Sent Out of D1 (B):	37,062	20,978	10,757
Pop Added to D1 (D + G):	59,044	15,562	41,663
Net Change to D1 (sent out + added):	21,982	-5,416	30,906
New D1 VAP:	738,384	319,492	383,997
D1 Core Retention:	94.8%	93.5%	97.0%

Pop Retained in Original Districts (A + E + H)	2,181,493	1,278,911	770,660
Pop Changing Districts (B + D + G):	96,106	36,540	52,420
Plan Core Retention (Pop Retained / Total Pop):	95.8%	97.2%	93.6%

Source: Data discussed in text; calculations by Bryan GeoDemographics for author.

68. In *Table III.F.5* (below) one sees a comparison of the core retention in total and by race, WNH and APB. There are many communities of interest in Mississippi and differential core retention analysis enables one to demographically quantify the impact of potential changes on one of interest, which in this case would be the existing judicial districts. The CRA shows that Illustrative Plans 1 and 2 are significantly disruptive to large numbers of Mississippians across the state in order to achieve small increases in the percent APB in District 1. The differential CRA shows that the Least Change Plans 1 and 2 are minimally disruptive and do *not* displace large numbers of Mississippians. Least Change Plan 1 has a minimal amount of differential core retention by race (that is, 94.3% CRA for WNH and 89.2% CRA for APB is minimally different from 92.4% overall), while Least Change Plan 2 has virtually no differential core retention by race (that is, 97.2% CRA for WNH and 93.6% CRA for APB is minimally different from 95.8% overall).

Table III.F.5 Core Retention Analysis of SCOMS by Plaintiff Plan

Population		III Plan 1	III Plan 2	LC Plan 1	LC Plan 2
Total	District 1	63.1%	51.5%	88.4%	94.8%
	Total	74.3%	66.8%	92.4%	95.8%
WNH	District 1	49.7%	35.1%	85.4%	93.5%
	Total	75.2%	67.5%	94.3%	97.2%
APB	District 1	76.9%	68.6%	91.7%	97.0%
	Total	72.0%	65.7%	89.2%	93.6%

Source: 2020 Census Population analyzed with CRA by SCOMS and alternate plaintiff plans. Calculations by Bryan GeoDemographics for author.

Compactness

69. The second traditional redistricting principle I address is the compactness of districts (See paragraph 15). In addition to noting that compactness was a criteria used in the “Magnolia Bar” case (Barbour, 1992), I once again turn to Mississippi Code § 5-3-101 which states for the purpose of legislative redistricting:

“In accomplishing the apportionment, the committee shall follow such constitutional standards as may apply at the time of the apportionment and shall observe the following guidelines unless such guidelines are inconsistent with constitutional standards at the time of the apportionment, in which event the constitutional standards shall control.”

(a) Every district shall be compact

70. Within Mr. Cooper’s report on Page 4 (P. 4), Mr. Cooper states that he was “asked by the attorneys for the Plaintiffs in this case [have asked me] to determine whether the Black population in Mississippi is “sufficiently large and **geographically compact**” to allow for one of the three at-large districts for the Mississippi Supreme Court to be drawn with a majority Black voting age population, consistent with traditional districting principles.” Mr. Cooper goes on to mention the word “compact” six more times in his report as follows:

1. On P.5, Mr. Cooper states at C. Summary of Expert Conclusions 11. “I have reached the following conclusions: • Based on the 2020 Census, Black Mississippians are sufficiently numerous and **geographically compact** to allow for one majority-Black VAP district”.
2. On P.6, Mr. Cooper also states at C. Summary of Expert Conclusions 11 “• In addition, Black Mississippians have been sufficiently numerous and **geographically compact** to allow for one majority-Black VAP district as part of a three-district plan for the Mississippi Supreme Court based on the prior decennial Census numbers from 1990, 2000, and 2010.”
3. On P.24, Mr. Cooper states at A. Illustrative Plans and Traditional Redistricting Principles 46. “The two illustrative plans that I have developed contain three districts— each with one

majority-Black district. Both illustrative plans comply with traditional redistricting principles, including **compactness**”.

4. On P.24, Mr. Cooper states at A. Illustrative Plans and Traditional Redistricting Principles 47. “The illustrative plans meet the first Gingles precondition, i.e., they demonstrate that the Black population in Mississippi is sufficiently numerous and **geographically compact** to allow for the creation of at least one 3-member majority Black district.”
5. On P.24, Mr. Cooper states at A. Illustrative Plans and Traditional Redistricting Principles 48. “There is no question that Mississippi’s Black population is **“geographically compact.”** For example, and by way of reference, the nine-single member district plan shown in Exhibit G contains three contiguous majority-Black VAP districts (Districts 4, 5, and 6)—demonstrating beyond a shadow of doubt that **the Black population is compactly distributed** north-to-south in and around the Delta.”
71. Mr. Cooper makes statements in his report that he is *certain* that the alternate districts as he has configured them are defensibly compact. In fact, on P.24, Mr. Cooper uses language such as *“there is no question”* and *“beyond a shadow of a doubt.”* Yet the only evidence he offers are his own personal observations and strongly stated beliefs. Mr. Cooper does not appear to have gone through the exercise of actually calculating and measuring the compactness of each district in each plan – an exercise that he *has* done in other cases.²⁸ At this point, I turn my attention to performing and discussing just such an analysis.
72. Compactness is a tool that can be used in redistricting to compare the relative compactness of existing districts against new districts to determine whether the new districts entail minimal or large-scale changes from the existing districts. There are numerous measures of “compactness” – each using different math and concepts. But what compactness measure does an expert use? The law offers few precise definitions of compactness other than “you know it when you see it,” which effectively implies a common understanding of the concept. In contrast, academics have shown that compactness has multiple dimensions and have generated many conflicting measures.²⁹
73. There is no professional consensus on a “right” measure, and every widely used measure works differently. A district that is “most compact” by one measure can easily

²⁸ See Second Declaration of William S. Cooper in *Alabama Caster v. Merrill* and Exhibit 1 - Decl. of William S. Cooper in *Robinson v. Ardoin* and *Galmon v. Ardoin* and related Louisiana redistricting litigation in 2022 both current SCOTUS cases where he reports and discusses CVAP alongside VAP and its importance in measuring minority populations.

²⁹ “How to Measure Legislative District Compactness If You Only Know it When You See it,” <https://gking.harvard.edu/presentations/how-measure-legislative-district-compactness-if-you-only-know-it-when-you-see-it-7>.

and frequently be less compact by another. Four of the most common measures (Polsby-Popper, Schwartzberg, Reock and Convex Hull) each have unique features³⁰ so I use each to facilitate a comprehensive analysis of each plan. The analysis includes two tables per plan. The first is the actual scores, by district and by measure including a plan average by measure. The second is a *ranking* by district and by plan. That is – for each district and each measure, how did each score rank (1 being the best score and 5 being the worst)? Last, the tables are thematically shaded based on their performance. Cells in green are the best performing districts, cells in red are poorer performing districts.

Table III.F.6a (below) shows the compactness scores for the existing SCOMS districts, by compactness measure, and *Table III.F.6b* (below) shows the ranks of those scores relative to the other plans. One can compare the average scores and sum these ranks as a means of evaluating the compactness of each plan. For example, using *Table III.F.6b*. For District 1, using the Polsby-Popper Score, the SCOMS plan ranks first, that is, that district, by that measure, out of the five plans (original SCOMS and each of Cooper’s alternative plans) is the most compact.

³⁰ These measures are provided by the widely used professional redistricting software “Maptitude for Redistricting,” for example, the software Mr. Cooper has used in the past in other cases such as in Alabama *Caster v. Merrill*. The Reock compactness score is computed by dividing the area of the voting district by the area of the smallest circle that would completely enclose it. Since the circle encloses the district, its area cannot be less than that of the district, and so the Reock compactness score will always be a number between 0 and 1 (which may be expressed as a percentage). The Area/Convex Hull test computes the ratio the district area to the area of the convex hull of the district (minimum convex polygon which completely contains the district). This measure is always between 0 and 1, with 1 being the most compact. The Polsby-Popper (PP) measure is the ratio of the area of the district to the area of a circle whose circumference is equal to the perimeter of the district. This measure also is always between 0 and 1, with 1 being the most compact. The Schwartzberg test (Schwartzberg, 1966) <https://core.ac.uk/download/pdf/217207073.pdf> is a perimeter-based measure that compares a simplified version of each district to a circle, which is considered to be the most compact shape possible. Unlike other measures, the scale of Schwartzberg values is *above* 1, with *lower* values approaching 1 being most compact. The Polsby-Popper and Schwartzberg ratios place high importance on district perimeter. Thus, they are highly susceptible to bias due to “shoreline complexity.” Therefore, districts that are trimmed around shorelines may end up with a low compactness score through no fault of the district’s authors and may not necessarily be a true indicator of gerrymandering. This is precisely why it is important to use multiple compactness scores (in this case the Polsby-Popper, Schwartzberg, Reock and Convex Hull measures) and let the reader judge which one is a better fit based on the geography of the district and method of calculation each score uses. A higher score means more compact, but the scores using different measures cannot be directly compared to each other. See Azavea White Paper, “Redrawing the Map on Redistricting,” (2012), https://cdn.azavea.com/com.redistrictingthenation/pdfs/Redistricting_The_Nation_Addendum.pdf.

Table III.F.6a Compactness Scores of Existing SCOMS Districts

District	More is Better			Less is Better
	Polsby-Popper	Reock	Convex_Hull	Schwartzberg
1	0.15	0.42	0.65	2.55
2	0.31	0.44	0.77	1.79
3	0.40	0.66	0.88	1.58
Average	0.29	0.51	0.77	1.97

Source: See text. Calculations by Bryan GeoDemographics for author.

Table III.F.6b Compactness Rankings of Existing SCOMS Districts

District	Polsby-Popper	Reock	Convex_Hull	Schwartzberg
1	1	1	3	1
2	3	3	4	3
3	2	1	1	2
Average	2.0	1.7	2.7	2.0

Source: See text. Calculations by Bryan GeoDemographics for author

74. In *Table III.F.6b* one can see that the existing SCOMS districts perform the best or nearly the best for each district, by each measure compared to the other proposed plans. The exception is the Convex Hull measure, which ranks District 1 3rd and District 2 4th out of the five plans. The sum of the ranks for the existing SCOMS plan is 25.

75. *Table III.F.7a* (below) shows the compactness scores for the Cooper Illustrative 1 Plan districts, by compactness measure, and *Table III.F.7b* shows the ranks of those scores relative to the other plans.

Table III.F.7a Compactness Scores of Cooper Illustrative 1 Districts

District	More is Better			Less is Better
	Polsby-Popper	Reock	Convex_Hull	Schwartzberg
1	0.15	0.32	0.74	2.61
2	0.31	0.39	0.80	1.80
3	0.37	0.38	0.79	1.65
Average	0.27	0.36	0.78	2.02

Source: See text. Calculations by Bryan GeoDemographics for author

Table III.F.7b Compactness Ranking of Cooper Illustrative 1 Districts

District	Polsby-Popper	Reock	Convex_Hull	Schwartzberg
1	2	3	1	2
2	5	4	2	4
3	3	4	2	3
Average	3.3	3.7	1.7	3.0

Source: See text. Calculations by Bryan GeoDemographics for author

76. In Table III.F.7b one can see that the Cooper Illustrative 1 Plan districts perform more poorly than the existing SCOMS plan. That is, the plan is less compact. The Convex Hull measure ranks District 1 as 1st with District 2 and District 3 tied for 2nd. The sum of the ranks for the Cooper Illustrative 1 Plan is 35.

Table III.F.8a Compactness Scores of Cooper Illustrative 2 Districts

District	More is Better			Less is Better
	Polsby-Popper	Reock	Convex_Hull	Schwartzberg
1	0.12	0.27	0.71	2.85
2	0.38	0.48	0.78	1.62
3	0.29	0.33	0.72	1.85
Average	0.27	0.36	0.74	2.11

Source: See text. Calculations by Bryan GeoDemographics for author

Table III.F.8b Compactness Ranking of Cooper Illustrative Plan 2 Districts

District	Polsby-Popper	Reock	Convex_Hull	Schwartzberg
1	3	5	2	3
2	2	2	3	2
3	5	5	4	5
Average	3.3	4.0	3.0	3.3

Source: See text. Calculations by Bryan GeoDemographics for author

77. In Table III.F.8b one can see that the Cooper Illustrative Plan 2 districts performs even more poorly than the existing SCOMS plan. That is, the plan is less compact. The District 2 configuration generally performs well across the different measures. The sum of the ranks for the Cooper Illustrative Plan 2 is 41.

Table III.F.9a Compactness Scores of Cooper Least Change 1 Districts

District	More is Better			Less is Better
	Polsby-Popper	Reock	Convex_Hull	Schwartzberg
1	0.09	0.29	0.55	3.39
2	0.39	0.50	0.83	1.60
3	0.33	0.41	0.79	1.74
Average	0.27	0.40	0.72	2.24

Source: See text. Calculations by Bryan GeoDemographics for author

Table III.F.9b Compactness Ranking of Cooper Least Change 1 Districts

District	Polsby-Popper	Reock	Convex_Hull	Schwartzberg
1	5	4	5	5
2	1	1	1	1
3	4	3	3	4

Source: See text. Calculations by Bryan GeoDemographics for author

78. In *Table III.F.9b* one can see that the Cooper Least Change 1 Plan Districts 1 and 3 perform more poorly and the plan overall performs more poorly than the existing SCOMS plan. That is, the plan is less compact overall. The movement of Madison County from District 1 to District 3 significantly distorts the boundaries of District 1 and impairs the compactness of District 3. The sum of the ranks for the Cooper Least Change Plan 1 is 37.

Table III.F.10a Compactness Scores of Cooper Least Change 2 Districts

District	More is Better		Less is Better	
	Polsby-Popper	Reock	Convex_Hull	Schwartzberg
1	0.12	0.35	0.59	2.95
2	0.31	0.44	0.77	1.79
3	0.46	0.54	0.88	1.48
Average	0.30	0.44	0.75	2.07

Source: See text. Calculations by Bryan GeoDemographics for author.

Table III.F.10b Compactness Ranking of Cooper Least Change 2 Districts

District	Polsby-Popper	Reock	Convex_Hull	Schwartzberg
1	4	2	4	4
2	3	3	4	3
3	1	2	1	1
Average	2.7	2.3	3.0	2.7

Source: See text. Calculations by Bryan GeoDemographics for author

79. In *Table III.F.10b* one can see that the Cooper Least Change Plan 2 Districts 1 performs more poorly and the plan overall performs more poorly than the existing SCOMS plan. That is, the plan is less compact. Note that District 2 in this plan is unchanged from the original SCOMS plan. The sum of the ranks for the Cooper Least Change Plan 2 is 32.

80. In summary, the alternate plans suggested by Cooper range from somewhat less compact to substantially less compact when compared to the existing SCOMS plan.

G. Voting Age Population Polling Place Spatial Analysis

81. There is a long history of Black voter suppression in Mississippi. In recent years, much has been written about the impact of Black voter disenfranchisement, driven both by social and legal forms of suppression.³¹ In this report, I attempt to measure two elements of Black voter suppression. The first is *causal* and is what I discuss here. “What are the differences in proximity, the differences in the distance (proximity) of Black voting age population to current polling stations compared to all voting age population – and, in particular, the WNH voting age population. My hypothesis for this question was that if the Black voting age population were being systematically disenfranchised by the state of Mississippi, a symptomatic indicator of that would be seeing fewer of them close to polling places, and more of them a great distance from polling places. The second measure I discuss is *evidentiary* (discussed later in Section IV): Does one sees actual evidence of Black voter suppression at the polls today? That is: does one see a difference in Black voter registration and Black voter turnout, which one would expect as an outcome of Black voter disenfranchisement?

³¹ <https://www.clarionledger.com/in-depth/news/politics/elections/2022/08/23/mississippi-voter-access-roadblocks-vote-despite-voting-rights-act-1965/10201239002/>

<https://publicintegrity.org/politics/elections/who-counts/more-than-15-of-black-mississippi-residents-permanently-barred-from-voting/>

<https://dce.olemiss.edu/um-votes-exploring-the-history-of-voting-suppression-in-ms/>

<https://www.fastcompany.com/90570476/how-voters-arc-casting-their-ballot-in-the-state-thats-made-it-hardest-to-vote-in-2020>

82. The Statewide Election Management System (or “SEMS”) is the election information management system - for which data is provided by local officials. This system supports a wide variety of responsibilities related to elections and based on information from SEMS and by working with assorted county election officials, reporters at the Mississippi Free Press (*MFP*) produced an inventory of polling places for the November 8, 2020 election.³² Using that inventory, BryanGeoDemographics performed for me an in-depth spatial analysis of the location of those polling places and their proximity to the voting age population in total and by race and ethnicity. This analysis was conducted for the population as a whole and by race and ethnicity for the entire state of Mississippi. This analysis was then conducted for each individual county. This sub-state analysis allows one to aggregate and assign the proximity of total VAP, WNH VAP and Any Part Black VAP to polling places within each existing district in the current SCOMS configuration, as well in each illustrative and least change configuration proposed by Mr. Cooper in his expert report. While each of Mr. Cooper’s illustrative and least change plans increases the percent of the Black population in District 1, I wanted to know if the increases he achieved came at the expense of Black voter proximity to the polls. That is, while he increased the number and proportion of Blacks – did he increase (or decrease) the number of Blacks who happen to have close proximal access to the polls. If Mr. Cooper’s plans increased the number and proportion of Blacks, but he moved close-poll proximity Blacks *out of* District 1 and moved distant-poll proximity Blacks *into* District 1, one could argue that the actual impact of such plans would be to increase Black voter disenfranchisement and risk *fewer* Blacks actually turning out to vote.

83. I was not selective and did not discriminately select a vintage of polling locations that I expected would have been any more or less favorable to the outcome I was researching.

³²<https://www.sos.ms.gov/press/op-ed-secretary-watson-election-reform-whats-best-mississippi>;
<https://www.mississippifreepress.org/voting-2022>

Table III.G.1 Distance of Population to Polling Places by Race Definition

	VAP (A)	WNH VAP (B)	APB VAP (C)
1/4 Mile	546,405	282,127	235,277
1 Share of Distance		51.6%	43.1%
1 Share of Pop		21.4%	28.6%
1/2 Mile	972,324	488,114	427,910
2 Share of Distance		50.2%	44.0%
2 Share of Pop		37.1%	52.0%
< Mile	1,488,775	785,200	612,982
3 Share of Distance		52.7%	41.2%
3 Share of Pop		59.7%	71.3%
> Mile	788,824	530,251	210,098
4 Share of Distance		67.2%	26.6%
4 Share of Pop		40.3%	25.5%
Total	2,277,599	1,315,451	823,080
5 Share		57.8%	36.1%

Source: data discussed in text; calculations by Bryan GeoDemographics for author.

84. Table III.G.1 shows the VAP (at A), the WNH VAP (at B), and the APB VAP (at C) with the sum of the population who are different distances from a polling place. In the first row (at 1) I show the population who are within a quarter mile of a polling place. This number is shown as both a percent of the population that is within that distance (WNH / VAP and APB / VAP), as well as the share of that population of their share within the state (WNH VAP within ¼ mile / WNH VAP and APB VAP within ¼ mile / APB VAP for example). In the second row (at 2) I show the population within ½ a mile. In the third row (at 3) I show the population within 1 a mile. And in the fourth row (at 4) I show the population more than a mile distant from a polling place. At 5 I show that the 1,315,451 WNH VAP are 57.8% of the total Mississippi VAP (MS VAP), and 823,080 APB VAP are 36.1% of MS VAP.

85. Starting with my analysis at ¼ mile. While WNH VAP make up 57.8% of MS VAP, they only make up 51.6% of VAP within ¼ mile of a polling place. Conversely, while APB VAP make up 36.1% of MS VAP, they make up 43.1% of VAP within ¼ mile of a polling place. While 21.4% of WNH VAP live within ¼ mile of a polling place, 28.6% of APB VAP live within ¼ mile of a polling place. By both measures, WNH VAP are *under*-represented and APB VAP are *over*-represented at our measure of closest distance (1/4 mile) to MS polling places.

86. Starting with my analysis at ½ mile. While WNH VAP make up 57.8% of MS VAP, they only make up 50.2% of VAP within ½ mile of a polling place. Conversely, while APB VAP make up 36.1% of MS VAP, they make up 44.0% of VAP within 1/2 mile of a polling place. While 37.1% of WNH VAP live within ½ mile of a polling place,

52.0% of APB VAP live within ½ mile of a polling place. By both measures, again, WNH VAP are *under*-represented and APB VAP are *over*-represented at our next proximal measure (1/2 mile) to MS polling places.

87. Starting with my analysis at < 1 mile. While WNH VAP make up 57.8% of MS VAP, they only make up 52.7% of VAP within 1 mile of a polling place. Conversely, while APB VAP make up 36.1% of MS VAP, they make up 41.2% of VAP within 1 mile of a polling place. While 59.7% of WNH VAP live within 1 mile of a polling place, 74.5% of APB VAP live within 1 mile of a polling place. By both measures, again, WNH VAP are *under*-represented and APB VAP are *over*-represented at our next proximal measure (1 mile) to MS polling places.
88. Now, looking at VAP more than one mile from a polling place. While the WNH VAP makes up 57.8% of MS VAP, it makes up 67.2% of VAP more than a mile from a polling place. Conversely, while the APB VAP makes up 36.1% of MS VAP, it makes up 26.6% of VAP more than a mile from a polling place. While 40.3% of the WNH VAP live more than a mile from a polling place, only 25.5% of the APB VAP live more than a mile from a polling place. By both measures, the WNH VAP is *over*-represented and the APB VAP is *under*-represented at our measure of greatest distance (> 1 mile) to MS polling places.
89. These results suggest that in terms of proximity distance to a polling place, Black voters have more of an opportunity to vote than White voters in Mississippi.

H. Diversity Evaluation of the Supreme Court Districts

90. In conjunction with the lawsuit that led to this report, the ACLU (2022) states “It’s far past time that the Supreme Court districts that Mississippi uses to elect its Supreme Court reflect the diversity of the state’s population, rather than diminishing the voice of Black voters.” Given this statement and the recognition of the importance of political and socio-economic diversity by Judge William Barbour in the “Magnolia Bar” case, which involved SCOMS districting (Barbour, 1992), it is worthwhile here to evaluate the issue of population diversity in conjunction with this case involving SCOMS districts.
91. The ACLU and Judge Barbour are not the only entities to recognize the importance of diversity in Mississippi. Another entity is the Board of Trustees of the State Institutions of Higher Learning, whose members are appointed by The Governor on the basis of the State’s Supreme Court Districts. Among the Board’s policies and bylaws, as

amended through September 29th, 2022,³³ one finds Policy 102.06 (p. 14), a statement on diversity:

“One of the strengths of Mississippi is the diversity of its people. This diversity enriches higher education and contributes to the capacity that our students develop for living in a multicultural and interdependent world. Our system of government, rooted in respect for all people and respect for each individual, is based on understanding. Embracing diversity of thought, cultural background, experience, and identity helps to foster inclusive and intellectually enriched campus communities that maximize opportunities for success among all students and employees.”

92. Given this statement, the one by the ACLU, and the opinion by Judge Barbour, I conducted an examination of the diversity of the Supreme Court Districts themselves using a demographic “cluster analysis” which is set of tools and algorithms used to classify different objects into groups in such a way that the similarity between two objects is maximal if they belong to the same group and minimal otherwise (Gallesty, 2020). It is the process of grouping individuals or entities with similar characteristics or similar variables (NCSS, 2022). In the case of the entities of interest here - Mississippi counties - one can then examine how these groups are represented in the existing and proposed district plans. The *Mississippi Health and Hunger Atlas* (Haggard, Cafer, and Green, 2017) provides the data for this process, which allows one to construct groups of counties through its indices of health and well-being (See paragraph 96 for a description of these indices). In turn, these groups can be used to assess diversity based on the indices. For example, if the cluster analysis reveals that all of the state’s 82 counties can be formed into “k” groups, and each of these “k” groups had the same percent of its counties within a given district, the district in question would be maximally diverse; if all of the counties within a given Supreme Court District were members of the same group, there would be no population diversity within the district.

93. The authors of the *Mississippi Health and Hunger Atlas* note that health and hunger are correlated with socio-economic status (Haggard, Cafer, and Green, 2017:1), which in turn is correlated with race (Massey, 2007). This correlation comes back full circle to health and well-being, via the correlation of race and socio-economic status with one another and to mortality (McGehee, 1994; Stockwell, Swanson, and Wicks, 1988; Swanson and McGehee, 1996; Swanson and Sanford, 2012; Swanson and Tedrow, 2018; Waldron, 2002). These correlations support the argument that the health and hunger indices also serve as indices of race and socio-economic status.

³³ <http://www.mississippi.edu/board/downloads/policiesandbylaws.pdf>

94. As can be seen in *Exhibit III.H.1*, there are nine variables used to indicate health need and seven to indicate hunger need. As described in the Atlas, these variables are combined and summarized to create a single “needs” index for each county in Mississippi, as described in paragraph 96. Five health variables are combined and summarized with five hunger variables to create a single “performance” index for each county. These two indices formed the input for the cluster analysis. I performed what is known as a NCSS K-Means procedure (NCSS, 2022), the results of which are shown in Appendix 2.
95. The performance levels are based on quintiles (Haggard, Cafer, and Green, 2017:4), which are arranged from very low to very high: “Counties with a very low ranking are in the lowest 20 percent for need or performance. Being in the lowest 20 percent or first quintile means counties either have low need or low performance, depending on the indicator. Counties with a very high ranking are in the highest 20 percent counties for need or performance. For example, a very high ranking for percent of food insecure individuals means that county is in the highest 20 percent, or fifth quintile. This denotes the highest need group for percentages of food insecure people in that county.” The health indices were scored similarly.

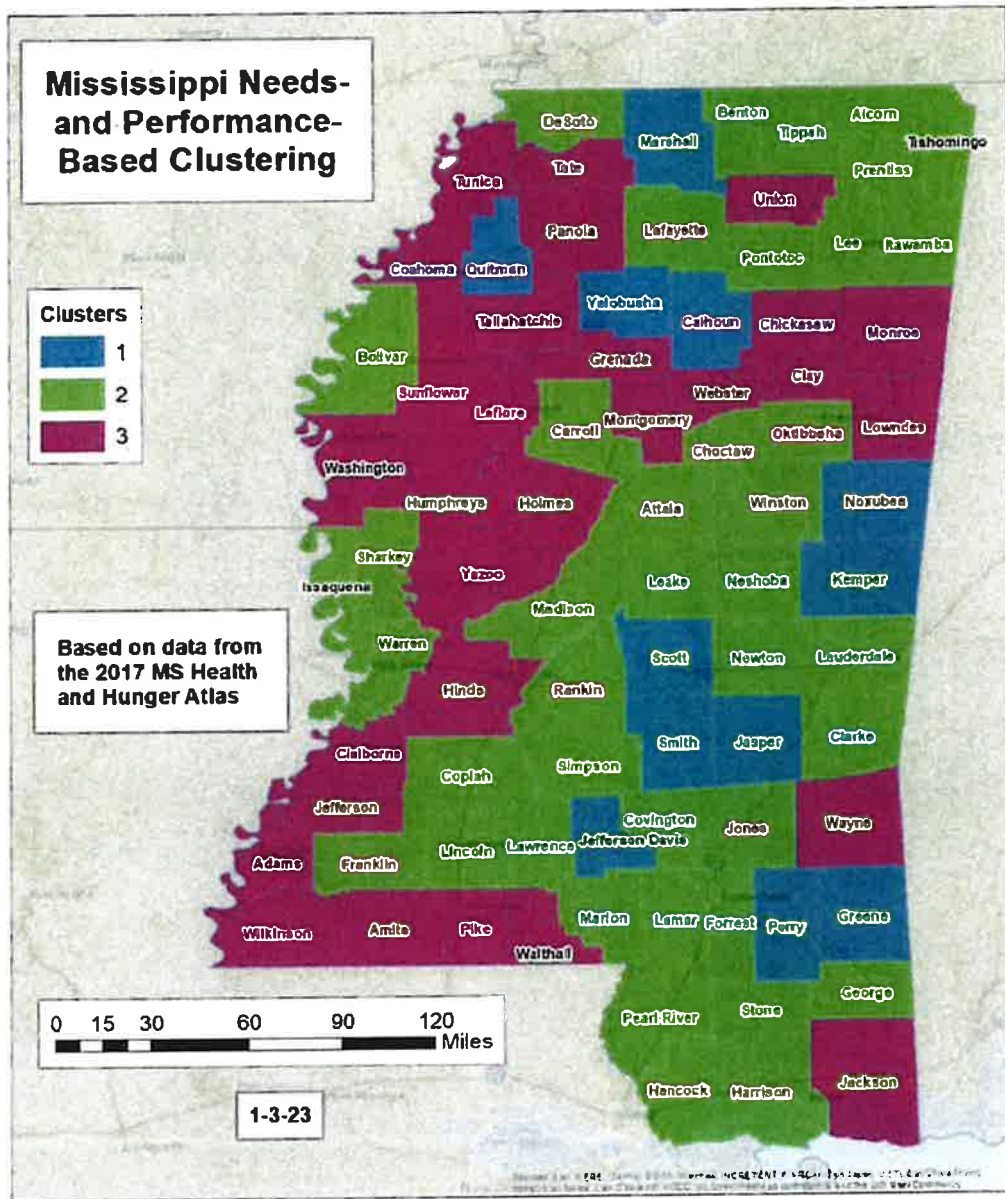
Exhibit III.H.1 Health and Hunger Needs Atlas Needs and Performance Variables

<u>Need Indicators</u>	<u>Performance Indicators</u>
Health	Health
Teen Pregnancy Rate per 1,000 Live Births	Primary Care Physicians per 100,000
Low Birth Weight per 100 Live Births	Other Primary Care Providers per 100,000
Pre-Term Birth Rate per 100 Live Births	Medicaid Enrollees per Primary Care Provider
Adult Obesity Rate	Population Enrolled in Medicaid
Adult Diabetes Rate	Under 18 Enrolled in Medicaid
Adult Hypertension per 100,000 Deaths	
Uninsured Adults	
Uninsured Under 18	
Avg. Miles to Closest Primary Care Provider	
Hunger	Hunger
Food Insecure Individuals	SNAP Enrollment (% Total Population)
Children Food Insecure	SNAP Enrollment (% Eligible)
Food Insecure with Hunger	SNAP Enrollment: Children (% Eligible)
Population Income Eligible for SNAP	Local Sustainability Resilience Index
Children Income Eligible for SNAP	Overall Performance Rank
Food Affordability	
Low Food Access Index	

Source: *Mississippi Health and Hunger Atlas*, 2017 (indicators are shown and discussed in pp 2 to 22).

96. The cluster analysis enables us to understand the geographic distribution of population diversity beyond the raw % APB for each county. Using the existing SCOMS districts as a reference (see Appendix 4 Map D), it can be seen that large numbers of high %APB VAP population are generally distributed north and south along the Mississippi river, but there are other concentrations around the state at the county level. District 1 was originally drawn such that it captures much of its APB population along the Mississippi river, but it also extends eastward to capture, among other concentrations, two high APB counties on the eastern edge of Mississippi, Kemper and Noxubee. As will be shown, the current districts each have a given level of population diversity. The cluster analysis enables us to determine if the alternative plans proposed by plaintiffs maintain the level of population diversity found in each of the current districts, increase it, or reduce it.
97. My analysis yielded three clusters as follows: 12 counties in cluster 1 (high need/high performance); 41 counties in cluster 2 (medium need/medium performance); and 29 counties in cluster 3 (high need/low performance). In the remainder of this section, I compare the numbers and types of clusters for the existing SCOMS plans and for each of the plans proposed the Plaintiffs' expert, Mr. Cooper.
98. The overall results can be seen in the map shown as *Exhibit III.H.2*, where 12 counties are clustered into Group 1 (shown in teal), "low need/high performance;" 41 counties are clustered into Group 2 (shown in lime green), "medium "need/medium performance" group; and 29 counties are clustered into Group 3 (shown in purple), "high need/low performance."
99. The counties in each of the three cluster groups would be spread proportionately across the three Supreme Court Districts if diversity was at a maximum. However, unlike group 1, which can be divided by three with no remainder, groups 2 and 3 have fractional remainders. Given this; districts 1, 2 and 3 would have each 4 of the 12 counties in Group 1; districts 1, 2, and 3 would each have 13 of the 41 counties in Group 2, with the remaining two counties placed, respectively, into two of the three districts; and districts 1, 2, and 3 would each have 9 of the 29 counties in Group 3, with the remaining two counties placed, respectively, into two of the three districts. These distributions match the arithmetic means that correspond to the arithmetic means (expressed as percentages) shown in the "b" series of exhibits in this section (see below for a description of the exhibits).

Exhibit III.H.2 Cluster Map Based on Mississippi Needs and Performance Indicators

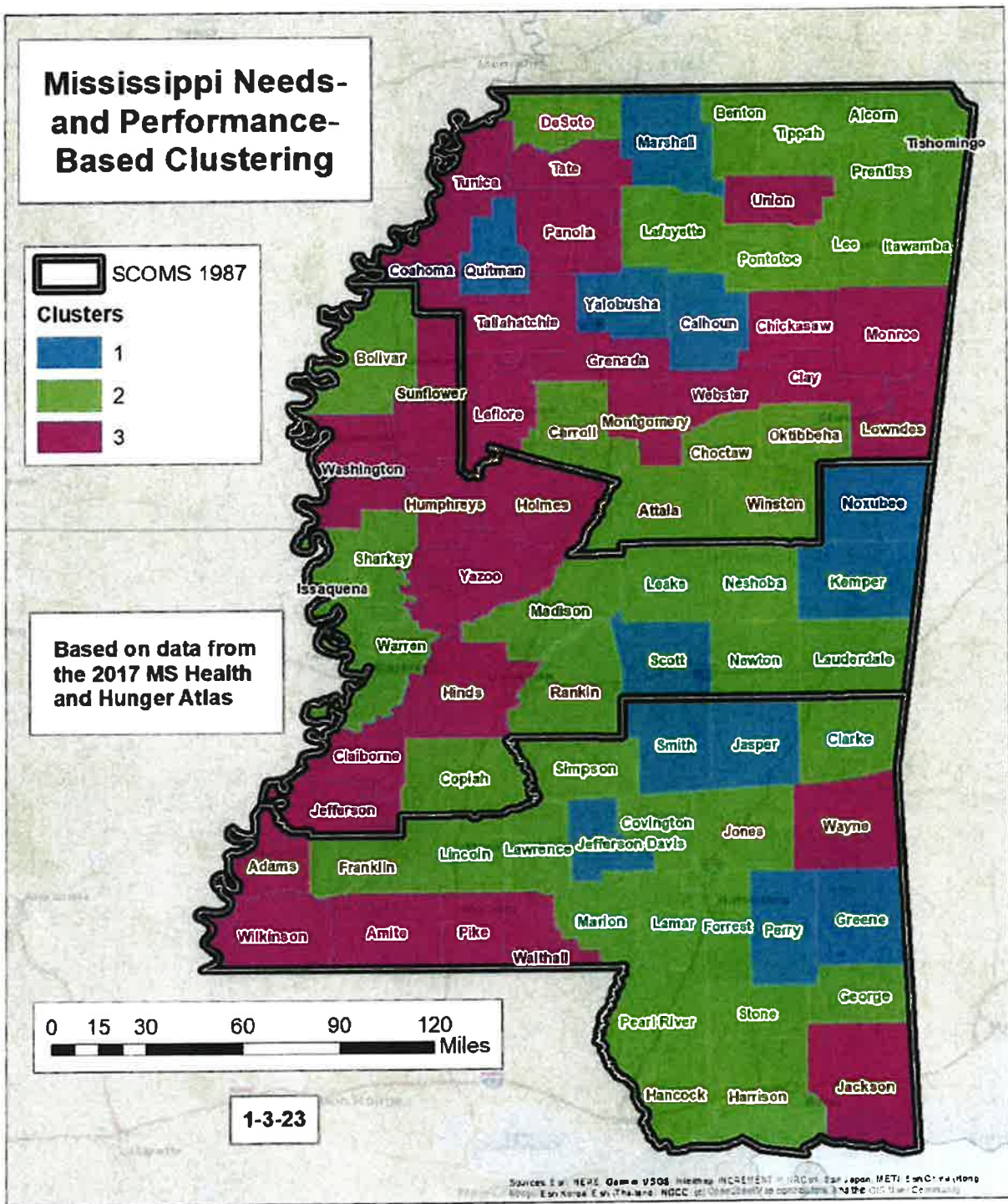


Source: *Mississippi Health and Hunger Atlas*, 2017. K-Means Cluster Analysis & calculations by author; map by Bryan GeoDemographics for author.

100. Next, I present the cluster analysis results for the existing SCOMS districts, and for each of the four alternate plans presented by Mr. Cooper. The remaining series of fifteen exhibits are presented by each of the five plans, with a map, a table and a chart for each, which is in accordance with the following general layout:

- *Exhibit III.H.#.a* is the map showing the arrangement of counties for the plan
- *Exhibit III.H.#.b* is a chart with the statistics of the cluster analysis for the plan
- *Exhibit III.H.#.c* is a chart of the cluster analysis for the plan

Exhibit III.H.3.a Cluster Map for Existing SCOMS Plan



Source: Mississippi Health and Hunger Atlas, 2017. K-Means Cluster Analysis & calculations by author; map by Bryan GeoDemographics for author.

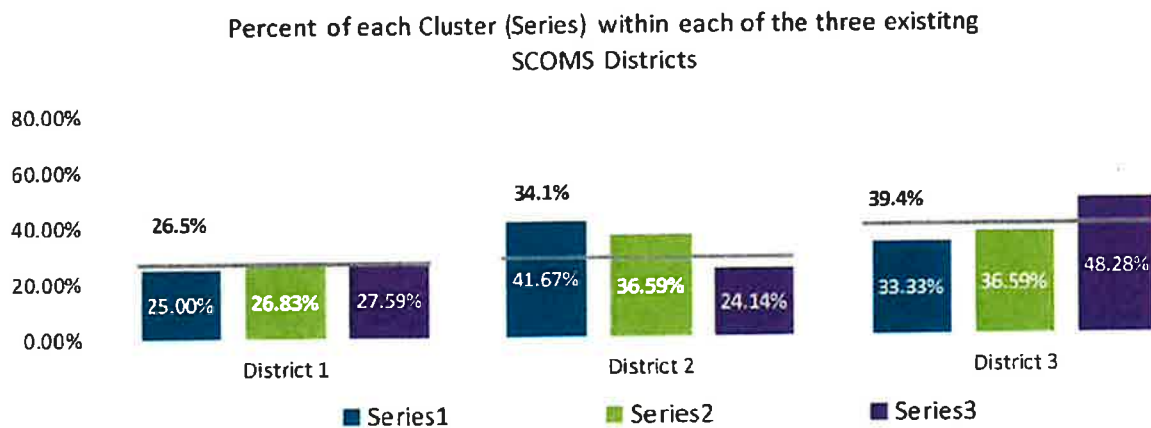
101. *Exhibit III.H.3.a* (above) shows the distribution of counties by cluster group across the three existing Supreme Court Districts. Under the existing plan: District 1 has three of the 12 Group 1 counties (shown in teal), 11 of the 41 Group 2 counties (shown in lime green), and eight of the 29 Group 3 counties (shown in purple); District 2 has five of the 12 Group 1 counties (teal), 15 of the 41 Group 2 counties (lime green), and seven of the 29 Group 3 counties (purple); District 3 has four of the 12 Group 1 counties (teal), 15 of the 41 Group 2 counties (lime green), and 14 of the 29 Group 3 counties (purple). *Exhibit III.H.3.b* and *Exhibit III.H.3.c* (below) shows the percent of each cluster in tabular and graphical (labeled “Series” in the graph) form with each of the three existing districts.

Exhibit III.H.3.b Cluster Analysis Table: Existing SCOMS Plan

Cluster (Series)	District 1	District 2	District 3	Total
1	25.0%	41.7%	33.3%	100.0%
2	26.8%	36.6%	36.6%	100.0%
3	27.6%	24.1%	48.3%	100.0%
mean	26.5%	34.1%	39.4%	
sd	0.01	0.07	0.06	
cv	0.04	0.22	0.16	

Source: *Mississippi Health and Hunger Atlas*, 2017. K-Means Cluster Analysis, calculation, table and graph by author.

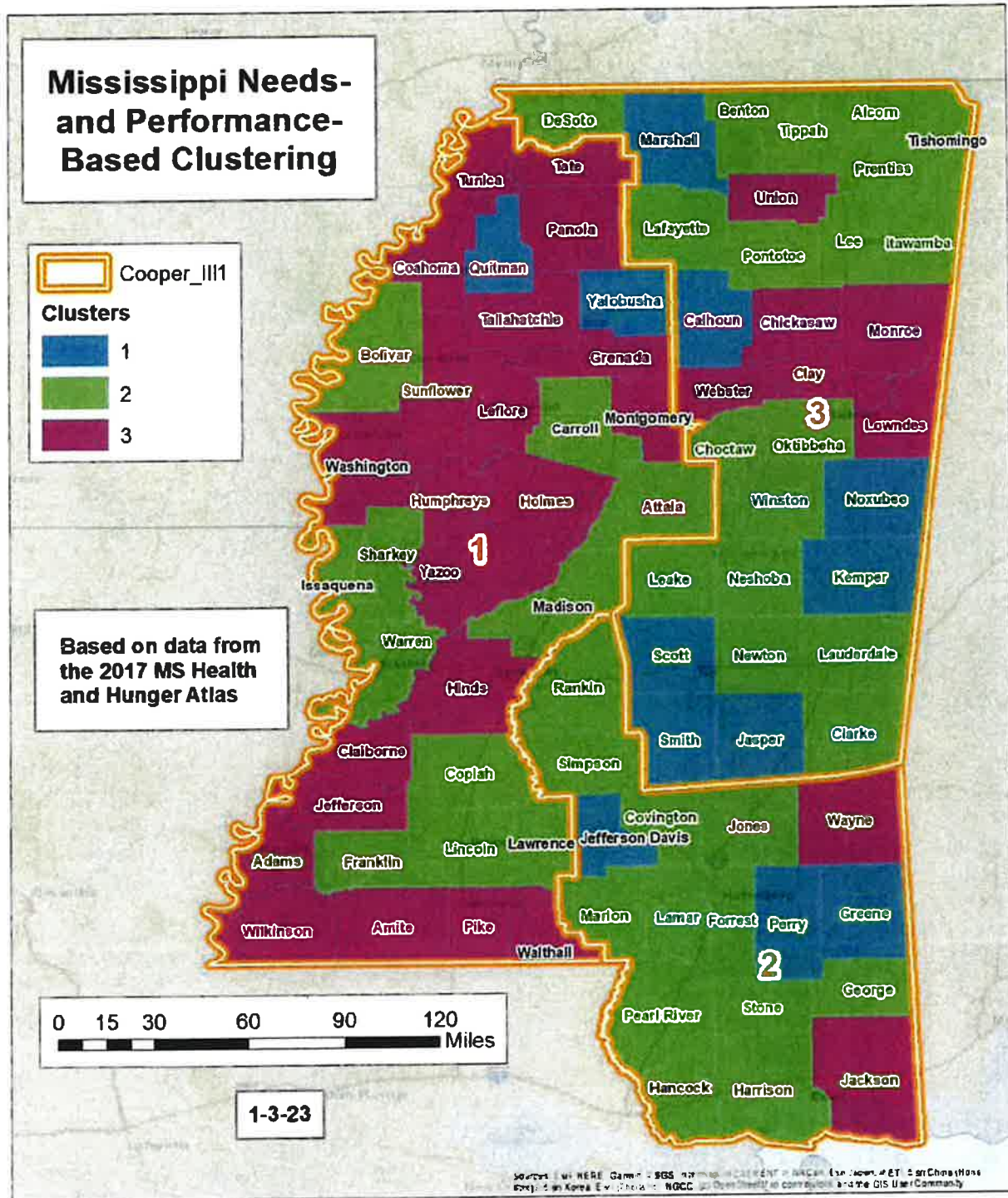
Exhibit III.H.3.c Cluster Analysis Chart: Existing SCOMS Plan



Source: *Mississippi Health and Hunger Atlas*, 2017. K-Means Cluster Analysis, calculation, table and graph by author.

102. In *Exhibit III.H.3.b* and *Exhibit III.H.3.c*, (above) one can see the relative distribution of the cluster groups (labeled as “Series” in the Graph) within each of the three existing Supreme Court Districts numerically and graphically (teal = cluster group 1; lime green = cluster group 2, and Purple = cluster group 3). If all three groups were proportionately distributed equally within each district, the tops of the colored bars would all be at the same height within a given district (which is the arithmetic average of the three groups, as shown approximately by the horizontal bar within each of the three districts). In the case of the Existing Districts, the three groups are nearly distributed equally within existing district 1, Cluster Group 1 (teal bar at 25%), cluster group 2 (lime green at 26.83%) and Cluster group 3 (purple at 27.59%). In existing district 2, the horizontal line shows that cluster groups 1 (teal bar at 41.67%) and 2 (lime green bar at 36.59%) are both higher and closer to one another than either is to group 3 (purple bar at 24.14%), while in existing district 3, groups 1 (teal bar at 33.33%) and 2 (lime green bar at 36.49%) are both lower and closer to one another than either is to group 3 (purple bar at 48.28%). As a way to summarize these results, recall the discussion of the arithmetic mean, standard deviation and coefficient of variation (*CV*) in line item #33, where it is noted that the latter which shows the extent of variation relative to the mean. In District 1, the *CV* is 0.04, in District 2, it is 0.22, and in District 3, it is 0.16. These *CV*s can be interpreted as a measure of the diversity in that the lower they are, the more diversity is equitably distributed. I will compare these *CV* values under the existing set of Supreme Court Districts to those proposed by Cooper, with a focus on District 1.

Exhibit III.H.4.a Cluster Map for Cooper Illustrative Plan 1



Source: *Mississippi Health and Hunger Atlas*, 2017. K-Means Cluster Analysis & calculations by author; map by Bryan GeoDemographics for author.

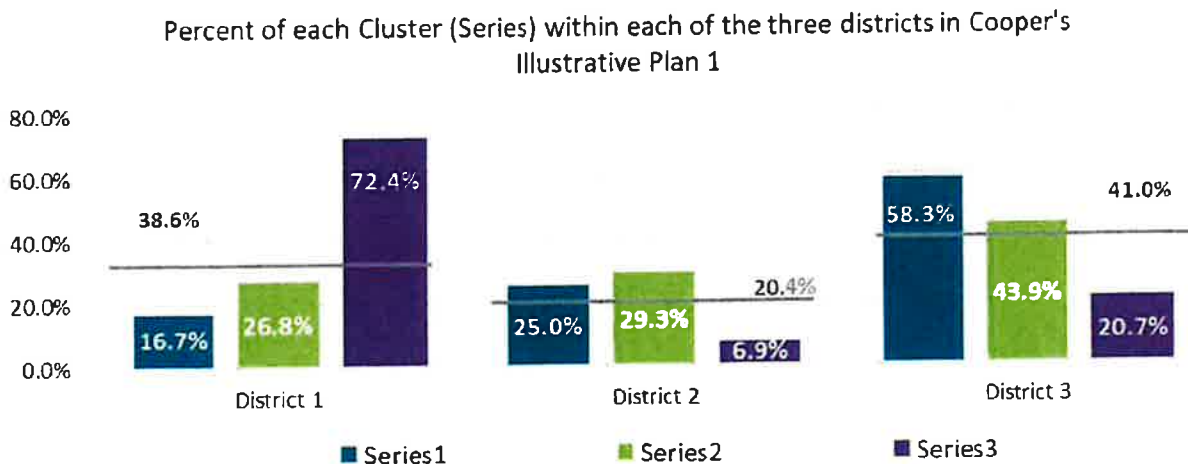
103. *Exhibit III.H.4.a* (above) shows the distribution of counties by cluster group across the three Supreme Court Districts proposed under Cooper’s Illustrative Plan I: District 1 has two of the 12 Group 1 counties (shown in teal), 11 of the 41 Group 2 counties (shown in lime green) , and 21 of the 29 Group 3 counties (shown in purple); District 2 has three of the 12 Group 1 counties (teal), 12 of the 41 Group 2 counties (lime green), and two of the 29 Group 3 counties (purple); District 3 has seven of the 12 Group 1 counties (teal), 18 of the 41 Group 2 counties (lime green), and six of the 29 Group 3 counties (purples). *Exhibit III.H.4.b* and *Exhibit III.H.4.c* (below) shows the percent of each cluster in tabular and graphical (labeled “Series” in the graph) form with each of the three districts proposed in Cooper’s Illustrative Plan 1.

Exhibit III.H.4.b Cluster Analysis Table: Cooper Illustrative Plan 1

Cluster (Series)	District 1	District 2	District 3	Total
1	16.7%	25.0%	58.3%	100.0%
2	26.8%	29.3%	43.9%	100.0%
3	72.4%	6.9%	20.7%	100.0%
mean	38.6%	20.4%	41.0%	
sd	0.24	0.10	0.16	
cv	0.63	0.48	0.38	

Source: *Mississippi Health and Hunger Atlas*, 2017. K-Means Cluster Analysis, calculations, table and graph by author.

Exhibit III.H.4.c Cluster Analysis Chart: Cooper Illustrative Plan 1



Source: *Mississippi Health and Hunger Atlas*, 2017. K-Means Cluster Analysis, calculations, table and graph by author.

104. In *Exhibit III.H.4.b* and *Exhibit III.H.4.c*, (above) one can see the relative distribution of the cluster groups (labeled as “Series” in the Graph) under Cooper’s Illustrative Plan 1, across the three Supreme Court Districts numerically and graphically (teal = cluster group 1; lime green = cluster group 2, and purple = cluster group 3). If all three groups were proportionately distributed equally within each district, the tops of the colored bars would all be at the same height within a given district (which is the arithmetic average of the three groups, as shown by the horizontal bar within each of the three districts). In the case of the districts proposed in Cooper’s Illustrative Plan 1, the three groups are highly unequally distributed within District 1, with cluster group 3 (purple bar at 72.4%) counties substantially higher than cluster group 1 (teal bar at 16.7%) and group 2 counties (lime green bar at 26.8%) combined. In proposed District 2, the bars show that cluster groups 1 (teal bar at 25.0%) and 2 (lime green bar at 29.3%) are both substantially higher and closer to one another than either is to group 3 (purple bar at 6.9%), while in Cooper’s proposed district 3, groups 1 (teal bar at 58.3%) and 2 (lime green bar at 43.9%) are both substantially higher and closer to one another than either is to group 3 (purple bar at 20.7%). Recall that for the existing districts that the *CVs*, are as follows: In District 1, the *CV* is 0.04; in District 2, it is 0.22; and in District 3, it is 0.16. Under Cooper’s Illustrative Plan 1, the *CVs* are 0.63 in District 1, 0.48 in District 2, and 0.38 in District 3, all of which are higher than the corresponding *CVs* found for the existing districts. Notably, the *CV* for District 1 under Cooper’s Illustrative Plan 1 is 15.75 times higher than the *CV* for District 1 under the existing plan: It decreases diversity by a factor of 15.75.

105. *Exhibit III.H.5.a* (above) shows the distribution of counties by cluster group across the three districts proposed under Cooper’s Illustrative Plan II. Under this plan: District 1 has two of the 12 Group 1 counties (shown in teal), nine of the 41 Group 2 counties (shown in lime green), and 20 of the 29 Group 3 counties (shown in lime green); District 2 has four of the 12 Group 1 counties (teal), 15 of the 41 Group 2 counties (lime green), and six of the 29 Group 3 counties (purple); District 3 has six of the 12 Group 1 counties (teal), 17 of the 41 Group 2 counties (lime green), and two of the 29 Group 3 counties (purple). *Exhibit III.H.5.b* and *Exhibit III.H.5.c* (below) shows the percent of each cluster in tabular and graphical (labeled “Series” in the graph) form with each of the three districts proposed in Cooper’s Illustrative Plan 2.

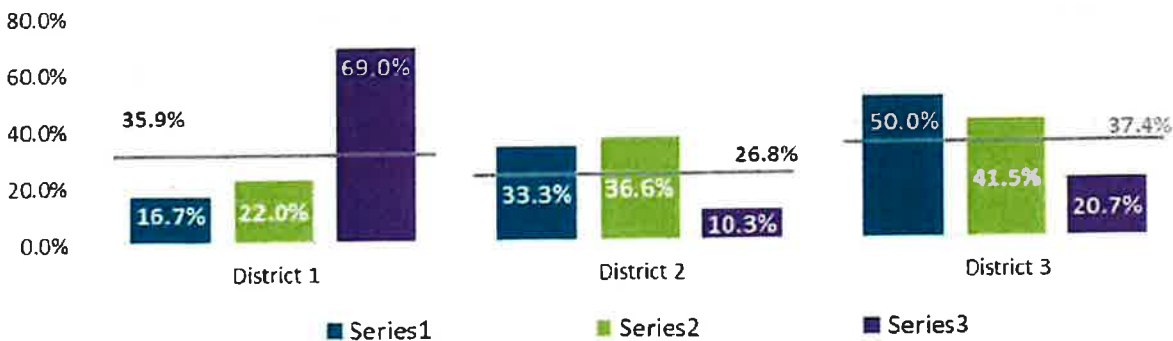
Exhibit III.H.5.b Cluster Analysis Table: Cooper Illustrative Plan 2

Cluster (Series)	District 1	District 2	District 3	Total
1	16.7%	33.3%	50.0%	100.0%
2	22.0%	36.6%	41.5%	100.0%
3	69.0%	10.3%	20.7%	100.0%
mean	35.9%	26.8%	37.4%	
sd	0.24	0.12	0.12	
cv	0.66	0.44	0.33	

Source: *Mississippi Health and Hunger Atlas*, 2017. K-Means Cluster Analysis, calculations, table and graph by author.

Exhibit III.H.5.c Cluster Analysis Chart: Cooper Illustrative Plan 2

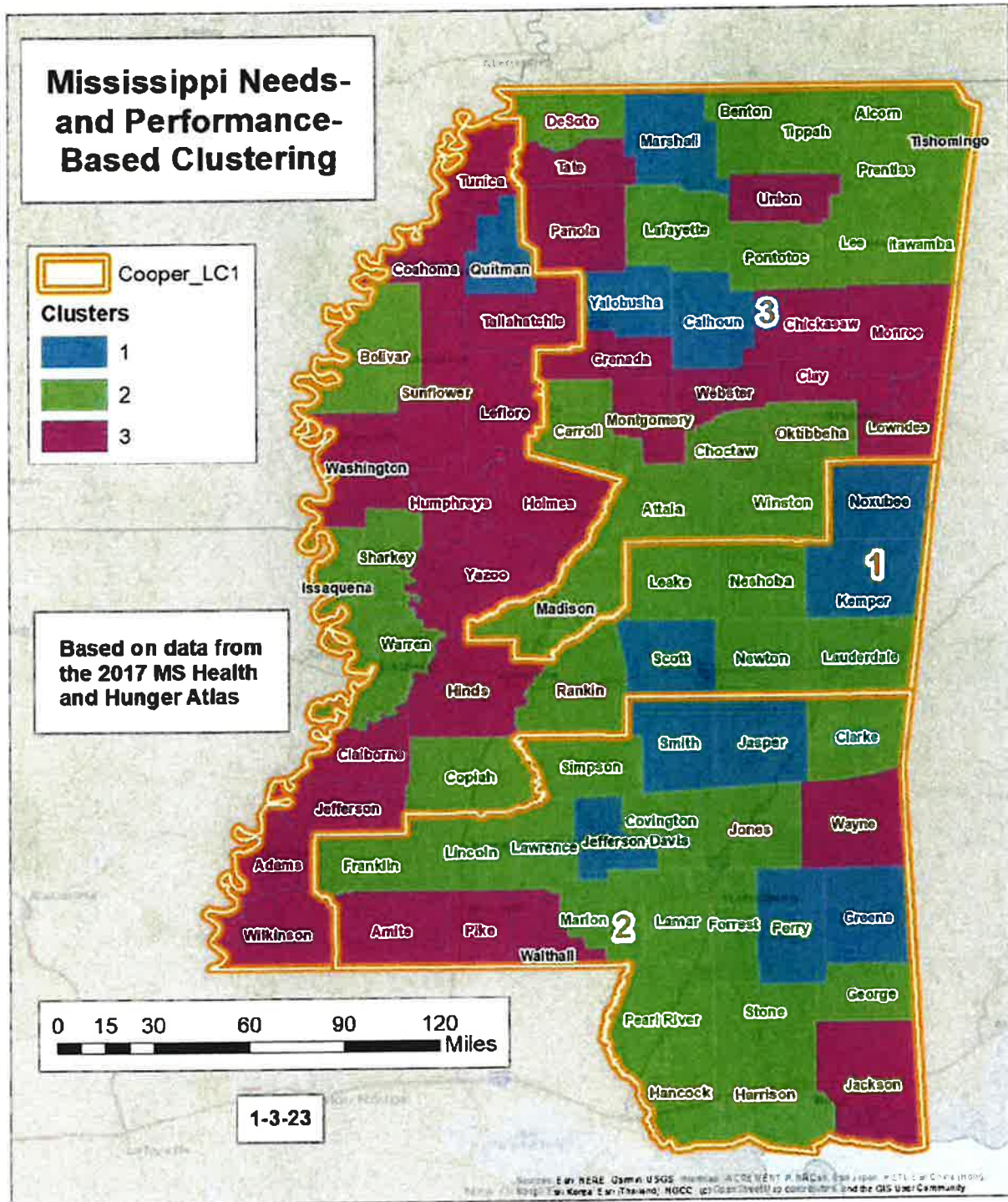
Percent of each Cluster (Series) within each of the three districts in Cooper’s Illustrative Plan 2



Source: *Mississippi Health and Hunger Atlas*, 2017. K-Means Cluster Analysis, calculations, table and graph by author.

106. In *Exhibit III.H.5.b* and *Exhibit III.H.5.c*, (above), one can see the relative distribution of the cluster groups (Labeled “Series” in the Graph) under Cooper’s Illustrative Plan 2, within each of the three Supreme Court Districts numerically and graphically (teal = cluster group 1; lime green = cluster group 2, and purple = cluster group 3). If all three groups were proportionately distributed equally within each district, the tops of the colored bars would all be at the same height within a given district (which is the arithmetic average of the three groups, as approximately shown by the horizontal bar within each of the three districts). In the case of these proposed districts, the three groups are unequally distributed within proposed district 1, with cluster group 3 (purple bar at 69.0%) counties substantially higher than both cluster group 1 (teal bar at 16.7%) and cluster group 2 (lime green bar at 22.0%) counties. In proposed district 2, cluster groups 1 (teal bar at 33.3%) and 2 (lime green bar at 36.6%) are both higher and closer to one another than either is to group 3 (purple bar at 10.3%), while in Cooper’s proposed district 3, Cluster group 1 (teal bar at 50%) is higher than group 2 (lime green bar at 41.5%), which, in turn, is substantially higher than cluster group 3 (purple bar at 20.7%). Again, recall that for the existing districts that the *CV*s, are as follows: In District 1, the *CV* is 0.04; in District 2, it is 0.22; and in District 3, it is 0.16. Under Cooper’s Illustrative Plan 2, the *CV*s are 0.66 in District 1, 0.44 in District 2, and 0.33 in District 3, all of which are higher than the corresponding *CV*s found for the existing districts. Notably, the *CV* for District 1 under Cooper’s Illustrative Plan 1 is 16.5 times higher than the *CV* for District 1 under the existing plan: It decreases diversity by a factor of 16.5.

Exhibit III.H.6.a Cluster Map for Cooper Least Change Plan 1



Source: *Mississippi Health and Hunger Atlas*, 2017. K-Means Cluster Analysis & calculations by author; map by Bryan GeoDemographics for author.

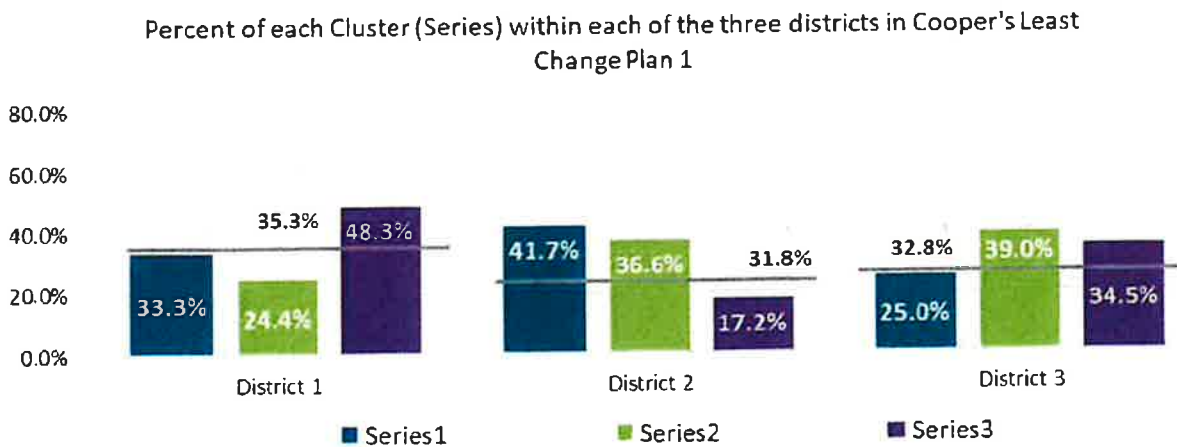
107. *Exhibit III.H.6.a* (above) shows the distribution of counties by cluster group across the three districts proposed under Cooper’s Least Change Plan 1. Under this plan: District 1 has four of the 12 Group 1 counties (shown in teal), 10 of the 41 Group 2 counties (shown in lime green), and 14 of the 29 Group 3 counties (shown in purple); District 2 has five of the 12 Group 1 counties (teal), 15 of the 41 Group 2 counties (lime green), and five of the 29 Group 3 counties (purple); District 3 has three of the 12 Group 1 counties (teal), 16 of the 41 Group 2 counties (Lime green), and ten of the 29 Group 3 counties (purple). *Exhibit III.H.6.b* and *Exhibit III.H.6.c* (below) shows the percent of each cluster in tabular and graphical (labeled “Series” in the graph) form with each of the three districts proposed in Cooper’s Least Change Plan 1.

Exhibit III.H.6.b Cluster Analysis Table: Cooper Least Change Plan 1

Cluster (Series)	District 1	District 2	District 3	Total
1	33.3%	41.7%	25.0%	100.0%
2	24.4%	36.6%	39.0%	100.0%
3	48.3%	17.2%	34.5%	100.0%
mean	35.3%	31.8%	32.8%	
sd	0.10	0.11	0.06	
cv	0.28	0.33	0.18	

Source: *Mississippi Health and Hunger Atlas*, 2017. K-Means Cluster Analysis, calculations, table and graph by author.

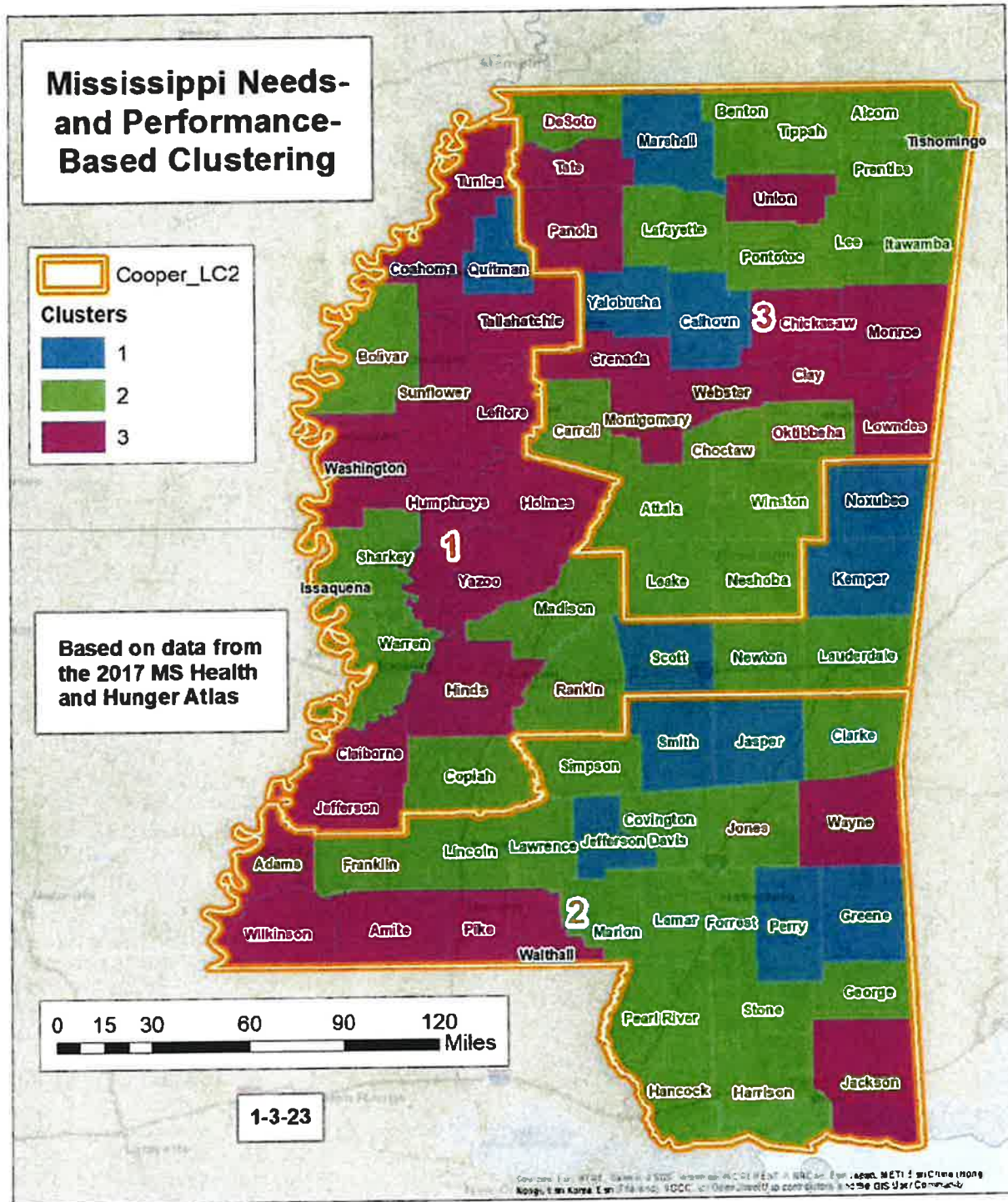
Exhibit III.H.6.c Cluster Analysis Chart: Cooper Least Change Plan 1



Source: *Mississippi Health and Hunger Atlas*, 2017. K-Means Cluster Analysis, calculations, table and graph by author.

108. In *Exhibit III.H.6.b* and *Exhibit III.H.6.c*, (above), one can see the relative distribution of the cluster groups (Labeled “Series” in the Graph) within each of the three Supreme Court Districts proposed in Cooper’s Least Change Plan 1 numerically and graphically (teal = cluster group 1; lime green = cluster group 2, and purple = cluster group 3). If all three cluster groups were proportionately distributed equally within each district, the tops of the colored bars would all be at the same height within each of the three districts proposed under Cooper’s Least Change Plan I (which is the arithmetic average of the three groups, as shown by the horizontal bar within each of the three districts). The three groups are not distributed equally within Cooper’s proposed District 1, where the graph shows that Cluster groups 1 (teal bar at 33.3%) and 2 (lime green bar at 24.4%) are both lower and closer to one another than either is to Cluster group 3 (purple bar at 48.3%). In proposed District 2, Cluster groups 1 (teal bar at 41.6% and 2 (lime green bar at 36.6%) are substantially higher and closer to one another than either is to Group 3 (purple bar at 17.2%). In Cooper’s proposed District 3, Cluster group 1 (teal bar at 25%) is lower than that found for Cluster groups 2 (lime green bar at 39.0%) and 3 (purple bar at 34.5%) which are both closer to one another than either is to Cluster Group 1. Once again, recall that for the existing districts that the *CV*s, are as follows: In District 1, the *CV* is 0.04; in District 2, it is 0.22; and in District 3, it is 0.16. Under Cooper’s Least Change Plan 1, the *CV*s are 0.28 in District 1, 0.33 in District 2, and 0.18 in District 3, all of which are higher than the corresponding *CV*s found for the existing districts. Notably, the *CV* for District 1 under Cooper’s Illustrative Plan 1 is seven times higher than the *CV* for District 1 under the existing plan: It *decreases* diversity by a factor of seven.

Figure III.H.7.a Cluster Map for Cooper Least Change Plan 2



Source: Mississippi Health and Hunger Atlas, 2017. K-Means Cluster Analysis & calculations by author; map by Bryan GeoDemographics for author.

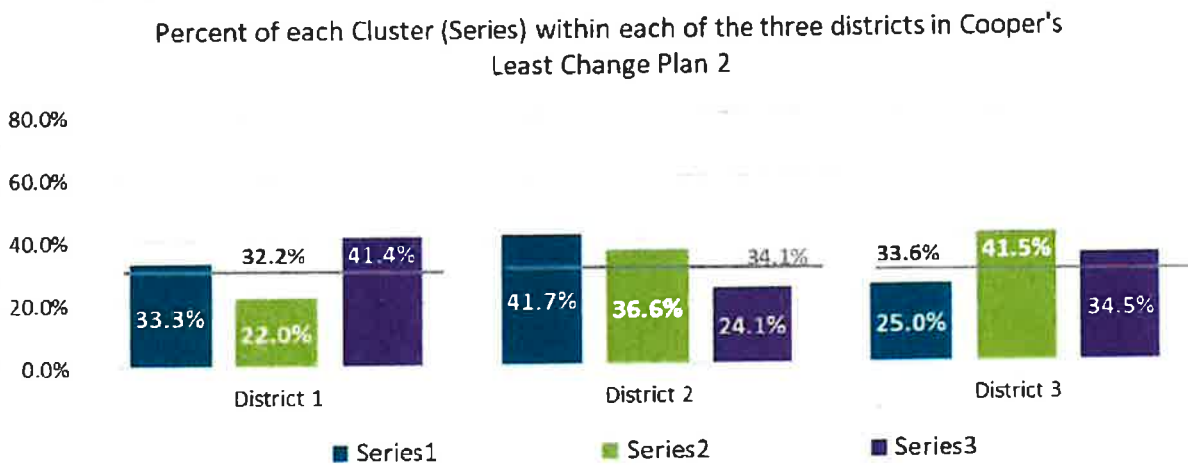
109. *Exhibit III.H.7.a* (above) shows the distribution of counties by cluster group across the three districts proposed under Cooper’s Least Change Plan II. Under this plan: District 1 has four of the 12 Group 1 counties (shown in teal), nine of the 41 Group 2 counties (shown in lime green), and 12 of the 29 Group 3 counties (shown in purple); District 2 has five of the 12 Group 1 counties (teal), 15 of the 41 Group 2 counties (lime green), and 10 of the 29 Group 3 counties (purple); District 3 has three of the 12 Group 1 counties (teal), 17 of the 41 Group 2 counties (lime green), and six of the 29 Group 3 counties (purple). *Exhibit III.H.7.b* and *Exhibit III.H.7.c* (below) shows the percent of each cluster in tabular and graphical (labeled “Series” in the graph) form with each of the three districts proposed in Cooper’s Least Change Plan 2.

Exhibit III.H.7.b Cluster Analysis Table: Cooper Least Change Plan 2

Cluster (Series)	District 1	District 2	District 3	Total
1	33.3%	41.7%	25.0%	100.0%
2	22.0%	36.6%	41.5%	100.0%
3	41.4%	24.1%	34.5%	100.0%
mean	32.2%	34.1%	33.6%	
sd	0.08	0.07	0.07	
cv	0.25	0.22	0.20	

Source: Mississippi Health and Hunger Atlas, 2017. K-Means Cluster Analysis, calculations, table and graph by author.

Exhibit III.H.7.c Cluster Analysis Chart: Cooper Least Change Plan 2



Source: Mississippi Health and Hunger Atlas, 2017. K-Means Cluster Analysis, calculations, table and graph by author.

110. In *Exhibit III.H.7.b* and *Exhibit III.H.7.c*, (above), one can see the relative distribution of the cluster groups (Labeled “Series” in the Graph) within each of the three Supreme Court Districts proposed in Cooper’s Least Change Plan 2 numerically and graphically (teal = cluster group 1; lime green = cluster group 2, and purple = cluster group 3). If all three cluster groups were proportionately distributed equally within each district, the tops of the colored bars would all be at the same height within each of the three districts proposed under Cooper’s Least Change Plan 2 (which is the arithmetic average of the three groups, as shown by the horizontal bar within each of the three districts). The three groups are not distributed equally within Cooper’s proposed District 1, where the graph shows that Cluster groups 1 (teal bar at 33.3%) and 2 (lime green bar at 22.0%) are both substantially lower and closer to one another

than either is to Cluster group 3 (purple bar at 41.4%). In proposed District 2, Cluster groups 1 (teal bar at 41.7% and 2 (lime green bar at 36.6%) are both substantially higher and closer to one another than either is to Group 3 (purple bar at 24.1%). In Cooper's proposed District 3, Cluster group 1 (teal bar at 25.0%) is lower than that found for Cluster groups 2 (lime green bar at 41.5%) and 3 (purple bar at 34.5%) which are both closer to one another than either is to Cluster Group 1. Recall, again that for the existing districts that the *CV*s, are as follows: In District 1, the *CV* is 0.04; in District 2, it is 0.22; and in District 3, it is 0.16. Under Cooper's Least Change Plan 2, the *CV*s are 0.25 in District 1, 0.22 in District 2, and 0.20 in District 3, none of which is lower than the corresponding *CV*s found for the existing districts. Notably, the *CV* for District 1 under Cooper's Illustrative Plan 1 is 6.25 times higher than the *CV* for District 1 under the existing plan: It decreases diversity by a factor of 6.25.

111. In summary, each of the four plans proposed by Cooper reduce the level of diversity found in all of the existing three districts and notably do so in regard to District 1.

IV. MISSISSIPPI VOTER REGISTRATION AND TURNOUT

A. Voter Registration and Turnout by Race and Ethnicity in Mississippi

112. A core tenet of the plaintiffs in this case is that Black voters are currently disenfranchised and do not have the same access to voting and do not exercise their right to vote in the same way the Whites in Mississippi do. Here, I examine expert reports written on behalf of the plaintiffs and offer my opinion on current Black voter registration and voting behavior.

113. Measuring voter registration and actual voting in Mississippi by race is a challenge. The state of Mississippi does not record registered voters by race. Given this, the US Census Bureau's Current Population Survey (or "CPS") is used to understand recent voter registration and turnout in Mississippi. Because these data are only available at the whole-state level, I subsequently turn to sample survey data collected by the Survey Research Laboratory, Social Science Research Center, Mississippi State University, to examine sub-state patterns.

114. As part of its regular, on-going Current Population Survey (CPS), the Census Bureau adds periodic supplements asking questions on topics ranging from school enrollment to tobacco use.³⁴ One such supplement is the "voting and registration" supplement, which is added in November of national voting years.³⁵ In 2020, the CPS collected information from 134,122 respondents with dozens of detailed questions on voting behavior.³⁶ The sample is collected for the US as a whole and by state.

115. The US Census Bureau produces two work products from the "voting and registration" supplement. It tabulates and reports the results of the most important questions such as "Did (you/name) vote in the election held on Tuesday, November 3, 2020?" by state and by the most common demographic variables such as age, race, sex and educational attainment. The sample results are then adjusted to estimated population numbers and the results given in 1,000s of persons with 90% margins of error. These tabulations are formal and the resulting reports are viewed as official work products of the Federal Government.³⁷ When possible, an expert would always start their analysis of registration and voting behavior with a reference to these reports. In addition to these official statistics, the Census Bureau also publishes a "raw data" or "Public Use Microdata Sample" (or "PUMS" file) with data from individual

³⁴ https://www.census.gov/data/datasets/time-series/demo/cps/cps-supp_cps-repwgt.html

³⁵ <https://www.census.gov/programs-surveys/cps/about/supplemental-surveys.html>

³⁶ <https://www2.census.gov/programs-surveys/cps/techdocs/cpsnov20.pdf>

³⁷ <https://www.census.gov/data/tables/time-series/demo/voting-and-registration/p20-585.html>

respondents, with each weighted to represent the population in the United States they represent. I will discuss the PUMS data in more detail shortly.

116. In the course of examining voter turnout and registration, the first stop was to look at the official tables published by the Census Bureau to see if the statistics desired by race and ethnicity were available for Mississippi. They are in Table 4B, available as an excel file, provides the official statistics on the number and percent registered and voted by race and ethnicity in Mississippi in 2020.³⁸
117. *Table IV.A.1* (registration by race and ethnicity) and *Table IV.A.2* (actual voting by race and ethnicity) both present a “Total Population” as well as a “Total Citizen Population” – and show statistics under these categories for several race and ethnicity combinations, such as “White Alone,” “Black Alone,” “White non-Hispanic,” and “Black Alone or in combination”. In the online source for these two tables, which is the Census Bureau’s Table 4B,³⁹ it is not clearly stated that the “Total Population” in Table 4B is actually the voting age population (“VAP”) and that “Total Citizen Population” is actually the total Citizen Voting Age Population (CVAP). Keep this in mind in reading these two tables and also that the numbers are given in 1,000s.

Table IV.A.1 2020 Mississippi Voter Registration by Race and Ethnicity

Sex, Race, and Hispanic-Origin	Total "VAP" Population	Total citizen population	Total registered	Percent registered (Citizen)	Margin of error ¹
Total	2,212	2,177	1,749	80.4	2.7
Male	1,029	1,015	792	78.0	4.2
Female	1,182	1,162	957	82.4	3.6
White alone	1,350	1,337	1,054	78.8	3.6
White non-Hispanic alone	1,300	1,295	1,026	79.2	3.6
Black alone	792	787	654	83.1	4.1
Asian alone	37	20	9	B	B
Hispanic (of any race)	67	53	34	B	B
White alone or in combination	1,375	1,363	1,079	79.2	3.5
Black alone or in combination	805	799	666	83.4	4.1
Asian alone or in combination	41	24	13	B	B

Source: Table 4B, US Census Bureau (<https://www2.census.gov/programs-surveys/cps/tables/p20/585/table04b.xlsx>). Numbers do not always add to totals due to sampling and rounding error.

³⁸ <https://www2.census.gov/programs-surveys/cps/tables/p20/585/table04b.xlsx>

³⁹ <https://www2.census.gov/programs-surveys/cps/tables/p20/585/table04b.xlsx>

118. First, I examined voting registration. *Table IV.A.1* row 1 (highlighted in yellow) reading left to right shows the VAP population (2,212), then the total CVAP population (2,177) then the total CVAP registered to vote (1,749), then the percent CVAP who are registered, (80.4%, where $80.4 \approx (1,749/2,177)*100$).⁴⁰
119. *Table IV.A.1* row 5 (highlighted in yellow) shows voter registration results for White non-Hispanic alone population (in 1,000s). Again, reading left to right and starting in the first column, one can see that the White non-Hispanic alone VAP number is 1,300 and that the White non-Hispanic alone CVAP number is 1,295, of which 1,026 were registered to vote, yielding the results that 79.2% of the White non-Hispanic alone CVAP were registered to vote, where $79.2\% \approx (1,026/1,295)*100$.
120. *Table IV.A.1* row 10 (highlighted in yellow) shows voter registration results for Black Alone and in combination (in 1,000s). In this row, one sees 799 Black Alone or in combination CVAP, of whom 666 who were registered to vote, yielding the result that 83.4% of the Black Alone or in combination CVAP were registered to vote, where $83.4\% \approx (666/799)*100$.
121. Next, I examined actual voting. *Table IV.A.2* shows in the first row, reading from right to left, the VAP population (2,212), then the total CVAP population (2,177) then the CVAP who voted (1,521), then the percent CVAP who voted (70.3%, where $70.3 \approx (1,521/2,177)*100$).

⁴⁰ Note the numbers are in the table are the official reported. Percentages may vary slightly due to rounding.

Table IV.A.2 2020 Mississippi Voting by Race and Ethnicity

	Total "VAP" Population	Total citizen population	Total voted	Percent voted (Citizen)	Margin of error ¹
Total	2,212	2,177	1,531	70.3	3.2
Male	1,029	1,015	680	67.0	4.8
Female	1,182	1,162	850	73.2	4.2
White alone	1,350	1,337	921	68.9	4.1
White non-Hispanic alone	1,300	1,295	904	69.8	4.1
Black alone	792	787	573	72.8	4.9
Asian alone	37	20	8	B	B
Hispanic (of any race)	67	53	23	B	B
White alone or in combination	1,375	1,363	942	69.1	4.0
Black alone or in combination	805	799	582	72.9	4.8
Asian alone or in combination	41	24	11	B	B

Source: Table 4B, US Census Bureau (<https://www2.census.gov/programs-surveys/cps/tables/p20/585/table04b.xlsx>). Numbers do not always add to totals due to sampling and rounding error.

Table IV.A.2 row 5 (highlighted in yellow) shows voting results for White non-Hispanic alone population (in 1,000s). Reading right to left and starting in the first column, one can again see that the White non-Hispanic alone VAP number is 1,300 and that the White non-Hispanic alone CVAP number is 1,295, of which 904 voted, yielding the result that 69.8% of the White non-Hispanic CVAP voted, where $69.8\% \approx (904/1,295)*100$.

122. Table IV.A.2 row 10 (highlighted in yellow) shows voting results for Black Alone and in combination (in 1,000s). In this row, one sees 799 Black Alone or in Combination CVAP, of whom 582 voted, yielding the result that 72.9% of the Black Alone or in Combination CVAP voted, where $72.9\% \approx (582/799)*100$.

123. In examining the CPS results for the White non-Hispanic and the Black Alone or in combination population in Mississippi for the 2020 election, I am left with a decisive conclusion. In 2020 the Black Alone or in Combination population out-registered and out-voted the White non-Hispanic population. It is clear can see that Black Alone or in Combination were registered at a higher level (83.4%) than the White non-Hispanic (79.2%). And in looking at who voted in the 2020 election, Black Alone or in Combination voted at a higher level (72.9%) than the White non-Hispanic (69.8%).

124. Because the registration and voting data are from a sample survey, there are "Margins of Error" (MOEs) provided with them, which provide an estimate of the statistical uncertainty in the sample-based estimates. In the case of the 2020 CPS data, the MOEs are given at a 95% level of confidence. In regard to the 79.2% of the White

Non-Hispanic CVAP registered to vote, the estimated MOE is 3.6, which is interpreted to mean that one can be 95% certain that the actual percent who registered is between 75.6% and 82.8% (79.2 ± 3.6); similarly, in regard to the 83.4% of the Black Alone or in Combination CVAP registered to vote, the estimated MOE is 4.1, which is interpreted to mean that one can be 95% certain that the actual percent who registered is between 79.3% and 87.5% (83.4 ± 4.1). Because the upper end (82.8%) of the 95% MOE of White Non-Hispanic CVAP percent registered does not overlap the 83.4% estimated in the sample survey of the Black Alone or in combination CVAP registered to vote, one can be 95% certain that the actual percent of Black Alone or in Combination CVAP registered to vote in the 2020 Mississippi election is higher than the actual percent of White non-Hispanic CVAP (Swanson, 2012: 13-157). This finding is supported by the fact that the lower end (79.3%) of the 95% MOE of Black Alone or in Combination CVAP does not overlap the 79.2% of the White non-Hispanic CVAP registered to vote (Swanson, 2012: 153-157).

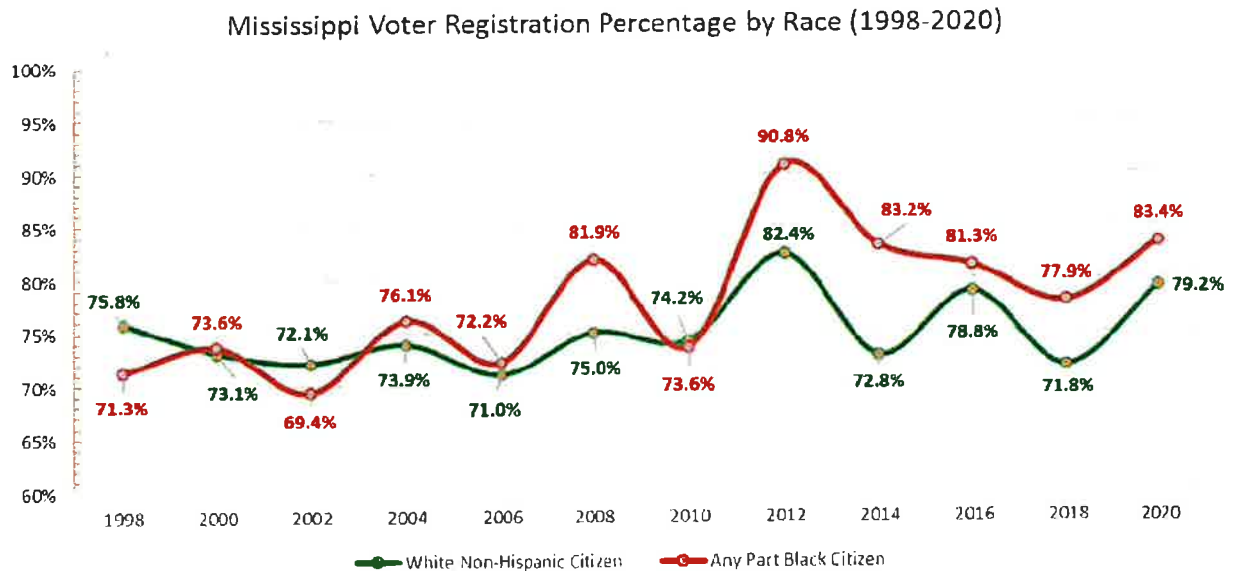
125. In regard to the 69.8% of the White Non-Hispanic CVAP who voted, the estimated MOE is 4.1, which is interpreted to mean that one can be 95% certain that the actual percent who voted is between 65.7% and 73.9% (69.8 ± 4.1); similarly, in regard to the 72.9% of the Black Alone or in Combination CVAP who voted, the estimated MOE is 4.8, which is interpreted to mean that one can be 95% certain that the actual percent who voted is between 68.1% and 77.7% (72.9 ± 4.1). Because the upper end (73.9%) of the 95% MOE of White Non-Hispanic CVAP percent voted overlaps the 72.9% estimated in the sample survey of the Black Alone or in Combination CVAP who voted, one cannot be 95% certain that the actual percent of Black Alone or in combination CVAP who voted in the 2020 Mississippi election is higher than the actual percent of White non-Hispanic CVAP who voted in the 2020 election (Swanson, 2012: 153-157). Using the numbers underlying the 95% level MOEs along with a knowledge of basis inferential statistics, however, one can be 66% certain that the actual percent of Black Alone or in Combination who voted in the 2020 Mississippi election is higher than the actual percent of White non-Hispanic CVAP who did (at a 66% level of confidence, $z \approx 1.00$ and with an estimated standard error of .0209, the MOE for this group is 1.21, resulting in the upper 66% MOE bound of 71.0%, where $71.0 = 69.8 + 1.21$) (Swanson, 2012: 147-150).

126. It is natural to ask if the voter registration and turnout for the 2020 election is an anomaly. In order to investigate this, I examined the historic US Census Bureau's CPS November Supplement the official reports for biannual federal election years. While the Census Bureau has collected voting and registration data since 1964, the CPS has gathered and reported *citizenship* data consistently only since 1998. Since the 2020 data are based on CVAP, I begin my historic analysis in 1998 to ensure data consistency

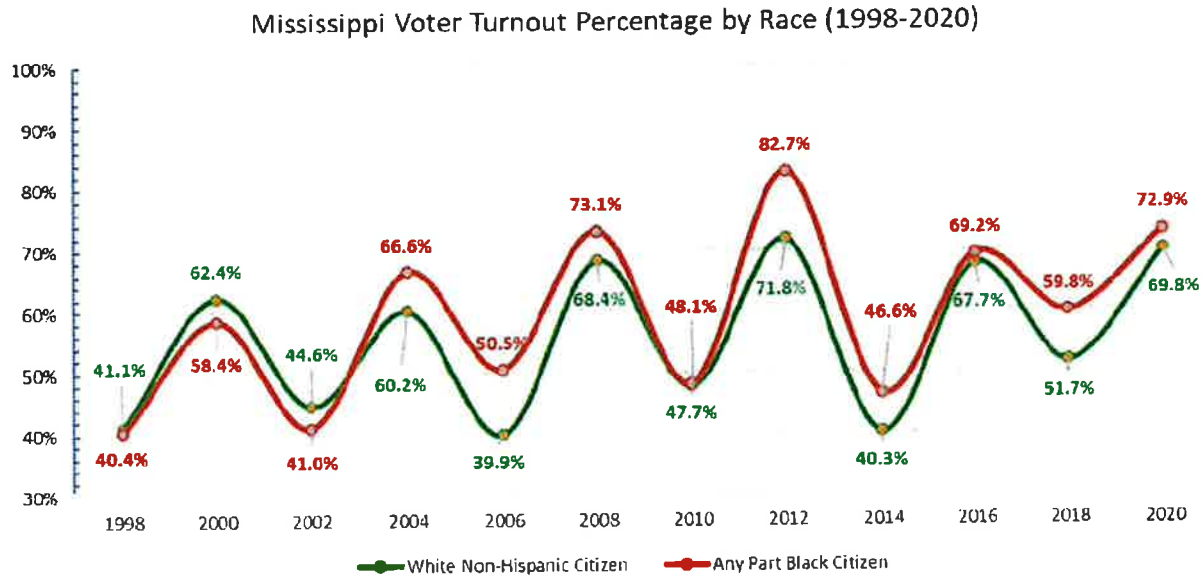
and comparability with my 2020 analysis to the degree possible (removing noncitizens decreases the voting-age population base, resulting in higher rates for any given election (<https://www.census.gov/topics/public-sector/voting/about/faqs.html>)).

127. In *Exhibit IV.A.1* below, one can see that from each election year from 1998 to 2006, the difference in the percent of registration between White non-Hispanic (WNH) citizens of voting age and any part Black (APB) citizens of voting age was small, being slightly higher or lower based on the election. However, starting in 2008 with Obama’s presidential campaign, the percent Black voter registration noticeably exceeded the percent White voter registration. In 2010 (not a presidential election year), the percent Black voter registration declined, and was virtually equal to percent White voter registration. Then in 2012, percent Black voter registration surged again with Obama’s second campaign. For every election year since 2012, percent Black voter registration has remained *higher* than percent White voter registration.

Exhibit IV.A.1 Mississippi Voter Registration by Race and Ethnicity History



Source: U.S. Census Bureau, Current Population Survey, November Voting Supplement (biannual by federal election year).

Exhibit IV.A.2 Mississippi Voter Turnout by Race and Ethnicity History

Source: U.S. Census Bureau, Current Population Survey, November Voting Supplement (biannual by federal election year).

128. In *Exhibit IV.A.2* (above), one sees that from 1998 to 2002, the percent voter turnout between White non-Hispanic (WNH) and any part Black (APB) were quite close to each other, each being slightly higher or lower based on the election. But then, starting in 2004, White voter turnout lagged Black voter turnout until 2010. In 2010 (not a presidential election year) the turnout declined to be equal to Whites. Then in 2012 they APB turnout surged even higher for President Obama's second campaign. For every year since, Black voter turnout has been somewhat to much higher than Whites.

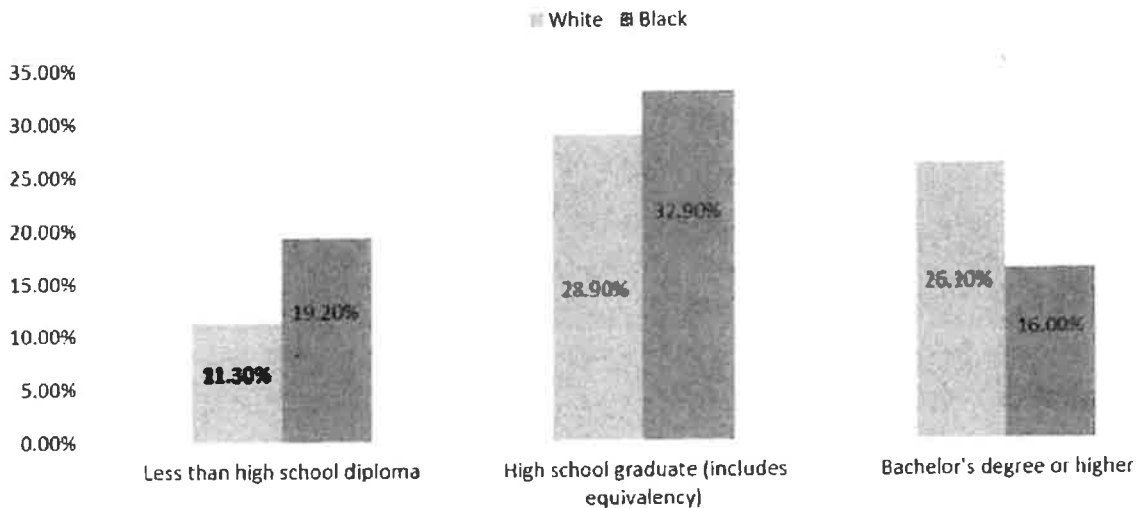
129. Now having reported the official US Census Bureau statistics on voter registration and voting turnout by race by year, I turn my attention to the analysis of this subject by the plaintiffs' expert, Dr. Traci Burch⁴¹. Here I focus on the analysis and interpretations on pages 9-10 of her report. This analysis examines educational attainment by race and ethnicity in Mississippi, then relates these two population characteristics to voter registration and turnout. In Exhibit 3, "Educational Attainment by Race in Mississippi Age 25 and Older" (shown below in *Exhibit IV.A.3*), Dr. Burch accurately reports the percent of Whites and Blacks by educational attainment level from the 2019 American Community Survey (ACS). My analysis of more recent ACS data corroborates her finding that the White population in Mississippi generally enjoys higher educational attainment levels than Blacks do. Her exhibit does not state the definition of "White"

⁴¹ Dr. Traci Burch is an Associate Professor of Political Science at Northwestern University and Research Professor at the American Bar Foundation. She states in her qualifications that "I am widely regarded as an expert on political behavior, barriers to voting, and political participation. Dr. Burch has presented an expert report as part of this case.

and “Black” however. My research shows that this exhibit reports White Alone, non-Hispanic and Black Alone, which is discussed subsequently at length. As in all research, consistency in demographic terms is critical across different analyses. The population put forth in the complaint and then analyzed in the demographer’s report (Cooper) is the any part Black, or “APB” population. The Black educational attainment data presented by Dr. Burch are straight from the standard ACS reporting template – which only includes this inconsistent Black definition. Additional work is generally necessary to get the exact race definitions to agree across analyses and would have been necessary here to know educational attainment for APB. I agree with Dr. Burch that any analysis of educational attainment should be based to the population by age who has largely completed whatever the highest level of educational attainment they hope to achieve. Conventionally, that base population is age 25+, and is the definition Dr. Burch reports here from the US Census Bureau’s own standard.

Exhibit IV.A.3 Racial Differences in Voter Turnout and by Education Level

Educational Attainment by Race in Mississippi
Age 25 and Older



SOURCE: 2019 AMERICAN COMMUNITY SURVEY

Source: Exhibit 3 (p. 9) in Report by Dr. Tracie. Burch

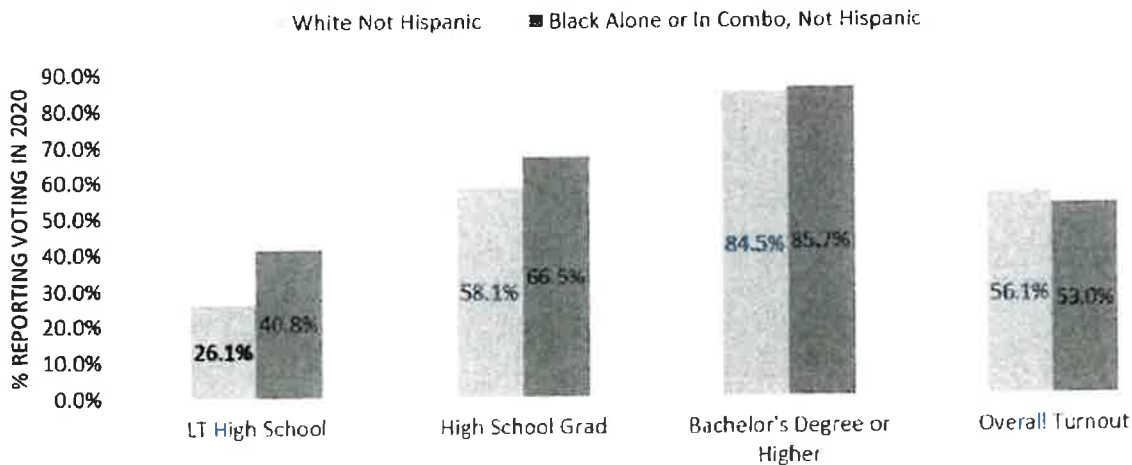
130. Next, on page 10 of her report, Dr. Burch provides Figure 4 “Racial Differences in Voter Turnout and by Education level” (shown below in *Exhibit IV.A.4*). The statistics in this table are key in supporting Dr. Burch’s statement that:

“Examining voter turnout in Mississippi by race and educational attainment in Figure 4 shows the clear impact of Mississippi’s history of educational attainment on voting.”

Exhibit IV.A.4 Racial Differences in Voter Turnout and by Education Level

Figure 4: Racial Differences in Voter Turnout Overall and by Education Level in Mississippi. Source: 2020 Current Population Survey Voting and Registration Supplement

Racial Differences in Voter Turnout Overall and By Education Level in Mississippi



SOURCE: 2020 CURRENT POPULATION SURVEY VOTING SUPPLEMENT

Source: Figure 4 (p. 10) in Report by Dr. Traci Burch

131. Here, Dr. Burch is vague about the source of the information she presents in the preceding exhibit and does not describe the steps she undertook to produce it. Since these statistics of voting by education level by state are not readily available in official published tables, I conclude that these estimates were produced with the use of the CPS PUMS (or “raw data”) files. In addition to the official statistics reported by the Census Bureau (above in *Tables IV.A.1* and *IV.A.2*), the Census Bureau also publishes a “raw data” or “Public Use Microdata Sample” (or “PUMS” file) with data from individual respondents, with each weighted to represent the population in the United States they represent. These files enable more detailed analysis than provided by the topline reports described above. These files are technically difficult and require both statistical software and expertise in sampling and survey research, demography and statistics. When experts seek more information and details on statistics beyond the high-level tables provided by the Census Bureau, they turn to these files.

132. Because Dr. Burch provides neither a clear definition of the source of her data (was it the tabulated results from the CPS or the PUMS file generated from the CPS?) nor the steps that resulted in the numbers she provides (as replicated here in *Exhibit IV.A.4*), an investigation of the CPS PUMS data is warranted, as is an attempt to replicate her findings. Whatever her method and whatever her definitions: our assumption is that her findings were based on an analysis and interpretation of the CPS “raw data” (or CPS “PUMS”) data alluded to earlier. It is there that the investigation turns next.

133. Bryan GeoDemographics has expertise in this area and both downloaded the national 2020 CPS dataset and data dictionary at my request ⁴² and processed the data in both Excel and SAS to ensure accuracy and reliability. According to the CPS PUMS data dictionary, the variables necessary to generate state-level registration and voting statistics by race are as follows:

- GESTFIPS: Federal Information Processing Standards (FIPS) State Code
- PES 1: Did (you/name) vote in the election held on Tuesday, November 3, 2020?
- PES 2: Were you/Was name) registered to vote in the November 3, 2020 election? (If NOT voted)
- PEEDUCA: Educational Attainment
- PRPERTYP: Type of respondent (child, adult civilian or adult armed forces)
- PTDTRACE: Race
- PEHSPNON: Hispanic Origin
- PRCITSHP: Citizenship Status
- PRTAGE: Respondent Age
- PWSSWGT: Population weight (note: there are numerous weights included in this file. The data dictionary instructs: “There is no supplement weight associated with the November 2020 Voting and Registration supplement. Use the basic CPS weight, PWSSWGT (located in positions 613-622), for tallying the supplement items.)

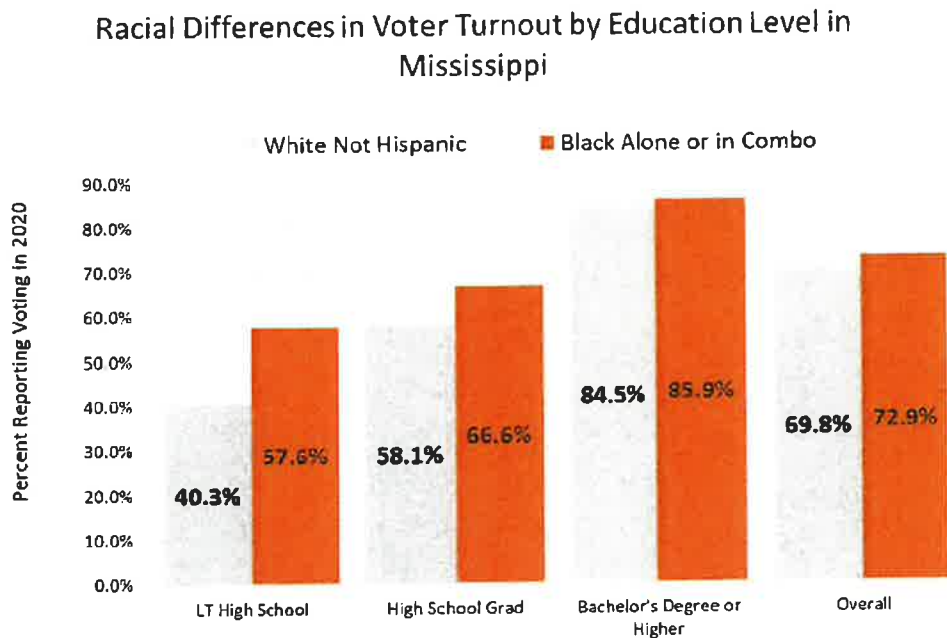
134. In the CPS PUMS data dictionary, it instructs users specifically that the universe for calculating education statistics is PRPERTYP = 2 or 3. That is, the base for educational statistics and their analysis is adults (either civilian or armed forces). In my analysis of the CPS PUMS data, I found the population definitions that appear to be used by Dr. Burch for her education analysis and began my analysis of her voting turnout estimates. I find that Dr. Burch’s CPS-based education estimates are based on

⁴² <https://www2.census.gov/programs-surveys/cps/techdocs/cpsnov20.pdf>

the citizen, non-Hispanic population of all ages (*not* adults as she reported earlier with her American Community Survey analysis). “White” is White Alone, and “Black” is APB. Using this definition, I can replicate her % voted statistics by education level precisely. While this is irrelevant for the Bachelor’s Degree or Higher population (since anyone with those accomplishments would be an adult anyways), this definition impacts the High School Grad statistics slightly and the “LT high school” statistics *significantly*. By including all ages here, Dr. Burch is effectively measuring what percent of children voted. Not only would that definition be illogical – but it is specifically instructed by the CPS documentation not to do so.

135. The correct population base for the Figure 4 that Dr. Burch presents would be the citizen, age 18+ population. That is, the percent of those who are actually eligible to vote. *Exhibit IV.A.5* shows what the percent voter turnout by race and educational level *would have been* using that correct definition. There are several important observations here. First, when you remove children ineligible to vote from the base, the % voted goes up, as expected. For White, non-Hispanic, less than high school, rises +14.2 percentage points, from 26.1% in Dr. Burch’s report to 40.3% here. For APB, less than high school, rises even more +16.8pp from 40.8% in Dr. Burch’s report to 57.6% here. Not only is there a significant difference in how each much each group increases, but the *interpretation* of the outcome changes as well. The percent difference between less than high school and high school graduate is significant only for White, non-Hispanic. In examining these results, if one were to argue that one group’s voter turnout appears to be suffering more so from a disparity in educational attainment – it would be the White non-Hispanics. Not Blacks. In examining the “Bachelor Degree or Higher” category, one sees that the “Black Alone or in Combination” population out-votes their White non-Hispanic peers there as well.

Exhibit IV.A.5 Racial Differences in Voter Turnout and by Education Level, Based to Citizens of Voting Age in 2020



Source: CPS 2020, November Voting Supplement (U.S. Census Bureau). Graph assembled by Bryan GeoDemographics for author.

136. Next, in examining Dr. Burch's estimate of total voter turnout by race (the last columns in her Figure 4). Dr. Burch's⁴³ report states (page 10) that:

“overall, White Mississippians have higher voter turnout than Black Mississippians: 56.1% of White Mississippi citizens voted in the 2020 general election, compared with 53.0% of Black Mississippi citizens.”

137. These numbers provided by Dr. Burch contradict the statistics published by the Census Bureau, reported in *Table IV.A.2 2020 Mississippi Voting by Race and Ethnicity* above – and here I seek to understand why. As with the analysis of voting by educational level – the official CPS PUMS data dictionary is employed, where it instructs users specifically that the universe for calculating voting registration and voting statistics is $PRTAGE \geq 18$ and $PRCITSHP = 1, 2, 3, \text{ or } 4$. That is, respondent must be voting age (18+) and citizens (code 1, 2, 3 and 4) to be included – otherwise they will be assigned “Not in Universe” and not included in the analysis.

Table IV.A.3 2020 MS Voter Estimates Citizens, Age 18+ by Race and Ethnicity Census Bureau Definition

	<u>No Response</u>	<u>Refused</u>	<u>DK</u>	<u>Not in Universe</u>	<u>Voted</u>	<u>Not Voted</u>	<u>Total</u>	<u>% Voted</u>
Total	172,860	7,148	26,039	0	1,530,528	440,304	2,176,877	70.3%
WNH	107,149	4,527	16,586	0	904,127	262,726	1,295,115	69.8%
Black including Hispanic Combinations								
BA (inc. Hisp)	61,542	2,621	7,554	0	573,046	141,975	786,738	72.8%
BA and B-W (inc. Hisp)	61,542	2,621	7,554	0	581,038	145,022	797,777	72.8%
BA and W-B-AI (inc. Hisp)	61,542	2,621	7,554	0	574,373	141,975	788,065	72.9%
APB (inc. Hisp)	61,542	2,621	7,554	0	582,365	145,022	799,104	72.9%
Black Non-Hispanic Combinations								
BA NH	61,542	2,621	7,554	0	571,130	140,112	782,959	72.9%
BA and B-W NH	61,542	2,621	7,554	0	575,115	143,158	789,991	72.8%
BA and W-B-AI NH	61,542	2,621	7,554	0	572,457	140,112	784,285	73.0%
APB NH	61,542	2,621	7,554	0	576,442	143,158	791,318	72.8%

Source: 2020 CPS November Voter Supplement PUMS file. Table assembled by Bryan GeoDemographics for author.

138. To begin, my initial analysis of the CPS PUMS data was aimed at replicating the officially published statistics published by the Census Bureau, using these definitions. Using the variables and definitions above, I was able to replicate the published results precisely using the CPS raw (PUMS) data file in *Table IV.A.2* (above). The official statistics published by the Census Bureau match their own internal dataset. Exactly. In *Table IV.A.3* (above) I show the PWSSWGT weights by racial and ethnic category, by response to PES 1: Did (you/name) vote in the election held on Tuesday, November 3, 2020? A complete inventory of variables and weights is shown in Appendix 3.

139. Next, my analysis was aimed at replicating the CPS results published by Dr. Burch. Since she does not present the exact populations or definitions used to calculate her percentages, one must carefully focus on her words:

“56.1% of White Mississippi citizens voted in the 2020 general election, compared with 53.0% of Black Mississippi citizens.”

140. I explored the CPS raw (PUMS) data file using a variety of variables, definitions and filters. Because Dr. Burch’s statistics are a level-shift different than ours, our conjecture is that (as with the education statistics reported above) she included the total *all-age* citizen population as the base of her analysis, rather than using the *citizen*

voting-age population.⁴⁴ In analyzing the CPS PUMS data, this would be easy to do. The population weight “PWSSWGT” in the CPS PUMS file is the person weight for the total population. An expert would need to filter any results of the PES1 (Did you vote?) variable to those *eligible to vote* (18+ VAP citizens) separately using the PRTAGE (age) and PRCITSHP (citizenship) variables to get the correct results. Knowing this, I seek to uncover how Dr. Burch arrived at her estimates and conclusions.

141. In *Table IV.A.4* (below), I report different percent voted statistics under a variety of race definitions, assuming Dr. Burch used citizens of all-ages as her universe. All of the following statistics will be misleading because they include children who are ineligible to vote. That population is highlighted in *Table IV.A.4* as “Not in Universe”.

142. In the second row, “WNH” (White, non-Hispanic) I calculate an all-age % voted as 56.1%. I believe this “White Not Hispanic” citizen all-age population is the one used in her report since the number matches exactly.

143. Next, I turn to replicating the 53.0% “Black Alone or in Combination, not Hispanic” voting statistic Dr. Burch reports.⁴⁵ Referencing *Table IV.A.4*: In the third row, I show APB NH (Any Part Black, non-Hispanic). This is our best guess at Dr. Burch’s Black definition, since she uses the words “Black Alone or in Combination, not Hispanic. That definition results in a theoretical % voted statistic of 52.6%. Very close, but not exactly the 53.0% Dr. Burch reports. This exploration continues by looking at various other Black Alone or in combination population definitions. For example:

- The % voted for the BA NH (Black Alone, non-Hispanic) population. That results in a % voted statistic of 53.1%.
- The % voted for the BA and B-W NH (Black Alone and Black-White, non-Hispanic) population. That results in a % voted statistic of 52.6%.
- The % voted for the BA and W-B-AI NH (Black Alone and Black-White, American Indian non-Hispanic) population. That results in a % voted statistic of 53.1%.

144. Having exhausted all permutations of “Black Alone or in Combination,” one has a variety of possible estimates from 52.6% to 53.1%. I conclude that Dr. Burch used the citizen, all-ages definition and one of the “Black Alone or in Combination” definitions

⁴⁴ I am uncertain why Dr. Burch excludes Black Hispanics, since the complaint states clearly that plaintiffs are considering “any part Black” – which includes Hispanics. Dr. Burch is not clear whether her White Non-Hispanic” is White Alone or in combination.

⁴⁵ All statistics are supported by an analytic table produced from the CPS PUMS file shown in Appendix 1

I have tested, and the small difference is attributable to either a small mathematical error or rounding.

Table IV.A.4 2020 MS Voter Estimates Citizens, All Ages by Race and Ethnicity: Dr. Burch Definition Replication Attempt

	<u>No Response</u>	<u>Refused</u>	<u>DK</u>	<u>Not In Universe</u>	<u>Voted</u>	<u>Not Voted</u>	<u>Total</u>	<u>% Voted</u>
Total	172,860	7,148	26,039	687,921	1,530,528	440,304	2,864,799	53.4%
WNH	107,149	4,527	16,586	315,946	904,127	262,726	1,511,060	56.1%
Black Including Hispanic Combinations								
BA (inc. Hisp)	61,542	2,621	7,554	297,536	573,046	141,975	1,084,274	52.9%
BA and B-W (inc. Hisp)	61,542	2,621	7,554	310,215	581,038	145,022	1,107,992	52.4%
BA and W-B-AI (inc. Hisp)	61,542	2,621	7,554	297,536	574,373	141,975	1,085,601	52.9%
APB (inc. Hisp)	61,542	2,621	7,554	310,215	582,365	145,022	1,109,319	52.5%
Black Non-Hispanic Combinations								
BA NH	61,542	2,621	7,554	292,827	571,130	140,112	1,075,785	53.1%
BA and B-W NH	61,542	2,621	7,554	303,549	575,115	143,158	1,093,540	52.6%
BA and W-B-AI NH	61,542	2,621	7,554	292,827	572,457	140,112	1,077,112	53.1%
APB NH	61,542	2,621	7,554	303,549	576,442	143,158	1,094,867	52.6%

Source: CPS 2020, November Voting Supplement (U.S. Census Bureau). Table assembled by Bryan GeoDemographics for author.

145. It appears that Dr. Burch fails to acknowledge she used a population base with a minimum age inappropriate for analyzing educational attainment, let alone, eligible to vote. That is, the universe Dr. Burch uses is the entire population. In the case of educational attainment, which includes post-secondary attainment, the minimum age used by the US Census Bureau is 25. For voter registration and voting turnout, not only is the minimum age 18, but, in addition, the appropriate denominator is the population eligible to vote, namely CVAP with the exclusion of felons. Dr. Burch's findings also present a troubling inconsistency. Not only are her reported overall turnout statistics substantively different than those officially reported by the US Census Bureau (hers are replicated here in *Exhibit IV.A.4*, which I compare to my calculations as found in at *Table IV.A.2* above) – but her interpretation presents the *opposite* conclusion of what I arrived at. That is: Blacks register at a lower rate and vote at a lower rate than Whites. The evidence I have found leads me to conclude differently: Blacks neither register nor vote at lower rates than Whites; instead the data show that Blacks register and vote at higher rates than Whites.

146. In sum, I believe Dr. Burch used the CPS PUMS data for her voting analysis. Dr. Burch appears to have applied the citizenship filter properly, the race definitions *somewhat* properly, but neglected to add an age filter to include only adults. The significant consequences of this decision alone are voter registration and turnout statistics and conclusions that are the *opposite* of actual reported, therefore with an *opposite* conclusion reached. The official CPS results showing Black voters outperforming White voters contradict the findings, the conclusions and general arguments of Dr. Burch.

147. There is a fundamental, demographic observation that supports this conclusion. In many states (Mississippi included) minority populations such as Black and Hispanic tend to be younger (Schaeffer, 2019). That is, they make up a larger share of the underage population ineligible to vote. This is the case in Mississippi, where the 2020 total population is 2,961,279, the White Alone population is 1,658,893 (56%) while the Any Part Black population found by summing all combinations of black and other races is 1,123,108 (38%) (<https://data.census.gov/table?q=any+part+black,+mississippi&tid=DECENNIAL.P1.2020.P1>). As shown in *Table III.D.1* of this report, the 2020 VAP total in Mississippi is 2,277,599 while the White Alone VAP is 1,315,451 (58% of the VAP total) and the Any Part Black (APB) population is 823,080 (36% of the VAP total). Whites are *over-represented* and Blacks are *under-represented* among VAP relative to their respective total populations. The “*under 18, not eligible to vote*” population total in Mississippi is 683,680 (where $683,680 = 2,961,279 - 2,277,599$). The White Alone population *under 18, not eligible to vote* is 343,442 (where $343,442 = 1,658,893 - 1,315,451$), which is 21% of the total White Alone population. The APB population *under 18, not eligible to vote* is 300,028 (where $300,028 = 1,123,108 - 823,080$, which is 27% of the APB population. Thus, according to the 2020 census of Mississippi, the APB population has a higher percent (27%) that is *under 18, not eligible to vote* than the White Alone population (21%). If an analyst were to include this under voting-age population in a calculation of voting turnout for Whites – it would artificially and incorrectly *inflate* a voter turnout estimate for them. If an analyst were to include this under voting-age population in a calculation of voting turnout for Blacks – it would artificially and incorrectly *decrease* a voter turnout estimate for them. In the end, Dr. Burch’s exact estimates and *how* she arrived at them are irrelevant. The conclusion that Whites have higher voter turnout than Blacks is incorrect for the 2020 election and would be incorrect based on *Exhibit IV.A.2* and have been since at least 2004.

B. Voter Registration by Race

148. The Survey Research laboratory of the Social Science Research Center (SSRC) at Mississippi State University (<https://srl.ssrc.msstate.edu/>) provided me with voter registration and voting frequency data by race as found in annual statewide surveys it has conducted from 2015 to 2021. The data were provided in a SAS file, which I exported into the NCSS statistical analysis package I use. An overview of the data was provided by Dr. John Edwards, the Director of the SSRC Survey Research Laboratory, which also documents the coding in this file. This is found in Appendix 5. As can be seen in Appendix 5, the sample size in each of these seven years is at least 1,500 and across all seven years, approximately 61% of respondents are White and 36%, Black. While the survey asks respondents if they are registered to vote in its annual surveys, it does not ask if they voted in a given election year. Instead it asks respondents a series of questions about the frequency of voting (always vote, nearly always vote, vote part of the time, seldom vote, never vote, with responses “Don’t Know” and “refused” classified as missing). Because of the nature of the voting question, it is not directly comparable to the turnout data found in the CPS. However, the results by race within the SSRC data are directly comparable. At this point it should be noted in regard to the voter registration data that I do discuss here that it is the case that while both Blacks and Whites tend to *over-report* voter registration (Cuevas-Molinas, 2017), Blacks may do so at a higher rate than Whites (Fullerton et al., 2007) as is also the case with voting (Jenkins et al., 2012). This caveat would not only apply to the SSRC survey data but also to the CPS, the ACS, and any other survey in the United States that includes questions on voter registration, voting and race.

149. Given this caveat, I used the NCSS “Contingency Tables” procedure⁴⁶ to examine race by voter registration by year (See Appendix 5b for the NCSS output of each of these seven runs). I find that in each year, 2015 to 2021, SSRC reports that the percent of Black voter registration exceeds that of White voter registration in Mississippi: In 2015, it is 90.4% for Whites and 93.3% for Blacks; in 2016, it is 91.9% for Whites and 92.8% for Blacks; in 2017, it is 92% for Whites; and 94.2% for Blacks; in 2018, it is 91.2% for Whites and 93.7% for Blacks; in 2019, it is 91.9% for Whites and 94.3% for Blacks; in 2020, it is 91.4% for Whites and 94.5% for Blacks; and in 2021, it is 90.9% for Whites and 94.2% for Blacks. While it may be the case that Blacks over-report voting and voter registration at a higher rate than Whites, the closer proximity to polling places that Blacks have (as discussed in the preceding section) may offset to some degree the likelihood of over-reporting.

⁴⁶ <https://www.ncss.com/software/ncss/analysis-of-two-way-tables-in-ncss/>

150. Again using the NCSS “Contingency Tables” procedure,⁴⁷ I now turn to an examination of race by voting frequency by year using the SSRC voting frequency data (See Appendix 5c for the NCSS output of each of these seven runs). I find that in each year, 2015 to 2021, SSRC reports that the percent of Black Mississippians 18 years of age and over who report “Always Vote” exceeds that of White Mississippians age 18 and over who report “Always Vote.” In 2015, it is 61.0% for Whites and 67.3% for Blacks; in 2016, it is 60.1% for Whites and 66.4% for Blacks; in 2017, it is 59.3% for Whites and 64.5 % for Blacks; in 2018, it is 54.5% for Whites and 62.5% for Blacks; in 2019, it is 60.3% for Whites and 65.5% for Blacks; in 2020, it is 68.22% for Whites and 72.1% for Blacks; and in 2021, it is 56.8% for Whites and 66.7% for Blacks. Again, while it may be the case that Blacks over-report voting and voter registration at a higher rate than Whites, the closer proximity to polling places that Blacks have (as discussed in the preceding section) may offset to some degree the likelihood of over-reporting.

151. Given my findings based on the SSRC data and my findings in regard to the CPS, which are based on estimates controlled to the universe of those who are eligible to vote (the definition directed by the Census Bureau and the definition my expertise would lead me to recommend), I disagree with Dr. Burch’s claim:

“...that the overall gap in turnout between Black and White Mississippians exists because the gap in educational opportunities between Black and White Mississippians. Black Mississippians have less access to quality education and therefore have lower educational attainment for the reasons discussed in this section; this lower educational attainment leads to lower voter turnout.”

CONCLUSIONS

152. For the reasons stated in this report and illustrated in the appendices, I conclude that Supreme Court District 1 already has a Black (Any Part Black) CVAP majority of 51.1% without a prison adjustment, and 51.0% with a prison adjustment. Mr. Cooper’s Illustrative Plan 1 would increase the Black (Any Part Black) CVAP majority in District 1 to approximately 57% Black. Cooper’s other illustrative plan and his two “least Change” plans yield a similar result: An already Black CVAP majority in District 1 is increased to a higher level.

153. Core retention of the Black (Any Part Black) VAP population in Cooper’s two illustrative plans is low, only 76.9% of the original Black VAP retained in his Illustrative Plan I and 68.7% in his Illustrative Plan II. Cooper’s two “least change”

⁴⁷ <https://www.ncss.com/software/ncss/analysis-of-two-way-tables-in-ncss/>

plans provide the highest level of retention of the original Black VAP at 91.7% and 97.0%, respectively.

154. In regard to Compactness, each of the alternate plans suggested by Cooper range from somewhat less compact to substantially less compact than is offered by the existing SCOMS plan.
155. The Supreme Court Districts serve as the geographic basis for elections to the state Transportation Commission and the Public Service Commission. In addition, they serve as the geographic basis for appointments to the Mississippi Board of Bar Admissions and the Board of Trustees for the State Institutions of Higher Learning (IHL) and a number of other boards (see Paragraph 17 for the list of the other boards). The IHL has a policy that acknowledges the value of diversity for Mississippi, as does a statement by the ACLU and a court decision by Judge William Barbour in the 1992 “Magnolia Bar” case involving the SCOMS districts. Using indices from the Mississippi Health and Hunger Atlas, I find that the existing Supreme Court Districts provide more population diversity than do any of Cooper’s four alternative plans and that Cooper’s plans serve to decrease diversity across the Supreme Court districts. These findings are consistent with my finding that core retention found in Cooper’s plans is low.
156. One of the findings in Dr. Traci Burch’s expert report (Figure 4 and accompanying text in her report) is that White Mississippians turned out to vote in the 2020 election at a higher rate than Black Mississippians, 56.1% to 53.0%, respectively. Dr. Burch’s finding is the result of a flawed analysis that employed the incorrect “universe” as the denominator in her calculations (the entire population, including non-citizens, those under age 18) rather than the population eligible to vote (“Citizens of Voting Age Population” - CVAP). Evidence from the same source she cites (the 2020 Current Population Survey, November Voting supplement) shows that when the correct universe, CVAP, is used as the denominator, Black Mississippians turned out at a higher rate in the 2020 election than White Mississippians: 72.9% to 69.8%. As shown by data from past Voting Supplements in the Current Population Survey (taken in the even numbered years when federal elections are held, starting in 1964), my finding is consistent with the trend of voting seen in Mississippi since 2004: Both the percent of Black CVAP registration and the percent of Black CVAP voting have generally been higher than the percent of White non-Hispanic CVAP registration and voting, respectively (see Figures IV.A.1 and IV.A.2 in this report). In conjunction with this 21st century trend, my finding in regard to the 2020 election also reveals that Dr. James T. Campbell’s implication (p. 51 of his report) that Black Mississippians currently register and vote at lower rates than White Mississippians also is mistaken:

“Under the circumstances prevailing in Mississippi today, and in light of the history from which those circumstances originate, it is my opinion that Black Mississippians are not afforded an equal opportunity to elect candidates of their choice in Supreme Court elections.”

157. The Voting Supplements of the Current Population Survey from 2004 to 2020 do not support Dr. Campbell’s opinion. Moreover, the voter registration data in the Voting Supplements of the Current Population Survey are consistent with annual voting registration data collected for Mississippi in sample surveys from 2015 to 2021 conducted by the Survey Research Laboratory at the Social Science Research Center, Mississippi State University. These sample surveys show that for each year, 2015 to 2021, the percent of Black Mississippians age 18 and over who are registered to vote is higher than the percent of White Mississippians age 18 and over who are registered to vote. In addition, the SSRC sample surveys show that for each year, 2015 to 2021, the percent of Black Mississippians aged 18 and over who report “Always Vote” is higher than the percent of White Mississippians age 18 and over who report “Always Vote.” Both the CPS and the SSRC data are consistent with a finding reported for the first time in this report: Statewide, a higher share of the Black population of potential and actual voters is within a quarter mile of a polling place than found for the White population of potential and actual voters.

* * *

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APPENDICES

Appendix 1. County Assignments

Generated by author and by Bryan Geodemographics for author

A. Mississippi County Assignments by

- **my Needs and Performance Cluster,**
- **the existing 1987 SCOMS Plan, and**
- **the Cooper Illustrative Plans 1 and 2 and Least Change Plans 1 and 2**

A. Mississippi County Assignments by Needs and Performance Cluster, the existing 1987 SCOMS Plan, and Cooper Illustrative Plans 1 and 2 and Least Change Plans 1 and 2

STCTY	Name	Cluster	SCP_1987	ILL_Plan1	ILL_Plan2	LCP_1	LCP_2
28001	Adams	3	2	1	1	1	2
28003	Acorn	2	3	3	3	3	3
28005	Amite	3	2	1	1	2	2
28007	Attala	2	3	1	1	3	3
28009	Benton	2	3	3	3	3	3
28011	Bolivar	2	1	1	1	1	1
28013	Calhoun	1	3	3	3	3	3
28015	Carroll	2	3	1	1	3	3
28017	Chickasaw	3	3	3	3	3	3
28019	Choctaw	2	3	3	3	3	3
28021	Cibalome	3	1	1	1	1	1
28023	Clarke	2	2	3	2	2	2
28025	Clay	3	3	3	3	3	3
28027	Coahoma	3	3	1	1	1	1
28029	Copiah	2	1	1	1	1	1
28031	Covington	2	2	2	2	2	2
28033	DeSoto	2	3	3	1	3	3
28035	Forrest	2	2	2	2	2	2
28037	Franklin	2	2	1	1	2	2
28039	George	2	2	2	2	2	2
28041	Greene	1	2	2	2	2	2
28043	Grenada	3	3	1	1	3	3
28045	Hancock	2	2	2	2	2	2
28047	Harrison	2	2	2	2	2	2
28049	Hinds	3	1	1	1	1	1
28051	Holmes	3	1	1	1	1	1
28053	Humphreys	3	1	1	1	1	1
28055	Issaquena	2	1	1	1	1	1
28057	Itawamba	2	3	3	3	3	3
28059	Jackson	3	2	2	2	2	2
28061	Jasper	1	2	3	2	2	2
28063	Jefferson	3	1	1	1	1	1
28065	Jefferson Davis	1	2	2	2	2	2
28067	Jones	2	2	2	2	2	2
28069	Kemper	1	1	3	3	1	1
28071	Lafayette	2	3	3	3	3	3
28073	Lamar	2	2	2	2	2	2
28075	Lauderdale	2	1	3	2	1	1
28077	Lawrence	2	2	1	2	2	2
28079	Leake	2	1	3	3	1	3
28081	Lee	2	3	3	3	3	3
28083	Leflore	3	3	1	1	1	1
28085	Lincoln	2	2	1	2	2	2
28087	Lowndes	3	3	3	3	3	3
28089	Madison	2	1	1	3	3	1
28091	Marion	2	2	2	2	2	2
28093	Marshall	1	3	3	3	3	3
28095	Monroe	3	3	3	3	3	3
28097	Montgomery	3	3	1	1	3	3
28099	Neshoba	2	1	3	3	1	3
28101	Newton	2	1	3	2	1	1
28103	Noxubee	1	1	3	3	1	1
28105	Okfuskeena	2	3	3	3	3	3
28107	Panola	3	3	1	1	3	3
28109	Pearl River	2	2	2	2	2	2
28111	Perry	1	2	2	2	2	2
28113	Pike	3	2	1	1	2	2
28115	Pontoloc	2	3	3	3	3	3
28117	Prentiss	2	3	3	3	3	3
28119	Quitman	1	3	1	1	1	1
28121	Rankin	2	1	2	3	1	1
28123	Scott	1	1	3	3	1	1
28125	Sharkey	2	1	1	1	1	1
28127	Simpson	2	2	2	3	2	2
28129	Smith	1	2	3	3	2	2
28131	Stone	2	2	2	2	2	2
28133	Sunflower	3	1	1	1	1	1
28135	Tallahatchie	3	3	1	1	1	1
28137	Tate	3	3	1	1	3	3
28139	Tippah	2	3	3	3	3	3
28141	Tishomingo	2	3	3	3	3	3
28143	Tunica	3	3	1	1	1	1
28145	Union	3	3	3	3	3	3
28147	Walthall	3	2	1	2	2	2
28149	Warren	2	1	1	1	1	1
28151	Washington	3	1	1	1	1	1
28153	Wayne	3	2	2	2	2	2
28155	Webster	3	3	3	3	3	3
28157	Wilkinson	3	2	1	1	1	2
28159	Winston	2	3	3	3	3	3
28161	Yalobusha	1	3	1	1	3	3
28163	Yazoo	3	1	1	1	1	1

Appendix 2. Cluster Analysis Methodology and Findings

I (David A. Swanson, author) used the NCSS K-Means Procedures to generate the clusters (<https://www.ncss.com/software/ncss/clustering-in-ncss/#KMeans>) because, I was looking for a small number of clusters (Ideally three) and as stated at this site:

The k-means algorithm was developed by J.A. Hartigan and M.A. Wong of Yale University as a partitioning technique. It is most useful for forming a small number of clusters from a large number of observations. It requires variables that are continuous with no outliers.

The objective of this technique is to divide N observations with P dimensions (variables) into K clusters so that the within-cluster sum of squares is minimized. Since the number of possible arrangements is enormous, it is not practical to expect the single best solution. Rather, this algorithm finds a “local” optimum. This is a solution in which no movement of an observation from one cluster to another will reduce the within-cluster sum of squares. The algorithm may be repeated several times with different starting configurations. The optimum of these cluster solutions is then selected.

I first used Discriminant Analysis (an analytic method related to cluster analysis whereby the clusters are a priori known and a model is constructed such that it can be used to determine into which clusters new cases would be placed) in 1980 (Swanson, 1980). I have used cluster analysis: (1) in work I did with Bryan GeoDemographics in regard to Texas redistricting (2021); (2) to identify value-chain clusters for the Southern Nevada Economic Study (Schlottman, et al., 2006); and (3) as a means of developing cost-effective ways to use the housing unit method to generate municipal population estimates in Washington (Swanson, Randall, and Weisser, 1977).

As the hyperlinked citation above indicates, I used the NCSS statistical package in this analysis (<https://www.ncss.com/software/ncss/>). I have used this statistical package since the early 1980s.

Dataset ...MS COUNTY NEED-PERFORM.NCSS

Minimum Iteration Section

Iteration No.	No. of Clusters	Percent of Variation	Bar Chart of Percent
2	2	65.50	
4	3	37.46	
8	4	27.17	
11	5	22.09	

Iteration Section

Iteration No.	No. of Clusters	Percent of Variation	Bar Chart of Percent
1	2	71.16	
2	2	65.50	
3	2	71.16	
4	3	37.46	
5	3	37.46	
6	3	37.46	
7	4	31.16	
8	4	27.17	
9	4	28.23	
10	5	23.94	
11	5	22.09	
12	5	23.05	

Cluster Means

Variables	Cluster1	Cluster2	Cluster3
NEED	3336.219	2843.865	4209.005
PERFORMANCE	35336.63	12430.18	14721.96
Count	12	41	29

Cluster Standard Deviations

Variables	Cluster1	Cluster2	Cluster3
NEED	313.4394	441.6815	596.8018
PERFORMANCE	10136.39	4359.49	5035.884
Count	12	41	29

F-Ratio Section

Variables	DF1	DF2	Between Mean Square	Within Mean Square	F-Ratio	Prob Level
NEED	2	79	1.585478E+07	238693.8	66.42	0.000000
PERFORMANCE	2	74	2.138707E+09	3.150861E+07	67.88	0.000000

K-Means Cluster Analysis Report (Continued)

Dataset ...MS COUNTY NEED-PERFORM.NCSS

Distance Section

<u>Row</u>	<u>Cluster</u>	<u>Dist1</u>	<u>Dist2</u>	<u>Dist3</u>
1	3	2.8206	1.1286	0.8646
2	2	3.0464	1.0160	2.7609
3	3	2.0752	1.5413	0.4177
4	2	2.7059	0.4426	2.1869
5	2	0.8837	0.0024	2.4459
6	2	2.2237	0.8380	0.9249
7	1	0.3147	2.2720	2.1611
8	2	1.5612	1.1072	1.2575
9	3	2.7743	1.1912	0.7629
10	2	2.3504	0.4048	2.0125
11	3	2.1922	0.9788	0.7930
12	2	2.4071	0.5780	1.1685
13	3	2.7123	0.9931	0.9013
14	3	2.6813	2.3417	0.5978
15	2	2.3223	0.6454	1.1021
16	2	2.6049	0.4574	1.3497
17	2	3.2453	0.7843	2.4045
18	2	2.5744	0.6066	1.1897
19	2	2.4434	0.4513	2.1151
20	2	2.8640	0.3475	1.9939
21	1	0.4092	1.2905	1.1530
22	3	2.5539	1.2770	0.5196
23	2	3.0582	0.7489	2.4730
24	2	2.8530	0.3209	1.8558
25	3	2.7058	1.0091	0.8807
26	3	2.3578	1.7794	0.1338
27	3	2.4098	2.7226	1.0991
28	2	0.5489	0.3324	2.1111
29	2	2.2431	1.0477	2.5456
30	3	3.2902	2.0881	0.8219
31	1	1.2517	1.4719	1.3304
32	3	2.8899	2.2071	0.5217
33	1	1.0461	1.4971	1.7226
34	2	2.5802	0.1541	1.6266
35	1	0.7766	3.2534	3.2262
36	2	3.2234	0.7173	1.9343
37	2	3.8070	1.5434	3.2150
38	2	3.3681	1.2108	2.9404
39	2	2.0833	0.4834	1.7840
40	2	1.5814	1.0566	1.2988
41	2	2.8715	0.4552	1.6208

K-Means Cluster Analysis Report (Continued)

Dataset ...IMS COUNTY NEED-PERFORM.NCSS

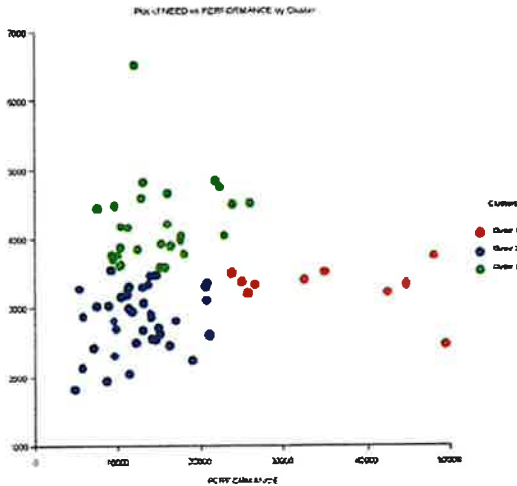
Distance Section (Continued)

Row	Cluster	Dist1	Dist2	Dist3
42	3	4.7564	4.6645	2.9515
43	2	2.6852	0.4494	1.4139
44	3	3.1130	2.0872	0.6438
45	2	3.2244	0.9437	1.5539
46	2	2.3320	0.6374	2.2239
47	1	0.2459	2.5631	2.3324
48	3	2.8570	1.2211	0.8141
49	3	2.8826	1.7057	0.4681
50	2	2.5834	0.5767	1.2230
51	2	2.3610	0.1736	1.6971
52	1	0.0118	0.8931	1.5504
53	2	3.0202	0.5853	1.6904
54	3	2.2810	2.6380	1.0615
55	2	2.6110	0.2274	1.5768
56	1	0.9444	1.6360	1.6793
57	3	3.0493	2.5098	0.8030
58	2	1.5906	0.9557	1.5213
59	2	2.3548	0.1859	1.6403
60	1	1.4677	3.9958	3.6302
61	2	3.5285	1.1583	2.8047
62	1	1.1138	1.5040	1.5209
63	2	2.3090	0.7957	0.9515
64	2	2.5441	0.2239	1.9542
65	1	1.8838	4.0112	4.3408
66	2	2.3282	0.3242	1.9065
67	3	1.6263	1.8967	0.8862
68	3	1.7922	2.5670	1.2726
69	3	2.1011	1.6175	0.3739
70	2	1.7971	0.9708	2.1459
71	2	2.4805	0.4117	2.0976
72	3	1.7167	2.5979	0.1545
73	3	2.7703	1.3313	0.6297
74	3	2.7941	1.6776	0.3830
75	2	2.8289	0.9618	1.0320
76	3	2.1291	0.9984	0.7997
77	3	2.1572	1.4056	0.4253
78	3	2.2807	1.4125	0.3535
79	3	1.9465	1.3303	0.6407
80	2	2.4135	0.2938	1.4527
81	1	1.0111	3.5231	3.4057
82	3	1.9179	2.4254	1.0452

K-Means Cluster Analysis Report (Continued)

Dataset ...MS COUNTY NEED-PERFORM.NCSS

Plots



Procedure Input Settings

Autosave Inactive

Variables Tab

-- Variables

Cluster Variables: NEED, PERFORMANCE
 Label Variable: <Empty>

-- Cluster Options

Minimum Clusters: 2
 Maximum Clusters: 5
 Reported Clusters: 3

-- Other Options

Random Starts: 3
 Max Iterations: 25
 Percent Missing: 50

Reports Tab

-- Select Reports

Minimum Iteration Report Checked
 Iteration Report Checked

K-Means Cluster Analysis Report (Continued)

Cluster Means Report Checked
 Cluster Standard Deviations Report Checked
 F-Ratio Report Checked
 Distance Report Checked
 Distance by Cluster Report Unchecked

-- Report Options

Precision: Single

Column Names: Names

Procedure Input Settings (Continued)

Plots Tab

– Bivariate Plot Format -----
Bivariate Plots Checked
Show Row Numbers Checked
Show Row Labels Checked

Storage Tab

– Storage Variable -----
Store Cluster ID in Variable: C21

Appendix 3. Current Population Survey Calculations

These tables were constructed by Bryan GeoDemographics for the author.

- A. CPS 2020 Voter Supplement PUMS Data Pivot Table, Matching Dr. Burch's Any-Age Voter Turnout by Education Analysis. PES 1 Vote Responses for MS Filtered to Race Any Part Black Non-Hispanic, Any Age and Citizenship Weighted by PWSSWGT. 40.8% LT HS, 66.5% HS Grad, 85.7% Bachelor's Degree or Higher, 52.6% Overall Calculations – attempting to match 53.0% overall reported.
- B. CPS 2020 Voter Supplement PUMS Data Pivot Table, Voter Turnout by Education Analysis. PES 1 Vote Responses for MS Filtered to Race Any Part Black (including Hispanics) Age 18+ and Citizenship Weighted by PWSSWGT. 26.1% LT HS, 58.1% HS Grad, 84.5% Bachelor's Degree or Higher, 56.1% Overall Calculations – attempting to match 56.1% overall reported.
- C. CPS 2020 Voter Supplement PUMS Data Pivot Table, CVAP Voter Turnout by Education Analysis. PES 1 Vote Responses for MS Filtered to Race Any Part Black (inc. Hispanic), Age 18+ and Citizenship Weighted by PWSSWGT
- D. D. CPS 2020 Voter Supplement PUMS Data Pivot Table, CVAP Voter Turnout by Education Analysis. PES 1 Vote Responses for MS Filtered to Race White Alone, non-Hispanic, Age 18+ and Citizenship Weighted by PWSSWGT
- E. CPS 2020 Voter Supplement PUMS Data Pivot Table, Matching Dr. Burch's Voter Turnout by Race Analysis. PES 1 Vote Responses for MS Including Any Age and Filtered to Citizenship (1, 2, 3 or 4)
- F. CPS 2020 Voter Supplement PUMS Data Pivot Table, Matching Reported Voter Turnout by Race Analysis. PES 1 Vote Responses for MS Filtered to Age (18+) and Citizenship (1, 2, 3 or 4)

A. CPS 2020 Voter Supplement PUMS Data Pivot Table, Matching Dr. Burch's Figure 4 Black Alone or in Combo non-Hispanic Any-Age Voter Turnout by Education Analysis. PES 1 Vote Responses for MS Filtered to Race Any Part Black Non-Hispanic, Any Age and Citizenship Weighted by PWSSWGT. Note that 52.6% total does not exactly match her 53.0% reported.

PES.1 Responses:	No Responses	DK	* Citizens*	Not In Universe - 1	Total	Not Voted	Voted	Total	Educational Attainment	% Voted
Any Part Black, Non-Hispanic	10,483,327	10,483,327	10,483,327	10,483,327	2,454,827,960	1,435,918,618	1,219,123,263	2,454,827,960	HS GRAD	65.5%
Hispanic	14,249,330	14,249,330	14,249,330	14,249,330	2,454,827,960	1,435,918,618	1,219,123,263	2,454,827,960	HS GRAD	65.5%
Educational Attainment by Vote Status	25,966,225	25,966,225	25,966,225	25,966,225	2,454,827,960	1,435,918,618	1,219,123,263	2,454,827,960	Some College	62.3%
High School/Grad	46,728,268	46,728,268	46,728,268	46,728,268	2,454,827,960	1,435,918,618	1,219,123,263	2,454,827,960	Bachelors+	85.7%
Masters	55,829,070	55,829,070	55,829,070	55,829,070	2,454,827,960	1,435,918,618	1,219,123,263	2,454,827,960	Bachelors+	85.7%
Professional	11,185,702	11,185,702	11,185,702	11,185,702	2,454,827,960	1,435,918,618	1,219,123,263	2,454,827,960	Bachelors+	85.7%
PhD	64,442,420	64,442,420	64,442,420	64,442,420	2,454,827,960	1,435,918,618	1,219,123,263	2,454,827,960	Bachelors+	85.7%
Grand Total	618,420,819	618,420,819	618,420,819	618,420,819	2,454,827,960	1,435,918,618	1,219,123,263	2,454,827,960	Overall	52.6%

B. CPS 2020 Voter Supplement PUMS Data Pivot Table, Matching Dr. Burch's Figure 4 White non-Hispanic Any-Age Citizen Voter Turnout by Education Analysis. PES 1 Vote Responses for MS Filtered to Race Any Part Black Non-Hispanic, Any Age and Citizenship Weighted by PWSSWGT.

gndtjps	28	State Filter	DK	Refused	Not in Universe	Voted	Not Voted	Total	Educational Attainment	% Voted
White Alone, Non-Hispanic	1	Race: White Alone								
Hispanic	2	Ethnicity: Non-Hispanic								
Educational Attainment by Vote	(All)	Age: All								
Status	(Multiple Items)	Citizenship 1, 2, 3 and 4								
Sum of PWSSWGT	No Response									
Row Labels	Column Labels									
Not in Universe -1					2,604,525,531			2,604,525,531		
Grad 39			17,458,341			2,304,519,122	1,172,578,187	3,099,703,140	HS GRAD	58.1%
SC 40			22,524,873		0	2,275,941,862	482,076,228	3,094,190,937		
Associate's			9,283,577			467,161,743	56,551,957	557,621,052	Some College	75.7%
Associate's Academic					12,964,196	870,556,186	131,831,272	1,124,339,962		
Bachelor 43			17,229,524		0	1,780,437,888	200,900,643	2,201,203,752	Bachelors+	84.5%
Masters 44						749,742,442	26,153,444	785,566,730		
Professional 45						115,698,943	16,586,638	132,285,581		
PHD 46						76,269,288	14,240,914	104,273,172		
Grand Total			45,287,861		2,159,417,539	9,041,270,569	2,637,255,713	15,130,003,204	Overall	56.1%

C. CPS 2020 Voter Supplement PUMS Data Pivot Table, matching Dr. Burch's Figure 4 Black Alone or in Combo non-Hispanic Any-Age Voter Turnout by Education Analysis – except filtered to voting age 18+. PES 1 Vote Responses for MS Filtered to Race Any Part Black Non-Hispanic, 18+ and Citizenship Weighted by PWSSWGT.

Any Part Black, Educational Attainment by Vote Status	* State FIPS Filter to MS					DK	Not in Universe	Voted	Not Voted	Total	Educational Attainment	% Voted
	No Response	Refused	DK	Not in Universe	Voted							
6-13E	10,782,151	1,675,364	59,388,128	0	2,066,482,470	771,410,147	3,105,060,941	11,296,825	11,296,825	11,296,825	HS GRAD	66.6%
7-8	10,782,151	1,675,364	59,388,128	0	2,066,482,470	771,410,147	3,105,060,941	11,296,825	11,296,825	11,296,825	HS GRAD	66.6%
9	10,782,151	1,675,364	59,388,128	0	2,066,482,470	771,410,147	3,105,060,941	11,296,825	11,296,825	11,296,825	HS GRAD	66.6%
10	10,782,151	1,675,364	59,388,128	0	2,066,482,470	771,410,147	3,105,060,941	11,296,825	11,296,825	11,296,825	HS GRAD	66.6%
11	10,782,151	1,675,364	59,388,128	0	2,066,482,470	771,410,147	3,105,060,941	11,296,825	11,296,825	11,296,825	HS GRAD	66.6%
12	10,782,151	1,675,364	59,388,128	0	2,066,482,470	771,410,147	3,105,060,941	11,296,825	11,296,825	11,296,825	HS GRAD	66.6%
Grad	257,780,196	13,451,673	59,388,128	0	2,066,482,470	771,410,147	3,105,060,941	11,296,825	11,296,825	11,296,825	HS GRAD	66.6%
SC	103,147,028	13,451,673	59,388,128	0	2,066,482,470	771,410,147	3,105,060,941	11,296,825	11,296,825	11,296,825	HS GRAD	66.6%
Associates	14,249,330	26,200,957	75,541,732	0	1,259,191,478	113,048,327	1,475,386,833	278,633,804	1,475,386,833	278,633,804	Some College	83.3%
Associates Academic	25,966,225	26,200,957	75,541,732	0	231,724,652	33,159,822	278,633,804	430,200,452	278,633,804	430,200,452	Some College	83.3%
Bachelor	46,728,268	13,451,673	16,153,604	0	328,004,087	60,076,536	430,200,452	858,230,819	430,200,452	858,230,819	Bachelors+	85.9%
Masters	55,829,070	13,451,673	16,153,604	0	751,449,754	60,052,797	858,230,819	402,586,067	858,230,819	402,586,067	Bachelors+	85.9%
Professional	11,185,702	13,451,673	16,153,604	0	332,399,660	14,357,337	402,586,067	11,185,702	402,586,067	11,185,702	Bachelors+	85.9%
PHD	64,442,420	13,451,673	16,153,604	0	11,185,702	11,185,702	11,185,702	77,894,093	11,185,702	77,894,093	Bachelors+	85.9%
Overall	635,420,414	26,200,957	75,541,732	0	5,823,650,494	1,450,218,364	7,991,039,961	7,991,039,961	7,991,039,961	7,991,039,961	Overall	72.9%

D. CPS 2020 Voter Supplement PUMS Data Pivot Table, matching Dr. Burch's Figure 4 White non-Hispanic Any-Age Voter Turnout by Education Analysis – except filtered to age 18+. PES 1 Vote Responses for MS Filtered to Race White non-Hispanic, 18+ and Citizenship Weighted by PWSSWGT.

genotype	28	* State FIPS Filter to MS					No Response		DK		Voted		Not Voted		Total	Educational Attainment	% Voted																				
PTDTRACE	1	* Race: White Alone					Column Labels																														
PEHSPNON	2	* Ethnicity: All																																			
PRTAGE	(Multiple Items)	* Age: 18+																																			
PACTSHIP	(Multiple Items)	* Citizenship 1, 2, 3					* Citizens"																														
Vote Status		No Response	Refused	DK	Not in Universe	Voted	Not Voted	Total																													
	Sum of PWSSWGT	-9						-3						-1						2						2						Grand Total					
Row Labels																																					
< 1st 31																																					
1, 2, 3, 4 37																																					
5, 6 43																																					
7, 8 34																																					
9 35																																					
10 36																																					
11 37																																					
12 38																																					
Grad 39		444,634,058	12,858,931	35,037,882	2,304,594,122	2,304,594,122	1,172,578,147	3,969,703,140																													
SC 40		241,407,765	22,524,879	72,240,109	2,275,941,962	2,275,941,962	482,076,228	3,094,190,937																													
Associates 41		10,605,943	9,883,577	13,417,843	467,161,742	467,161,742	56,551,957	557,621,062																													
Associates Academic 42		76,452,354	32,935,974	32,935,974	870,556,186	870,556,186	131,651,272	1,111,575,786																													
Bachelor 43		207,635,697	12,229,524	12,229,524	1,780,437,888	1,780,437,888	200,900,643	2,201,203,752																													
Masters 44		9,670,844			749,742,442	749,742,442	26,153,444	785,566,730																													
Professional 45					115,698,943	115,698,943	16,586,638	132,285,581																													
PhD 46		13,762,970			76,269,288	76,269,288	14,240,914	104,273,172																													
Grand Total		1,072,890,679	48,267,381	165,861,332	9,041,270,560	9,041,270,560	2,627,255,713	12,951,145,668																													

E. CPS 2020 Voter Supplement PUMS Data Pivot Table, Matching Dr. Burch's Voter Turnout by Race Analysis. PES 1 Vote Responses for MS Including Any Age and Filtered to Citizenship (1, 2, 3 or 4)

		* State PPS for MS		* Any Age		* Citizenship 1, 2, 3 and 4		* Citizens*		PES 1 Responses		No. Responses		PES 1 Responses		No. Responses		PES 1 Responses		No. Responses	
CITIZENSHIP	PERSONA	PTOTRACE	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON	PERSPHON
White Alone	Hispanic	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Non Hisp																				
	Total																				
Black Alone	Hispanic	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	Non Hisp																				
	Total																				
Asian Alone	Hispanic	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	Non Hisp																				
	Total																				
Native Only	Hispanic	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	Non Hisp																				
	Total																				
White and Black	Hispanic	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Non Hisp																				
	Total																				
White and HI	Hispanic	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	Non Hisp																				
	Total																				
White and Asian	Hispanic	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	Non Hisp																				
	Total																				
White-Black-As	Hispanic	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	Non Hisp																				
	Total																				
White-Asian-HI	Hispanic	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	Non Hisp																				
	Total																				
Grand Total																					

F. CPS 2020 Voter Supplement PUMS Data Pivot Table, Matching Reported Voter Turnout by Race Analysis. PES 1 Vote Responses for MS Filtered to Age (18+) and Citizenship (1, 2, 3 or 4)

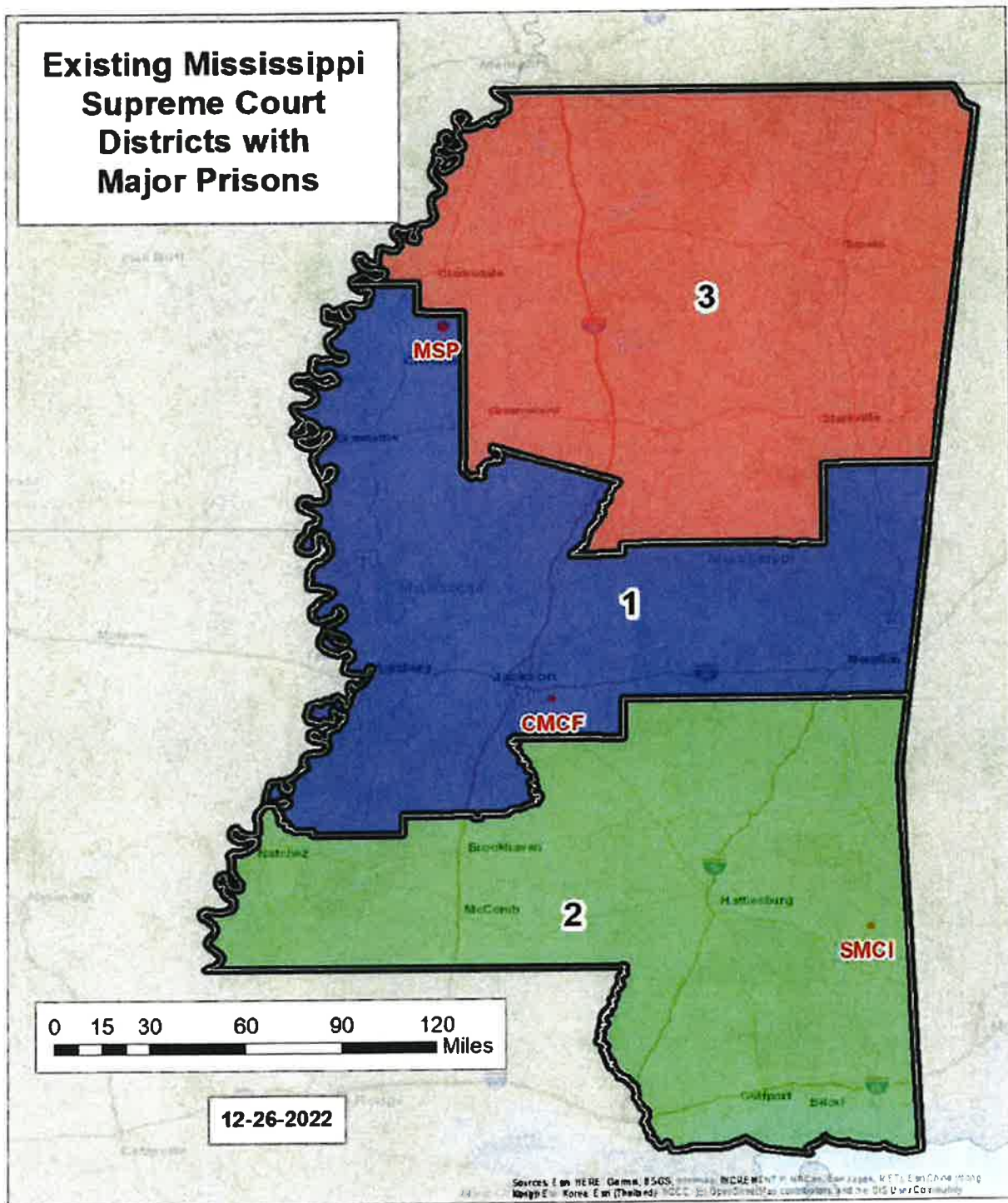
RACE	PES 1 Responses	PES 1 Responses						Total
		1	2	3	4	5	6	
White Alone		1,071,480,678	1,071,480,678	65,357,261	65,357,261	18,981,263	18,981,263	1,384,657,113
Black Alone		615,608,014	615,608,014	25,208,957	25,208,957	75,541,223	75,541,223	726,367,208
Asian Alone		41,887,248	41,887,248	41,887,248	41,887,248	0	0	167,642,000
Asian Only		0	0	0	0	0	0	167,642,000
White and Black		0	0	0	0	0	0	167,642,000
White and AI		0	0	0	0	0	0	167,642,000
White and Asian		0	0	0	0	0	0	167,642,000
White-BlackAI		0	0	0	0	0	0	167,642,000
White-Asian-IP		0	0	0	0	0	0	167,642,000
Grand Total		1,788,598,341	1,788,598,341	71,476,318	71,476,318	250,522,486	250,522,486	2,190,175,138

Appendix 4. Mississippi Maps

These maps were produced by Bryan Geodemographics for the author.

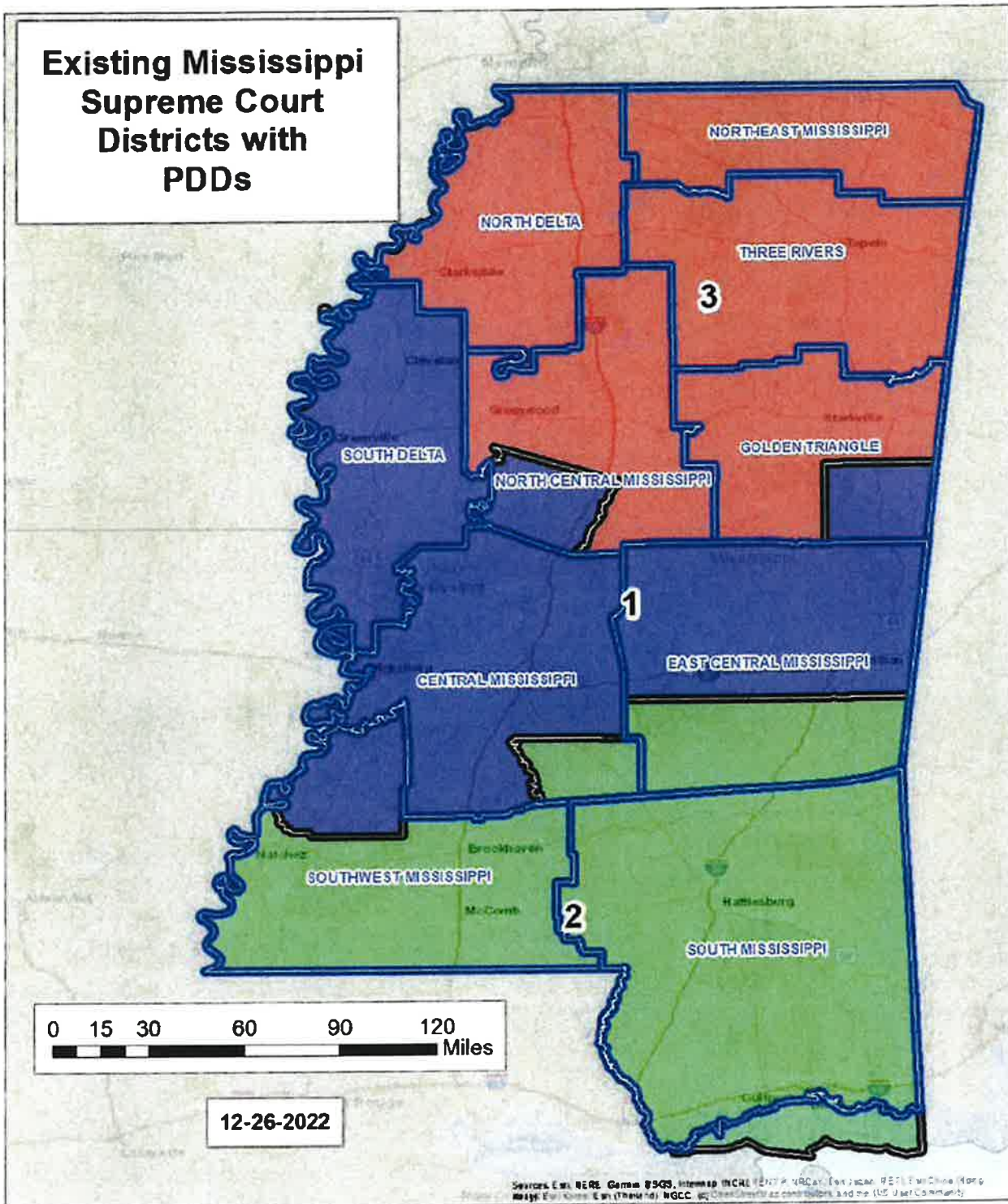
- A. Existing MS Supreme Court Districts
- B. Existing MS Supreme Court Districts with Major Prisons
- C. Existing MS Supreme Court Districts with Planning and Development Districts
- D. Existing MS Supreme Court Districts and Percent VAP APB by County

B. Existing MS Supreme Court Districts with Major Prisons



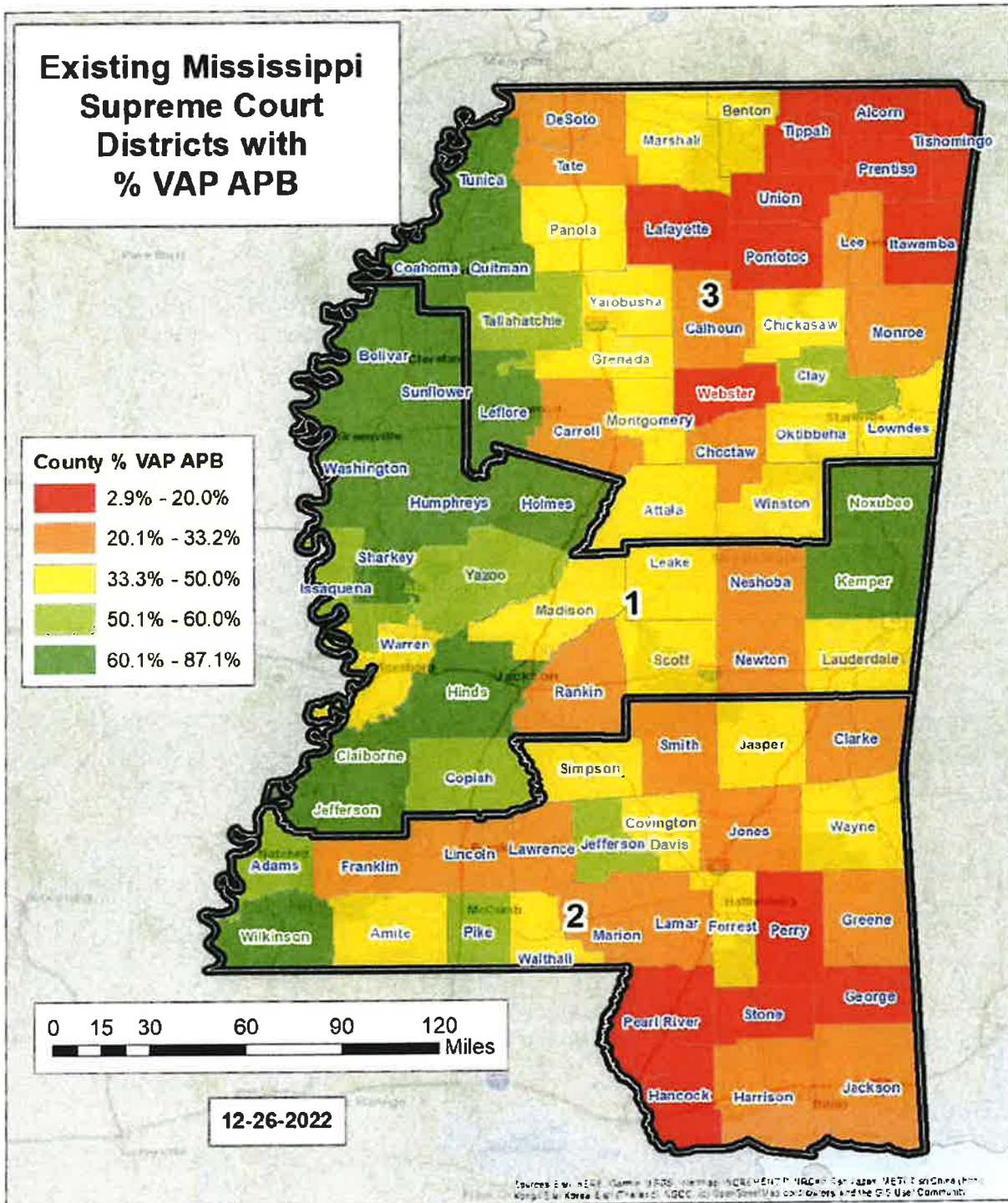
Map compiled for author by Bryan GeoDemographics using data described in text.

C. Existing MS Supreme Court Districts with Planning and Development Districts



Map compiled for author by Bryan GeoDemographics using data described in text.

D. Existing MS Supreme Court Districts and Percent VAP APB by County



Map compiled for author by Bryan GeoDemographics using data described in text.

Appendix 5a. SSRC Survey Overview with Codes

Provided to author by Dr. John Edwards, Director, Survey Research Lab, SSRC, Mississippi State University

Mississippi Voter Registration Status 2015-2021

DataYear

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2015	1578	14.8	14.8	14.8
	2016	1524	14.3	14.3	29.1
	2017	1515	14.2	14.2	43.3
	2018	1500	14.1	14.1	57.3
	2019	1527	14.3	14.3	71.7
	2020	1505	14.1	14.1	85.8
	2021	1518	14.2	14.2	100.0
	Total	10667	100.0	100.0	

RegVote

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Registered to vote	9787	91.8	92.5	92.5
	2 Not Registered to vote	793	7.4	7.5	100.0
	Total	10580	99.2	100.0	
Missing	3 Don't Know	42	.4		
	4 Refused	45	.4		
	Total	87	.8		
Total		10667	100.0		

FreqVote

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Always votes	6216	58.3	62.5	62.5
	2 Nearly always votes	2046	19.2	20.6	83.0
	3 Votes part of the time	831	7.8	8.4	91.4
	4 Seldom votes	414	3.9	4.2	95.5
	5 Never votes	445	4.2	4.5	100.0
	Total	9952	93.3	100.0	
Missing	6 Don't know	38	.4		
	7 Refused	38	.4		
	System	639	6.0		
	Total	715	6.7		
Total		10667	100.0		

		County			Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1 Adams County	117	1.1	1.1	1.1
	2 Alcorn County	122	1.1	1.1	2.2
	3 Amite County	52	.5	.5	2.7
	4 Attala County	102	1.0	1.0	3.7
	5 Benton County	39	.4	.4	4.1
	6 Bolivar County	119	1.1	1.1	5.2
	7 Calhoun County	64	.6	.6	5.8
	8 Carroll County	45	.4	.4	6.2
	9 Chickasaw County	77	.7	.7	6.9
	10 Choctaw County	40	.4	.4	7.3
	11 Claiborne County	39	.4	.4	7.7
	12 Clarke County	56	.5	.5	8.2
	13 Clay County	104	1.0	1.0	9.2
	14 Coahoma County	68	.6	.6	9.8
	15 Covich County	102	1.0	1.0	10.8
	16 Covington County	65	.6	.6	11.4
	17 DeSoto County	261	2.4	2.5	13.9
	18 Forrest County	252	2.4	2.4	16.2
	19 Franklin County	28	.3	.3	16.5
	20 George County	75	.7	.7	17.2
	21 Greene County	41	.4	.4	17.6
	22 Grenada County	79	.7	.7	18.3
	23 Hancock County	155	1.5	1.5	19.8
	24 Harrison County	684	6.4	6.4	26.2
	25 Hinds County	965	9.0	9.1	35.3
	26 Holmes County	83	.8	.8	36.1
	27 Humphreys County	14	.1	.1	36.2
	28 Issaquena County	2	.0	.0	36.2
	29 Itawamba County	80	.7	.8	37.0
	30 Jackson County	468	4.4	4.4	41.4
	31 Jasper County	62	.6	.6	42.0
	32 Jefferson County	36	.3	.3	42.3
	33 Jefferson Davis County	40	.4	.4	42.7
	34 Jones County	213	2.0	2.0	44.7
	35 Kemper County	40	.4	.4	45.1
	36 Lafayette County	176	1.6	1.7	46.7
	37 Lamar County	207	1.9	1.9	48.7
	38 Lauderdale County	274	2.6	2.6	51.2
	39 Lawrence County	46	.4	.4	51.7

County	County			Cumulative Percent
	Frequency	Percent	Valid Percent	
40 Leake County	83	.8	.8	52.5
41 Lee County	351	3.3	3.3	55.8
42 Leflore County	105	1.0	1.0	56.7
43 Lincoln County	138	1.3	1.3	58.0
44 Lowndes County	292	2.7	2.7	60.8
45 Madison County	456	4.3	4.3	65.1
46 Marion County	80	.7	.8	65.8
47 Marshall County	78	.7	.7	66.6
48 Monroe County	169	1.6	1.6	68.2
49 Montgomery County	55	.5	.5	68.7
50 Neshoba County	102	1.0	1.0	69.6
51 Newton County	82	.8	.8	70.4
52 Noxubee County	46	.4	.4	70.8
53 Oktibbeha County	346	3.2	3.3	74.1
54 Panola County	86	.8	.8	74.9
55 Pearl River County	171	1.6	1.6	76.5
56 Perry County	35	.3	.3	76.8
57 Pike County	140	1.3	1.3	78.2
58 Pontotoc County	124	1.2	1.2	79.3
59 Prentiss County	85	.8	.8	80.1
60 Quitman County	23	.2	.2	80.3
61 Rankin County	606	5.7	5.7	86.0
62 Scott County	102	1.0	1.0	87.0
63 Sharkey County	16	.1	.2	87.2
64 Simpson County	87	.8	.8	88.0
65 Smith County	50	.5	.5	88.4
66 Stone County	46	.4	.4	88.9
67 Sunflower County	86	.8	.8	89.7
68 Tallahatchie County	40	.4	.4	90.1
69 Tate County	75	.7	.7	90.8
70 Tippah County	68	.6	.6	91.4
71 Tishomingo County	71	.7	.7	92.1
72 Tunica County	27	.3	.3	92.3
73 Union County	101	.9	1.0	93.3
74 Walthall County	41	.4	.4	93.7
75 Warren County	188	1.8	1.8	95.4
76 Washington County	166	1.6	1.6	97.0
77 Wayne County	65	.6	.6	97.6
78 Webster County	62	.6	.6	98.2

County

	Frequency	Percent	Valid Percent	Cumulative Percent
79 Wilkinson County	20	.2	.2	98.4
80 Winston County	65	.6	.6	99.0
81 Yazoo County	42	.4	.4	99.4
82 Yazoo County	65	.6	.6	100.0
Total	10628	99.6	100.0	
Missing				
84 Refused	39	.4		
Total	10667	100.0		

Ethnicity

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
1 Hispanic	222	2.1	2.1	2.1
2 Non-Hispanic	10368	97.2	97.9	100.0
Total	10590	99.3	100.0	
Missing				
3 Don't Know	22	.2		
4 Refused	55	.5		
Total	77	.7		
Total	10667	100.0		

Race

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
1 White	6350	59.5	60.5	60.5
2 Black	3766	35.3	35.9	96.4
3 American Indian/Alaska Native	80	.7	.8	97.2
4 Asian or Pacific Islander	62	.6	.6	97.8
5 Multi-racial	178	1.7	1.7	99.5
6 Other	58	.5	.5	100.0
Total	10492	98.4	100.0	
Missing				
7 Not Sure	4	.0		
8 Refused	171	1.6		
Total	175	1.6		
Total	10667	100.0		

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Man	4651	43.6	43.8	43.8
	2 Woman	5963	55.9	56.2	100.0
	Total	10614	99.5	100.0	
Missing	4 Refused	53	.5		
Total		10667	100.0		

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Never attended school or only Kindergarten	4	.0	.0	.0
	2 Grades 1 - 8 (Elementary)	164	1.5	1.5	1.6
	3 Grades 9 - 11 (Some High School)	693	6.5	6.5	8.1
	4 Completed High School or GED equivalent	2695	25.3	25.4	33.5
	5 Some college or vocational program	2338	21.9	22.0	55.6
	6 Completed Associate degree (2-year program)	1400	13.1	13.2	68.8
	7 Completed Bachelors degree (4-year program)	1996	18.7	18.8	87.6
	8 Completed Masters degree	973	9.1	9.2	96.8
	9 Beyond Masters degree	343	3.2	3.2	100.0
Total	10606	99.4	100.0		
Missing	10 Not Sure	24	.2		
	11 Refused	37	.3		
	Total	61	.6		
Total		10667	100.0		

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18	115	1.1	1.1	1.1
	19	180	1.7	1.7	2.9
	20	173	1.6	1.7	4.5
	21	171	1.6	1.7	6.2
	22	154	1.4	1.5	7.7
	23	167	1.6	1.6	9.3
	24	148	1.4	1.4	10.7
	25	135	1.3	1.3	12.0
	26	153	1.4	1.5	13.5
	27	129	1.2	1.3	14.8
	28	143	1.3	1.4	16.2
	29	120	1.1	1.2	17.3
	30	156	1.5	1.5	18.8
	31	131	1.2	1.3	20.1
	32	146	1.4	1.4	21.5
	33	128	1.2	1.2	22.8
	34	152	1.4	1.5	24.2
	35	132	1.2	1.3	25.5
	36	162	1.5	1.6	27.1
	37	156	1.5	1.5	28.6
	38	168	1.6	1.6	30.2
	39	138	1.3	1.3	31.6
	40	144	1.3	1.4	33.0
	41	168	1.6	1.6	34.6
	42	139	1.3	1.3	35.9
	43	139	1.3	1.3	37.3
	44	146	1.4	1.4	38.7
	45	154	1.4	1.5	40.2
	46	177	1.7	1.7	41.9
	47	160	1.5	1.6	43.5
	48	173	1.6	1.7	45.1
	49	167	1.6	1.6	46.8
	50	196	1.8	1.9	48.7
	51	181	1.7	1.8	50.4
	52	192	1.8	1.9	52.3
	53	194	1.8	1.9	54.2
	54	185	1.7	1.8	55.9
	55	205	1.9	2.0	57.9
	56	210	2.0	2.0	60.0

Age

	Frequency	Percent	Valid Percent	Cumulative Percent
57	198	1.9	1.9	61.9
58	209	2.0	2.0	63.9
59	194	1.8	1.9	65.8
60	201	1.9	1.9	67.7
61	208	1.9	2.0	69.8
62	199	1.9	1.9	71.7
63	183	1.7	1.8	73.5
64	201	1.9	1.9	75.4
65	200	1.9	1.9	77.3
66	200	1.9	1.9	79.3
67	153	1.4	1.5	80.8
68	180	1.7	1.7	82.5
69	183	1.7	1.8	84.3
70	180	1.7	1.7	86.0
71	146	1.4	1.4	87.4
72	132	1.2	1.3	88.7
73	128	1.2	1.2	90.0
74	126	1.2	1.2	91.2
75	109	1.0	1.1	92.2
76	98	.9	.9	93.2
77	108	1.0	1.0	94.2
78	88	.8	.9	95.1
79	67	.6	.6	95.7
80	77	.7	.7	96.5
81	55	.5	.5	97.0
82	54	.5	.5	97.5
83	45	.4	.4	98.0
84	40	.4	.4	98.4
85	45	.4	.4	98.8
86	27	.3	.3	99.1
87	14	.1	.1	99.2
88	22	.2	.2	99.4
89	17	.2	.2	99.6
90	12	.1	.1	99.7
91	9	.1	.1	99.8
92	6	.1	.1	99.8
93	7	.1	.1	99.9
94	2	.0	.0	99.9
95	3	.0	.0	100.0

Age

	Frequency	Percent	Valid Percent	Cumulative Percent
96	2	.0	.0	100.0
97	2	.0	.0	100.0
Total	10317	96.7	100.0	
Missing	-99 Refused	350	3.3	
Total	10667	100.0		

Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Household income less than \$10,000	670	6.3	8.1	8.1
	2 Household income \$10,000 to under \$15,000	533	5.0	6.5	14.6
	3 Household income \$15,000 to under \$20,000	607	5.7	7.4	22.0
	4 Household income \$20,000 to under \$25,000	539	5.1	6.5	28.5
	5 Household income \$25,000 to under \$35,000	881	8.3	10.7	39.2
	6 Household income \$35,000 to under \$50,000	1130	10.6	13.7	52.9
	7 Household income \$50,000 to under \$75,000	1317	12.3	16.0	68.9
	8 Household income \$75,000 to under \$100,000	1022	9.6	12.4	81.3
	9 Household income \$100,000 to under \$150,000	845	7.9	10.3	91.5
	10 Household income \$150,000 to under \$200,000	366	3.4	4.4	96.0
	11 Household income \$200,000 or more	332	3.1	4.0	100.0
	Total	8242	77.3	100.0	
Missing	12 Not Sure	770	7.2		
	13 Refused	1655	15.5		
	Total	2425	22.7		
Total		10667	100.0		

Party

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Republican	3615	33.9	39.6	39.6
	2 Democrat	2999	28.1	32.9	72.5
	3 Independent	2512	23.5	27.5	100.0
	Total	9126	85.6	100.0	
Missing	4 Not sure	811	7.6		
	5 Refused	730	6.8		
	Total	1541	14.4		
Total		10667	100.0		

**Party
Lean**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Independent leaning democratic	671	6.3	45.0	45.0
	2 Independent leaning republican	819	7.7	55.0	100.0
	Total	1490	14.0	100.0	
Missing	3 Not sure	799	7.5		
	4 Refused	223	2.1		
	System	8155	76.5		
	Total	9177	86.0		
Total		10667	100.0		

Appendix 5b. NCSS Contingency Table output by year, 2105-2021, SSRC Survey Data on Voter Registration

Analysis based on SSRC data with calculations by author using the NCSS statistical package.

Race Code: 1 = White; 2 = Black

Registered to Vote Code: 1 = Yes; 2 = No; 3 = Don't Know; 4 = Refused.

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Cross Tabulation Report

Dataset C:\...SSRC SURVEY DATA BY COUNTY\SSRC SURVEY DATA V1.NCSS
 Filter (Race <> 3,4,5,6,7,8) AND (DataYear = 2015)
 Row Variable RegVote
 Column Variable Race

Counts Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	847	547	1394
2	82	35	117
3	5	1	6
4	3	3	6
Total	937	586	1523

Column Percentages Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	90.39%	93.34%	91.53%
2	8.75%	5.97%	7.68%
3	0.53%	0.17%	0.39%
4	0.32%	0.51%	0.39%
Total	100.00%	100.00%	100.00%

Expected Counts Assuming Independence Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	857.6	536.4	1394.0
2	72.0	45.0	117.0
3	3.7	2.3	6.0
4	3.7	2.3	6.0
Total	937.0	586.0	1523.0

Cross Tabulation Report

Dataset C:\...ISSRC SURVEY DATA BY COUNTY\ISSRC SURVEY DATA V1.NCSS
 Filter (DataYear=2016) AND (Race <> 3,4,5,6,7,8) AND (DataYear = 2016)
 Row Variable RegVote
 Column Variable Race

Counts Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	856	488	1344
2	70	36	106
3	2	1	3
4	4	1	5
Total	932	526	1458

Column Percentages Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	91.85%	92.78%	92.18%
2	7.51%	6.84%	7.27%
3	0.21%	0.19%	0.21%
4	0.43%	0.19%	0.34%
Total	100.00%	100.00%	100.00%

Expected Counts Assuming Independence Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	859.1	484.9	1344.0
2	67.8	38.2	106.0
3	1.9	1.1	3.0
4	3.2	1.8	5.0
Total	932.0	526.0	1458.0

Cross Tabulation Report

Dataset C:\...\SSRC SURVEY DATA BY COUNTY\SSRC SURVEY DATA V1.NCSS
 Filter (Race <> 3,4,5,6,7,8) AND (DataYear = 2017)
 Row Variable RegVote
 Column Variable Race

Counts Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	828	507	1335
2	64	29	93
3	3	2	5
4	5	0	5
Total	900	538	1438

Column Percentages Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	92.00%	94.24%	92.84%
2	7.11%	5.39%	6.47%
3	0.33%	0.37%	0.35%
4	0.56%	0.00%	0.35%
Total	100.00%	100.00%	100.00%

Expected Counts Assuming Independence Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	835.5	499.5	1335.0
2	58.2	34.8	93.0
3	3.1	1.9	5.0
4	3.1	1.9	5.0
Total	900.0	538.0	1438.0

Cross Tabulation Report

Dataset C:\...SSRC SURVEY DATA BY COUNTY\SSRC SURVEY DATA V1.NCSS
 Filter (Race <> 3,4,5,6,7,8) AND (DataYear = 2018)
 Row Variable RegVote
 Column Variable Race

Counts Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	809	509	1318
2	72	32	104
3	5	1	6
4	1	1	2
Total	887	543	1430

Column Percentages Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	91.21%	93.74%	92.17%
2	8.12%	5.89%	7.27%
3	0.56%	0.18%	0.42%
4	0.11%	0.18%	0.14%
Total	100.00%	100.00%	100.00%

Expected Counts Assuming Independence Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	817.5	500.5	1318.0
2	64.5	39.5	104.0
3	3.7	2.3	6.0
4	1.2	0.8	2.0
Total	887.0	543.0	1430.0

Cross Tabulation Report

Dataset C:\...SSRC SURVEY DATA BY COUNTY\SSRC SURVEY DATA V1.NCSS
 Filter (Race <> 3,4,5,6,7,8) AND (DataYear = 2019)
 Row Variable RegVote
 Column Variable Race

Counts Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	808	528	1336
2	69	27	96
3	1	2	3
4	1	3	4
Total	879	560	1439

Column Percentages Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	91.92%	94.29%	92.84%
2	7.85%	4.82%	6.67%
3	0.11%	0.36%	0.21%
4	0.11%	0.54%	0.28%
Total	100.00%	100.00%	100.00%

Expected Counts Assuming Independence Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	816.1	519.9	1336.0
2	58.6	37.4	96.0
3	1.8	1.2	3.0
4	2.4	1.6	4.0
Total	879.0	560.0	1439.0

Cross Tabulation Report

Dataset C:\...\SSRC SURVEY DATA BY COUNTY\SSRC SURVEY DATA V1.NCSS
 Filter (Race <> 3,4,5,6,7,8) AND (DataYear = 2020)
 Row Variable RegVote
 Column Variable Race

Counts Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	837	466	1303
2	72	25	97
3	3	2	5
4	4	0	4
Total	916	493	1409

Column Percentages Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	91.38%	94.52%	92.48%
2	7.86%	5.07%	6.88%
3	0.33%	0.41%	0.35%
4	0.44%	0.00%	0.28%
Total	100.00%	100.00%	100.00%

Expected Counts Assuming Independence Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	847.1	455.9	1303.0
2	63.1	33.9	97.0
3	3.3	1.7	5.0
4	2.6	1.4	4.0
Total	916.0	493.0	1409.0

Cross Tabulation Report

Dataset C:\...\SSRC SURVEY DATA BY COUNTY\SSRC SURVEY DATA V1.NCSS
 Filter (Race <> 3,4,5,6,7,8) AND (DataYear = 2021)
 Row Variable RegVote
 Column Variable Race

Counts Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	817	490	1307
2	66	28	94
3	12	1	13
4	4	1	5
Total	899	520	1419

Column Percentages Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	90.88%	94.23%	92.11%
2	7.34%	5.38%	6.62%
3	1.33%	0.19%	0.92%
4	0.44%	0.19%	0.35%
Total	100.00%	100.00%	100.00%

Expected Counts Assuming Independence Table

<u>RegVote</u>	<u>Race</u>		Total
	1	2	
1	828.0	479.0	1307.0
2	59.6	34.4	94.0
3	8.2	4.8	13.0
4	3.2	1.8	5.0
Total	899.0	520.0	1419.0

Appendix 5c. NCSS Contingency Table output by year, 2105-2021, SSRC Survey Data on Voting Frequency

Analysis based on SSRC data with calculations by author using the NCSS statistical package

Race Code:

- 1 = White
- 2 = Black
- 3 = AIAN (American Indian, Alaskan Native)
- 4 = API (Asian, Pacific Islander)
- 5 = Multiracial
- 6 = other
- 7 = not sure
- 8 = refused

Voting Frequency:

- 1 = Always Votes
- 2 = Nearly Always Votes
- 3 = Votes Part of the Time
- 4 = Seldom Votes
- 5 = Never Vote
- 6 = Don't Know
- 7 = Refused

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Cross Tabulation Report

Dataset C:\...SSRC SURVEY DATA BY COUNTY\SSRC SURVEY DATA V1.NCSS
 Filter DataYear = 2015
 Row Variable Race
 Column Variable FreqVote

Counts Table

<u>Race</u>	<u>FreqVote</u>							Total
	1	2	3	4	5	6	7	
1	517	203	71	31	18	4	3	847
2	368	90	47	25	17	0	0	547
3	5	0	0	0	0	0	0	5
4	1	1	2	1	0	0	0	5
5	10	3	0	0	2	0	0	15
6	1	0	0	0	1	0	0	2
8	12	3	2	1	2	0	0	20
Total	914	300	122	58	40	4	3	1441

The number of rows with at least one missing value is 137

Row Percentages Table

<u>Race</u>	<u>FreqVote</u>							Total
	1	2	3	4	5	6	7	
1	61.04%	23.97%	8.38%	3.66%	2.13%	0.47%	0.35%	100.00%
2	67.28%	16.45%	8.59%	4.57%	3.11%	0.00%	0.00%	100.00%
3	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
4	20.00%	20.00%	40.00%	20.00%	0.00%	0.00%	0.00%	100.00%
5	66.67%	20.00%	0.00%	0.00%	13.33%	0.00%	0.00%	100.00%
6	50.00%	0.00%	0.00%	0.00%	50.00%	0.00%	0.00%	100.00%
8	60.00%	15.00%	10.00%	5.00%	10.00%	0.00%	0.00%	100.00%
Total	63.43%	20.82%	8.47%	4.02%	2.78%	0.28%	0.21%	100.00%

The number of rows with at least one missing value is 137

NCSS 12.0.4

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Cross Tabulation Report

Dataset C:\...SSRC SURVEY DATA BY COUNTY\SSRC SURVEY DATA V1.NCSS
 Filter DataYear = 2016
 Row Variable Race
 Column Variable FreqVote

Counts Table

<u>Race</u>	<u>FreqVote</u>							Total
	1	2	3	4	5	6	7	
1	560	198	59	34	73	3	5	932
2	349	78	33	17	45	2	2	526
3	4	2	4	1	2	0	0	13
4	1	1	0	1	4	0	0	7
5	13	0	2	2	3	1	0	21
8	17	1	1	2	1	0	3	25
Total	944	280	99	57	128	6	10	1524

Row Percentages Table

<u>Race</u>	<u>FreqVote</u>							Total
	1	2	3	4	5	6	7	
1	60.09%	21.24%	6.33%	3.65%	7.83%	0.32%	0.54%	100.00%
2	66.35%	14.83%	6.27%	3.23%	8.56%	0.38%	0.38%	100.00%
3	30.77%	15.38%	30.77%	7.69%	15.38%	0.00%	0.00%	100.00%
4	14.29%	14.29%	0.00%	14.29%	57.14%	0.00%	0.00%	100.00%
5	61.90%	0.00%	9.52%	9.52%	14.29%	4.76%	0.00%	100.00%
8	68.00%	4.00%	4.00%	8.00%	4.00%	0.00%	12.00%	100.00%
Total	61.94%	18.37%	6.50%	3.74%	8.40%	0.39%	0.66%	100.00%

NCSS 12.0.4

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Cross Tabulation Report

Dataset C:\...\SSRC SURVEY DATA BY COUNTY\SSRC SURVEY DATA V1.NCSS
 Filter DataYear = 2017
 Row Variable Race
 Column Variable FreqVote

Counts Table

Race	FreqVote							Total
	1	2	3	4	5	6	7	
1	534	185	65	34	73	3	6	900
2	347	73	52	21	37	6	2	538
3	6	2	1	1	1	1	0	12
4	1	2	0	0	2	0	0	5
5	12	4	3	1	4	0	1	25
6	3	2	2	2	4	0	0	13
8	17	2	0	3	0	0	0	22
Total	920	270	123	62	121	10	9	1515

Row Percentages Table

Race	FreqVote							Total
	1	2	3	4	5	6	7	
1	59.33%	20.56%	7.22%	3.78%	8.11%	0.33%	0.67%	100.00%
2	64.50%	13.57%	9.67%	3.90%	6.88%	1.12%	0.37%	100.00%
3	50.00%	16.67%	8.33%	8.33%	8.33%	8.33%	0.00%	100.00%
4	20.00%	40.00%	0.00%	0.00%	40.00%	0.00%	0.00%	100.00%
5	48.00%	16.00%	12.00%	4.00%	16.00%	0.00%	4.00%	100.00%
6	23.08%	15.38%	15.38%	15.38%	30.77%	0.00%	0.00%	100.00%
8	77.27%	9.09%	0.00%	13.64%	0.00%	0.00%	0.00%	100.00%
Total	60.73%	17.82%	8.12%	4.09%	7.99%	0.66%	0.59%	100.00%

NCSS 12.0.4

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Cross Tabulation Report

Dataset C:\...SSRC SURVEY DATA BY COUNTY\SSRC SURVEY DATA V1.NCSS
 Filter DataYear = 2018
 Row Variable Race
 Column Variable FreqVote

Counts Table

Race	FreqVote							Total
	1	2	3	4	5	6	7	
1	441	238	69	35	22	2	2	809
2	318	105	52	13	18	3	0	509
3	1	2	1	0	2	0	0	6
4	1	0	1	0	0	0	0	2
5	11	7	2	2	2	1	0	25
6	4	1	0	4	1	0	0	10
7	1	0	0	1	0	0	0	2
8	9	3	0	0	0	0	0	12
Total	786	356	125	55	45	6	2	1375

The number of rows with at least one missing value is 125

Row Percentages Table

Race	FreqVote							Total
	1	2	3	4	5	6	7	
1	54.51%	29.42%	8.53%	4.33%	2.72%	0.25%	0.25%	100.00%
2	62.48%	20.63%	10.22%	2.55%	3.54%	0.59%	0.00%	100.00%
3	16.67%	33.33%	16.67%	0.00%	33.33%	0.00%	0.00%	100.00%
4	50.00%	0.00%	50.00%	0.00%	0.00%	0.00%	0.00%	100.00%
5	44.00%	28.00%	8.00%	8.00%	8.00%	4.00%	0.00%	100.00%
6	40.00%	10.00%	0.00%	40.00%	10.00%	0.00%	0.00%	100.00%
7	50.00%	0.00%	0.00%	50.00%	0.00%	0.00%	0.00%	100.00%
8	75.00%	25.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Total	57.16%	25.89%	9.09%	4.00%	3.27%	0.44%	0.15%	100.00%

The number of rows with at least one missing value is 125

NCSS 12.0.4

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Cross Tabulation Report

Dataset C:\...SSRC SURVEY DATA BY COUNTY\SSRC SURVEY DATA V1.NCSS
 Filter DataYear = 2019
 Row Variable Race
 Column Variable FreqVote

Counts Table

<u>Race</u>	<u>FreqVote</u>							Total
	1	2	3	4	5	6	7	
1	487	203	67	36	10	3	2	808
2	346	83	60	16	20	1	2	528
3	7	2	1	0	2	0	0	12
4	2	0	1	1	1	0	0	5
5	14	6	3	1	1	0	0	25
6	5	2	1	1	0	0	0	9
8	11	1	3	1	1	0	1	18
Total	872	297	136	56	35	4	5	1405

The number of rows with at least one missing value is 122

Row Percentages Table

<u>Race</u>	<u>FreqVote</u>							Total
	1	2	3	4	5	6	7	
1	60.27%	25.12%	8.29%	4.46%	1.24%	0.37%	0.25%	100.00%
2	65.53%	15.72%	11.36%	3.03%	3.79%	0.19%	0.38%	100.00%
3	58.33%	16.67%	8.33%	0.00%	16.67%	0.00%	0.00%	100.00%
4	40.00%	0.00%	20.00%	20.00%	20.00%	0.00%	0.00%	100.00%
5	56.00%	24.00%	12.00%	4.00%	4.00%	0.00%	0.00%	100.00%
6	55.56%	22.22%	11.11%	11.11%	0.00%	0.00%	0.00%	100.00%
8	61.11%	5.56%	16.67%	5.56%	5.56%	0.00%	5.56%	100.00%
Total	62.06%	21.14%	9.68%	3.99%	2.49%	0.28%	0.36%	100.00%

The number of rows with at least one missing value is 122

NCSS 12.0.4

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Cross Tabulation Report

Dataset C:\...SSRC SURVEY DATA BY COUNTY\SSRC SURVEY DATA V1.NCSS
 Filter DataYear = 2020
 Row Variable Race
 Column Variable FreqVote

Counts Table

<u>Race</u>	<u>FreqVote</u>							Total
	1	2	3	4	5	6	7	
1	571	159	45	41	18	0	3	837
2	336	62	41	12	7	4	4	466
3	4	1	2	2	0	0	0	9
4	5	1	0	2	1	0	0	9
5	5	11	3	5	3	0	0	27
6	0	0	2	0	0	0	0	2
7	2	0	0	0	0	0	0	2
8	20	4	3	2	0	0	1	30
Total	943	238	96	64	29	4	8	1382

The number of rows with at least one missing value is 123

Row Percentages Table

<u>Race</u>	<u>FreqVote</u>							Total
	1	2	3	4	5	6	7	
1	68.22%	19.00%	5.38%	4.90%	2.15%	0.00%	0.36%	100.00%
2	72.10%	13.30%	8.80%	2.58%	1.50%	0.86%	0.86%	100.00%
3	44.44%	11.11%	22.22%	22.22%	0.00%	0.00%	0.00%	100.00%
4	55.56%	11.11%	0.00%	22.22%	11.11%	0.00%	0.00%	100.00%
5	18.52%	40.74%	11.11%	18.52%	11.11%	0.00%	0.00%	100.00%
6	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%
7	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
8	66.67%	13.33%	10.00%	6.67%	0.00%	0.00%	3.33%	100.00%
Total	68.23%	17.22%	6.95%	4.63%	2.10%	0.29%	0.58%	100.00%

The number of rows with at least one missing value is 123

NCSS 12.0.4

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Cross Tabulation Report

Dataset C:\...SSRC SURVEY DATA BY COUNTY\SSRC SURVEY DATA V1.NCSS
 Filter DataYear = 2021
 Row Variable Race
 Column Variable FreqVote

Counts Table

<u>Race</u>	<u>FreqVote</u>							Total
	1	2	3	4	5	6	7	
1	464	213	79	34	24	2	1	817
2	327	82	40	23	16	2	0	490
3	8	1	1	1	1	0	0	12
4	5	2	3	2	0	0	0	12
5	8	4	2	2	3	0	0	19
6	2	1	1	0	1	0	0	5
8	23	2	4	0	2	0	0	31
Total	837	305	130	62	47	4	1	1386

The number of rows with at least one missing value is 132

Row Percentages Table

<u>Race</u>	<u>FreqVote</u>							Total
	1	2	3	4	5	6	7	
1	56.79%	26.07%	9.67%	4.16%	2.94%	0.24%	0.12%	100.00%
2	66.73%	16.73%	8.16%	4.69%	3.27%	0.41%	0.00%	100.00%
3	66.67%	8.33%	8.33%	8.33%	8.33%	0.00%	0.00%	100.00%
4	41.67%	16.67%	25.00%	16.67%	0.00%	0.00%	0.00%	100.00%
5	42.11%	21.05%	10.53%	10.53%	15.79%	0.00%	0.00%	100.00%
6	40.00%	20.00%	20.00%	0.00%	20.00%	0.00%	0.00%	100.00%
8	74.19%	6.45%	12.90%	0.00%	6.45%	0.00%	0.00%	100.00%
Total	60.39%	22.01%	9.38%	4.47%	3.39%	0.29%	0.07%	100.00%

The number of rows with at least one missing value is 132

Appendix 6. David A. Swanson CV (2022 V17)

Curriculum Vitae

David A. Swanson

email: Webpage : <https://profiles.ucr.edu/app/home/profile/dswanson>**I. Education**

Ph.D.	1985	Sociology/Population Studies	University of Hawai'i
M.A.	1976	Sociology/Population Studies	University of Hawai'i
Graduate Studies Diploma	1974	Social Science/Swedish	University of Stockholm
B.Sc.	1972	Sociology/Mathematics	Western Washington State College

(Credit courses also completed at the University of Puget Sound (9 semester hours) and Columbia Basin College (30 quarter hours)

G.

H. II. Academic and Related Positions**A. Primary Appointments**

Center for Population Research Portland State University	2022-2023	Research Associate
Aoyama Gakuin University, Tokyo, Japan	October 27 to November 11 2018	Visiting Professor
University of California Riverside Department of Sociology	2007 - 2018	Professor of Sociology (emeritus, 2018)
University of Mississippi Department of Sociology & Anthropology	2003-2007	Professor of Sociology and Chair
Helsinki School of Economics Mikkeli Business Campus BScBA Program, BBA & MBA Program	2000 to 2003 1999-2000 1997 to 1999	Dean Acting Dean Visiting Faculty
Portland State University, Department of Urban Studies	1995 to 1997	Professor of Urban Studies
University of Arkansas at Little Rock, College of Business, Institute for Economic Advancement	1992 to 1995	Senior Demographic Specialist

Pacific Lutheran University, Department of Sociology	1987 to 1992	Associate Professor (Tenure Awarded)
Bowling Green State University, Department of Sociology	1985 to 1987 1984 to 1985	Assistant Professor Visiting Instructor
Alaska Department of Labor	1981-1983	State Demographer
Population, Enrollment, and Economic Studies Division, Washington State Office of Financial Management	1977-1981	Research Investigator
East-West Population Institute	1975 to 1977	Staff Researcher

B. Conjoint and Miscellaneous Appointments

M.P.S in Applied Demography Dept. of Sociology & Criminology Penn State University	2019	Lecturer (On-line) Appdem 804 Business Demography Appdem 805 Demog & Public Policy
Center for Studies in Demography & Ecology, University of Washington	2017-	Faculty Affiliate
Demographic and Social Analysis Program, Department of Sociology University of California Irvine	2007- 2019	Affiliated Faculty
Blakely Center for Sustainable Suburban Development University of California Riverside	2008 - 2009	Interim Director
Blakely Center for Sustainable Suburban Development University of California Riverside	2007-2018	Research Associate
Social Science Research Center Mississippi State University	2004-	Research Fellow
Center for Population Studies University of Mississippi	2003-2007	Director
Theodore Roosevelt Institute	2002-2011	Senior Fellow
HELP University, Malaysia	April, 2003	Guest Lecturer

Mikkeli Polytechnic College, International Business Program	Spring, 2001	Guest Lecturer in Statistics
	Spring, 2000	Guest Lecturer in Statistics
Portland State University Center for Population and Census	1995 -1997	Director
University of Arkansas at Little Rock, Institute for Economic Advancement	1992 -1995	Director, Demographic Research Unit
University of Arkansas for Medical Sciences, National Center for Rural Mental Healthcare Research	1992-1995	Research Scientist
Pacific Lutheran University, Center for Social Research And Public Policy	1987 -1992	Director
Pacific Lutheran University, Department of Sociology	1990-1991	Acting Chair
Bowling Green State University, Population and Society Research Center	1984-1987	Assistant Director for Population Research
University of Alaska, Juneau School of Business Administration	1983	Lecturer
National Science Foundation "Research For Undergraduates" Demographic Research Laboratory Western Washington University	Summer, 1994 Summer, 1991 Summer, 1989 Summer, 1988	Workshop Instructor Workshop Instructor Workshop Instructor Workshop Instructor
ICPSR Summer Program in Quantitative Methods, University of Michigan	July, 1989 July, 1988 July, 1987 July, 1986	Guest Lecturer Workshop Instructor Workshop Instructor Workshop Instructor
Argonne National Laboratory,	Summer, 1987	Faculty Research Participant

III. Teaching Experience

A. Credit Courses

1. Undergraduate Courses

Sociology Courses

Introductory Sociology
Population, Poverty, and Hunger
Introductory Statistics
Research Methods
Urban Sociology

Population Studies/Demography Courses

Introduction to Population Studies
Introduction to Applied Demography
Demographic Analysis and International Business
Market Demographics
Population Analysis
Population Forecasting
The Baby Boom
World Population Issues

i. Business Administration Courses

Introductory Statistics for Business Administration
Business Mathematics
Demographic Methods and International Business
Quantitative Methods in Business
Business Forecasting
Market Demographics
Introduction to SPSS

2. Graduate Courses

Sociology Courses

Research Methods
Multivariate Analysis

Population Studies/Demography Courses

Business Demographics
Demographic Methods
Advanced Market Demographics
Applied Demography
Population Forecasting
Population Estimation Methods

Business Administration Courses

Business Forecasting
Refresher Mathematics for MBA Students
Quantitative Methods

I. B. Non-Credit and Continuing Education Courses and Topics

Census and Survey Administration	Population Estimation
Census and Survey Methods	Population Forecasting
Interviewer Training	Enrollment Forecasting

IV. Thesis Supervision

A. Committees chaired

- 2014. *Overcrowding as a Determinant of Violence in California State Prisons*. B. A. Honors Thesis by John Maldonado. Department of Sociology. University of California Riverside.
- 2011 *Demographic Analysis and the U.S. Hispanic Population*. Ph.D. Dissertation by Matt Kaneshiro, Department of Sociology, University of California Riverside.
- 2007. *A Comparison of Housing Unit Estimates to the American Community Survey Master Address File*. Sociology M.A. Thesis completed by A. J. Reese. Department of Sociology and Anthropology, University of Mississippi.
- 2004 *Towards International Standardisation of Accounting: IAS and the Accounting Practises in Finland and Russia*. Senior (BScBA) Thesis completed by O. Nieminen, Mikkeli Business Campus, Helsinki School of Economics and Business Administration
- 2003 *The Impact of International Mergers and Acquisitions on Brand Strategies*. Senior (BScBA) Thesis completed by N. Yli-Pirilä, Mikkeli Business Campus, Helsinki School of Economics and Business Administration.
- 2003 *International Franchising and Investment*. Senior (BScBA) Thesis completed by M. Wainwright, Mikkeli Business Campus, Helsinki School of Economics and Business Administration
- 2002 *Mobile Commerce: Hype or Reality?* Senior (BScBA.) Thesis completed by P. Louko, Mikkeli Business Campus, Helsinki School of Economics and Business Administration.
- 2002 *Transport Perspectives within the European Union*. Senior (BScBA.) Thesis completed by O. Martychchenko, Mikkeli Business Campus, Helsinki School of Economics and Business Administration.
- 2001 *Investing in African Economies: Inhibitions and Prospects – A General Overview*. Senior (BBA.) Thesis completed by P. Kalubi, Mikkeli Business Campus, Helsinki School of Economics and Business Administration.
- 1996 *Population Estimation Techniques Using the Housing Unit Method*. Master of Urban Science (M.U.S.) Research Paper completed by Tom Bryan, Department of Urban Studies, Portland State University (Co-chaired with George Hough).
- 1987 *Measuring Propensity: The Association between Socioeconomic Variables and Differential Migration for Ohio, 1975-1980*. M.A. Thesis completed by K. A. Wright, Department of Sociology, Bowling Green State University.
- 1986 *Estimation of Net Migration among Major regions in Iraq, 1957- 1977*, M.A. Thesis completed by A. Al-Jiboury, Department of Sociology, Bowling Green State University.

- 1986 *An Interpretation of the Ratio-Correlation Method of Population Estimation*. M.A. Thesis completed by R. Prevost, Department of Sociology, Bowling Green State University.

B. Committees of which a member

- 2017 *A Descriptive Profile of the Multiracial Asian Population in the United States*. Ph.D. Dissertation completed by Sooji Han, Department of Sociology, University of California Riverside
- 2014 *A Spatial Examination of Residency Restriction Legislation: The Impact of Social Disorganization and Social Services*. Ph.D. Dissertation completed by Erin Wolbeck, Department of Sociology, University of California Riverside
2012. *Exploring the Decision-Making Process in Relation to Legitimacy Assignment*. Ph.D. Dissertation completed by Adam Sanford, Department of Sociology, University of California Riverside.
- 2005 *Unique Competencies of International Non-Governmental Organizations (INGOs): Empirical Explorations from India*. Ph.D. Dissertation completed by Pranaya Kumar Swain, Department of Sociology, Indian Institute of Technology-Kanpur, Kanpur, Uttar Pradesh, India (External Examiner).
- 1991 *The Influence of Parents on the Drinking Patterns of Their Teenage Children*. M.A. Thesis completed by R. D. Jacobsen, Division of Social Sciences, Pacific Lutheran University.
- 1990 *Austrian National Identity and the Dokumentationsarchiv des Osterreichischen Widerstandes*. M.A. Thesis completed by F. Hornquist, Division of Social Science, Pacific Lutheran University.
- 1989 *A Model for Fertility Change*. Ph.D. Dissertation completed by N. Sugathan, Department of Demography, University of Kerala, (External Examiner).
- 1989 *The Spruce Program: A Profile of the Participants*. M.A. Thesis completed by K. Roe, Division of Social Science, Pacific Lutheran University.
- 1986 *A Content Analysis of Music Videos*. M.A. Thesis completed by L. Olsen, Department of Radio, Television, and Film, Bowling Green State University.
- 1986 *Projection of Flexible Age-specific Migration Rates: An Examination of Pittenger's Simplified Techniques*. M.A. completed by B. Bennett, Department of Sociology, Bowling Green State University.
1986. *Alienation Correlates of Marital Dissolution: A Longitudinal Study*. Ph.D. Dissertation completed by Yvonne Woods, Department of Sociology, Bowling Green State University.

V. Professional Development

Participant in (and Successful completion of) Records Management Training, ALCS, June, 2016

Participant in (and Successful completion of) Information Security Training, ALCS, June, 2016.

Participant, Population Projections Workshop, Association for Latin American Population Studies, 16 November 2010.

Participant, U.S. Census Bureau Workshop, "The American Community Survey," 22 September 2010.

Participant, U.S. Census Bureau Webinar, "The American Community Survey: Tracking How We Change with Multi-Year Estimates," 18 November 2009.

Participant, Nielsen Claritas Webinar, "Small Area Population Estimates," 10 November 2009.

Special Sworn Status. US Census Bureau. 2007 (renewed, 2008).

Participant, "Title 13 Training, Confidentiality and Privacy." US Census Bureau, Completed, March, 2007 and renewed November 2008.

Participant, "The Basic Course in the Protection of Human Research Subjects," University of Mississippi, Completed, October, 2005.

Participant, RAND Summer Institute on Aging. RAND, Santa Monica, California. July, 2004.

Participant, Fulbright German Studies Seminar. Berlin, Rostock, and Bonn, Germany. June, 2003.

Participant in (and successful completion of), "Finnish for Foreigners II," Kuopio University, Kuopio, Finland, July-August, 2001

Participant in (and successful completion of), "Finnish for Foreigners I," Mikkeli Polytechnic College, Mikkeli, Finland, July, 2000

Participant in (and successful completion of), "Ethics in Business," Science Applications International Corporation, 1998, 1999

Participant in (and successful completion of), Regulatory and Licensing Training Program, U.S. Department of Energy, Yucca Mountain Project, Las Vegas, Nevada, November, 1998

Participant, "The American Community Survey," American Statistical Association, Los Angeles, California, August, 1997

Participant, "Marketing and Census 2000," Seattle, Washington, August, 1996

Participant in and successful completion of), "Refresher Swedish," Portland State University, Portland, Oregon, Fall, 1995.

Participant in (and successful completion of), "Introductory Finnish," Portland State University, Portland, Oregon, Fall, 1995

Participant, "Census 2000 Content and Access," Cincinnati, Ohio, April, 1993.

Participant, "Arkansas State Census Data Center Annual Meeting," Little Rock, Arkansas, October, 1992.

Participant, "The Strategic Planning Process," Pacific Lutheran University, January, 1992.

Participant, "1990 Census Content," U.S. Bureau of the Census (Seattle Regional Office), Pacific Lutheran University, November, 1990.

- Participant, "Programs and Products of the U.S. Bureau of the Census," U.S. Bureau of the Census (Detroit Regional Office) Bowling Green State University, April, 1987.
- Participant, "Proposal Writing and Research Administration," College of Education, Bowling Green State University, Spring Semester, 1987.
- Participant, "An Introduction to the Bootstrap," Continuing Education Session, American Statistical Association, Chicago, Illinois, August, 1986.
- Participant, First Annual Research Conference, U.S. Bureau of the Census, April, 1985.
- Participant in (and successful completion of), "Performance Evaluation for Supervisory Personnel," Alaska Department of Labor, September, 1983.
- Participant, "Planning for the 1990 Census," Continuing Education Session, American Statistical Association, Toronto, Ontario, Canada, August, 1983.
- Participant, (and successful completion of), "Successful Project Management," Alaska Department of Personnel, Juneau, Alaska, October, 1981.
- Participant in (and successful completion of), "MARK-IV Programming," Informatics, Inc., Olympia, Washington, 1980.
- Participant in (and successful completion of), "IBM OS JCL" and "WYLBUR," Washington State University, Olympia, Washington, 1979.
- Participant (and successful completion of), "Zero-Based Budgeting," Washington Office of Financial Management, Olympia, Washington, 1978.
- Participant, "Funding Public Higher Education," Washington Office of Financial Management-Washington Higher Education Coordinating Board, Olympia, Washington, 1977.
- Participant, "Didactic Seminar on Causal Modeling," American Sociological Association, San Francisco, California, August, 1976.
- Participant in (and successful completion of), "Swedish I," "Swedish II," and "Swedish III," Stockholm University, Stockholm, Sweden, 1973-74.
- Participant, "1970 Census Products and Their Use," Hawaii Department of Administration, Honolulu, Hawaii, May, 1973.
- Participant in (and successful completion of), "Introduction to Basic Assembly Language (BAL) Programming," University of Hawaii, Honolulu, Hawaii, Spring, 1973.

VI. Research Projects and Grants

J. A. Research Grants and Contracts Let and Administered

- "Survey of Food Consumption and Lifestyles," Nye and Lincoln counties, Nevada, (\$100,000). 1996-97, University of Nevada Las Vegas
- "1984 Residential Energy Survey" (\$250,000). 1983-84, Walker Information, Inc.
- "Cooperative Publication on Alaskan Native Demography" (\$4,000). 1984, Alaska Department of Labor.
- "Chloropleth Computer Mapping" (\$3,500). 1983, Alaska Department of Labor.
- "Public Opinion Survey", Washington State Board for Community College Education, (\$25,000). 1981 Gilmore Research Group.

"Revision to the Higher Education Enrollment Projection System (HEEPS)," (\$5,000), 1980, Washington State Office of Financial Management.

"Population Forecasting System" (\$30,000), 1980, Washington State Office of Financial Management.

K. B. Research Contracts Awarded

Population Health Impact of Reduced Risk Tobacco Products (\$320,000). ALCS, Inc. (Principal Investigator) 2013-2018.

Hopi Tribal Population Dynamics and Forecast (\$70,000). Hopi Tribe. 2017-2019.

Population Forecasting System Evaluation (\$20,000) Washington State Office of Financial Management (Co-Principal Investigator with J. Tayman), 2015-2016

Accuracy Study (\$228,000). ESRI (Co-Principal Investigator, Cropper GIS), 2011-2012.

Population Projections for Native Hawaiians. (\$16,078). Policy Analysis and System Evaluation, Kamehameha Schools, Honolulu, Hawaii. March, 2008 (Principal Investigator, McKibben Demographic Research).

Evaluation of methods used to estimate vacancy rates and average persons for households (\$25,000), U. S. Bureau of the Census, Summer 2007- Fall 2008.

Multi-Year Estimates, American Community Survey, (\$5,500). U. S. Bureau of the Census, Summer, 2007.

Evaluation of Methods used to Estimate the Size and Composition of the Foreign-Born Population (\$27,000). U.S. Bureau of the Census, September, 2006 (through Sabre Systems, Inc.), Spring 2007 - Fall 2007.

Enrollment Forecasting and Attendance Boundary Study. (\$12,000). Harrison County School District, Biloxi, MS., Fall, 2006. (Principal Investigator, J. McKibben).

Small Area Labor Force and Population Projections. (\$7,500). Southern Nevada Regional Planning Commission (Subcontract with Theodore Roosevelt Institute, Las Vegas, NV), Summer, 2006

Population Projections of the Chinese Population by Age and Sex for 22 Selected Counties. (\$1,500). Third Wave Research, Inc. Madison, Wisconsin. November 2004.

Population Projections for Native Hawaiians. (\$9,871.24). Policy Analysis and System Evaluation, Kamehameha Schools, Honolulu, Hawaii. May 2004.

Forecasting Headcount Enrollment at the Southaven Satellite Campus, (\$2,000). Office of Outreach and Continuing Education, University of Mississippi. December 2003.

Estimation and Forecasting of U.S. Lifestyle Segments, 2002 to 2012 (\$6,500), Third Wave Research, Inc., Madison, Wisconsin. October, 2002.

Review and Revision of Demographic Forecasts for Jubail, Saudi Arabia (\$20,000), Parsons Brinckerhoff, Inc., Jubail, Saudi Arabia, July, 1999.

Demographic Mentoring and Instruction (\$3,000), Western Washington University, Bellingham, Washington, 1999.

Washoe County Population Estimation System Development (\$24,900), Washoe County Nevada. 1999.

Redesign of the Nevada State Population Forecasting Model (\$12,000), Nevada Consulting Alliance/Nevada State Demographer's Office. 1998-99.

Census Enumerator, Crew Leader, and Supervisor Training, Neighborhood Census Project (\$2,500), Portland Multnomah Progress Board (funded by a grant from the Anne E. Casey Foundation), Portland, Oregon. 1997.

Evaluating Response Rates for the American Community Survey, Portland Test Site, (\$2,000) U.S. Bureau of the Census. 1997.

Estimating Household Income from Incomplete Data (\$25,000), Metromail, Inc. 1997.

Liberal Education Profile, Portland State University (\$70,000), Portland State University. 1997 (with D. Atkinson).

Forecasting Enrollment and Attendance Zone Changes for the Hillsboro 1J District (\$77,000), Hillsboro 1J School District, Oregon, 1995-1996 (with D. Lycan, G. Hough, and I. Sharkova).

Forecasting Enrollment for the Newberg School District (\$5,000), Newberg School District, Oregon, 1996.

Estimating and Forecasting U.S. Lifestyle Segments, 1990 to 2010 (\$5,000), Third Wave Research, Inc. (with T. Bryan and G. Hough)

Omnibus Contract for Income Surveys, Community Development Block Grants (\$18,000), Oregon Department of Economic Development, 1996.

Tribal Membership Forecast (\$1,400). The Confederated Tribes of the Grand Ronde Community of Oregon, 1995.

"Demographic Services" for Study included in ADAMNA Grant No. P50 MH48197-03, entitled "Center For Rural Mental Health Care Research" (\$7,198). University of Arkansas for Medical Sciences, 1992-93.

"Kitsap County Open Space Poll." Consultation and Training of a Volunteer Organization to conduct Polling in support of a proposed open-space Bond Issue, Kitsap County, Washington (\$3,000). Kitsap Citizens for Open Space, 1992.

"Pierce County Private Industry Council, Evaluation of Programs." (\$25,000). Pierce County Private Industry Council. 1991. (with J. Schiller and K. McDade).

Pierce County Solid Waste Management Survey: (\$12,000). Jacobsen Ray McLaughlin and Phillips, Inc., 1991.

"1991 Tacoma-Pierce County Quality of Life Survey." Module on Mental Health Issues (\$3,000). Greater Lakes Mental Health Foundation, 1991.

"Implementation of the REMI Socioeconomic Forecasting Model in support of the SAIC/YMPO socioeconomic monitoring program and SCA model development." (\$29,000). Science Applications International Corporation, Yucca Mountain Project Office. U.S. Department of Energy, 1991.

"1990 Tacoma-Pierce County Quality of Life Survey." Module on health Issues (\$6,000). Tacoma-Pierce County Health Department.

1990. "Implementation of the REMI Socioeconomic Forecasting Model, in support of the SAIC/YMPO socioeconomic monitoring program and SCA model development." (\$38,000). Science Applications International Corporation, Yucca Mountain Project Office. U.S. Department of Energy, 1990.
- "Review and Analysis of the Demographic Module of the EDFs-S REMI Module." (\$6,380). Science Applications International Corporation, Yucca, Mountain Project Office, U.S. Department of Energy, 1989-90.
- "Small Area Model Development for the High Level Radioactive Waste Repository." (\$10,000). Battelle Human Affairs Research Centers, 1989.
- "1989 Tacoma-Pierce County Solid Waste Management Survey." module on hazardous and other household wastes (\$6,000). Pierce County Waste Management Division, Pierce County, Washington, 1989.
- "Pierce County Solid Waste Management Survey." (\$17,000). Pierce County, Washington (Co-Investigator with J. Schiller), 1988.
- 1988 "Tacoma Area Quality of Life Survey," module on racial issues (\$2,000). Tacoma Urban League (Co-Investigator with J. Schiller), 1988.
- "Evaluation of the Demographic Component of the HARC/REMI Economic Demographic Model (\$3,000). Battelle Human Affairs Research Centers, 1988.
- 'Survey of Applied Demographers." (\$1,500). Population Association of America, 1986-87.
- "Life Tables By Sex, 1980 and 1970 and Net Migration By Age and Sex, 1970-80 and 1960-70 For Ohio." (\$750). Final Report submitted to the Ohio Data User's Center, Department of Development, December, 1984.
- "Technical Data Services." (\$2,500). Alaska Reapportionment Board, 1981. 1980 Census Computer Tape Acquisition and Evaluation" (\$3,000). Washington State Redistricting Board, 1979.

C. Research Grants Awarded

- "Measuring Health Status for Populations with Incomplete Census & Vital Statistics Information: Estimating Life expectancy at Birth." (\$9,861). COR Fellowship. University of California Riverside. 2017.
- "Socio-Economic Status, Race, and Life Expectancy in Los Angeles County, 1970-1990: A Proof of Concept Proposal for \$20,100 in Funds under Strategic Goal 1. (\$20,100) College of Humanities, Arts, and Social Sciences, University of California (Principal Investigator). 2011-2012.
- "Virtual Co-laboratory for Policy Analysis in Greater Los Angeles" (\$2,300,000). UC Multicampus Research Program and Initiatives, University of California. (Co-Investigator with Richard Arnott et al.). 2010-2014.
- "Perceptions of Disaster Relief and Recovery: Analyzing the Importance of Social and Kinship Networks Among Hurricane Katrina Refugees on the Mississippi Gulf Coast." (\$96,212). National Science Foundation (Co-Principal Investigator with F. Forgette and M. Van Boening), 2005-6.
- "Interdisciplinary Working Group to Develop a Strategy for the Development of an NICHD Population and Health Research center in Mississippi." (\$9,400). Office of Research and Sponsored Programs, University of Mississippi (Principal Investigator, with Co-Investigators, Fazlay Faruque and Peggy Hewlett). 2005-6.
- "Applied Demographic Research in Migration" (\$40,000). National Science Foundation (Co-Director with L.M. Tedrow), 1991.

"Applied Demographic Research in Migration" (\$40,000). National Science Foundation (Co-Director with L.M. Tedrow), 1989.

"Applied Demographic Research in Migration" (\$40,000). National Science Foundation (Co-Director with L.M. Tedrow), 1988.

"VCR Survey" (\$1,500). Kaltborn Foundation (with B. Klopfenstein), 1987.

VCR Survey" (\$5,000). National Association of Broadcasters (with B. Klopfenstein), 1987.

"Pilot Survey of VCR Use" (\$1,500). Kaltborn Foundation, 1986.

"Pilot Survey of VCR Use" (\$2,730). Bowling Green State University, 1986.

"Socioeconomic Correlates of Infant Mortality: Ohio, 1980" (\$90,000). U.S. Department of Health and Human Services. (Co-principal Investigator with E.G. Stockwell and J. Wicks), 1985-86.

D. Program Grants Awarded

"Transition Funding for the BScBA Degree Conversion, Phase II (€100,000), European Union Objective 1 Program (with V-P. Heiskanen). 2002

"Transition funding for the BScBA Degree Conversion, Phase I (€200,000), European Union Objective 1 Program (with V-P. Heiskanen), 2001

"BBA Program Development" (€200,000) European Union Objective 1 Program (with J. Masalin), 2000.

"Academic Challenge: Developing an Applied Demography Program, Bowling Green State University" (\$121,336). Ohio Board of Regents (with M. Pugh et al.), 1986.

VII. Publications

A. Books and Monographs

Socio-demographic Perspectives on the COVID-19 Pandemic. (Forthcoming) Co-editor with Richard Verdugo. Information Age Publishing, Charlotte, NC.

Global Populations in Transition (2018). Co-author with Jo Martins and Fei Guo. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York.

Cohort Change Ratios and Their Applications. (2017). Co-author with Jack Baker, Jeff Tayman, and Lucky Tedrow. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York.

The Frontiers of Applied Demography. (2016) Editor. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York.

The Washington State Census Board and Its Demographic Legacy. (2016). Springer B.V. Press. Dordrecht, Heidelberg, London, and New York.

Methods of Demographic Analysis. (2014). Co-author with Farhat Yusuf and Jo Martins. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York.

A Practitioner's Guide to State and Local Population Projections. (2013). Co-author with Stanley K. Smith and Jeff Tayman. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York.

Subnational Population Estimates. (2012). Co-author with Jeff Tayman. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York.

Opportunities and Challenges for Applied Demography in the 21st Century. (2012). Co-Editor with Nazrul Hoque. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York .

Learning Statistics: A Manual for Sociology Students.(2012). Cognella Academic Publishing/University Readers. San Diego, CA.

An Introduction to Consumer Demographics and Behaviour: Markets are People. (2011). Co-author with Farhat Yusuf and Jo Martins. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York.

Estimating Characteristics of the Foreign-Born by Legal Status: An Evaluation of Data and Methods (2011). Co-author with Dean Judson. Springer Briefs in Population Studies, Volume 2, Springer, B.V. Press. Dordrecht, Heidelberg, London, and New York.

CEMAF as a Census Method: A Proposal for a Re-Designed Census and an Independent Census Bureau. (2011). Co-author with Paula Walashek. Springer Briefs in Population Studies, Volume 1, Springer, B.V. Press. Dordrecht, Heidelberg, London, and New York

Applied Demography in the 21st Century. (2008). Co-Editor with Steve Murdock. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York.

Southern Nevada Regional Economic Study (2006). Co-author with Alan Schlottmann, Robert Schmidt, and Edward Feser. Theodore Roosevelt Institute. Irvine, CA and Las Vegas, NV.

The Methods and Materials of Demography, 2nd Edition.. (2004). Co-Editor with Jacob Siegel. Academic/Elsevier Press: Los Angeles.

Population Projections for States and Local Areas: Methodology and Analysis. (2001). Co-author with Stanley K. Smith and Jeff Tayman. Kluwer Academic /Plenum Press: New York.

Issues In Applied Demography: Proceedings of the 1986 National Conference (1987) Co-Editor with Jerry Wicks. PSRC Press: Bowling Green, Ohio.

Socioeconomic Correlates of Infant Mortality-Ohio, 1980. Final Report for the Maternal and Child Health and Crippled Service Program, Grant MCJ-390520-01 (1986) Co-author with Edward G. Stockwell and Jerry Wicks.

Alaska Population Overview: 1982. Alaska Department of Labor (1983). Editor.

Alaska Population Overview: 1981. Alaska Department of Labor (1982). Editor.

B. Book and Monograph Chapters

Swanson, D. R. Sewell and T. Bryan (2021). The Effect of the Differential Privacy Disclosure Avoidance System Proposed by the Census Bureau on 2020 Census Products: Four Case Studies of Census Blocks in Alaska. pp. 2058-2062 in JSM 2021: Statistics, Data, and the Stories They Tell. American Statistical Association, Alexandria, VA.

"Estimating the underlying infant mortality rates for small populations: A case study of counties in Estonia." (2021), pp. 3-21 in R. Verdugo (Ed). The Demographic Crisis in Europe: Selected Essays. Information Age Publishing. Charlotte, NC.

"Constructing Life Tables from the Kaiser Permanente Smoking Study and Applying the Results to the Population of the United States." (2020) pp.115-152 in B. Jivetti and M. N. Hoque (eds.), Population Change and Public Policy. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York. (with S. Chow and T. Bryan).

"The Number of Native Hawaiians and Part-Hawaiians in Hawai'i, 1778 to 1900: Demographic Estimates by Age." (2020) pp. 345-356 in B. Jivetti and M. N. Hoque (eds.), Population Change and Public Policy. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York.

"A Bio-demographic Perspective on Inequality and Life Expectancy: An Analysis of 159 Countries for the Periods 1970-90 and 1990-2010." (2018) pp. 577- 613 in C.R. Rao and A. Rao (eds.), Handbook of Statistics, Vol. 38. Elsevier Press (with L. Tedrow).

"Foreword." (2016). pp. v-vi in T. Wilson, E. Charles-Edwards, and T. Bell (eds.) Demography for Planning and Policy: Australian Case Studies. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York.

"Demographics and Market Segmentation: China and India." (2016). pp. 3-19 in D. Swanson (ed.) The Frontiers of Applied Demography. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York. (with J. Martins, F. Yusuf, and G. Brooks).

"Census Costs: Rationale for Re-designing Traditional Census Data Collection Methodology with the Census-Enhanced Master Address File" (2016). pp. 287-301 in D. Swanson (ed.) The Frontiers of Applied Demography. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York. (with A. Yacyshyn).

"A Long Term Test of the Accuracy of the Hamilton-Perry Method for Forecasting State Populations by Age."(2016). pp. 491-513 in D. Swanson (ed.) The Frontiers of Applied Demography. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York. (with J. Tayman).

"Exploring Stable Population Concepts from the Perspective of Cohort Change Ratios: Estimating the Time to Stability and Intrinsic r from Initial Information and Components of Change." (2016) pp. 227-258 in R. Schoen (ed.). Dynamic Demographic Analysis. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York. (with L. Tedrow and J. Baker).

"An Exploratory Examination of Population and Stability in Afghanistan." (2015). pp. 305-322 in R. Sáenz, N. Rodríguez, and D. Embrick (eds.). The International Handbook of the Demography of Race and Ethnicity. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York. (with S. El-Badry).

"Applied Demography" (2015). pp. 839-844 in: James D. Wright (editor-in-chief). International Encyclopedia of the Social & Behavioral Sciences. 2nd edition, Vol 1. Oxford: Elsevier.

"On the Ratio-correlation Method of Population Estimation and Its Variants." (2014). pp. 93-118 in N. Hoque and L. Potter (eds.). Emerging Techniques in Applied Demography. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York. (with J. Tayman).

"A Loss Function Approach to Examining ACS Estimates: A Case Study of 2010 "Person per Household" Estimates for California Counties" (2012). pp. 98-100 in (D. Cork, Ed.) Case Studies/Agenda Book, Workshop on the Benefits (and Burdens) of the American Community Survey. National Research Council, National Academy of Sciences, Washington, DC. (with George Hough).
http://sites.nationalacademies.org/cs/groups/dbassessite/documents/webpage/dbasse_073124.pdf

"DOMICILE 1.0: An Agent-Based Simulation Model for Population Estimates at the Domicile Level." (2012). pp. 345-370 in N. Hoque and D. A. Swanson (eds.) Opportunities and Challenges for Applied

Demography in the 21st Century. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York. (with C. Griffith, M. Knight, and B. Long).

"Introduction." (2012) pp. 1-3 in N. Hoque and D. A. Swanson (eds.) Opportunities and Challenges for Applied Demography in the 21st Century. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York (with N. Hoque).

"Disappearing Hispanics? The Case of Los Angeles County, California: 1990-2000." (2011) pp. 95-122 in R. Verdugo (ed.). The Demography of the Hispanic Population: Selected Essays. Charlotte, NC: Information Age Publishing. Charlotte, NC. (with M. Kaneshiro and A. Martinez).

"Applied Demography: Its Business and Public Sector Components." (2008) in Yi Zeng (ed.) The Encyclopedia of Life Support Systems, Demography Volume. UNESCO-EOLSS Publishers. Oxford, England. (with L. Pol). (Online at <http://www.eolss.net/>).

"Applied Demography at the Beginning of the 21st Century." (2008) pp. 3-12 in S. Murdock and D. Swanson (eds.). Applied Demography in the 21st Century. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York. (with S. Murdock).

"Measuring Uncertainty in Population Data Generated by the Cohort-Component Method: A Report on Research in Progress." (2008) pp. 165-189 in S. Murdock and D. Swanson (eds.). Applied Demography in the 21st Century. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York.

"Opportunities and Challenges for Applied Demography in the 21st Century" (2008). pp. 361-368 in S. Murdock and D. Swanson (eds.). Applied Demography in the 21st Century. Springer B.V. Press. Dordrecht, Heidelberg, London, and New York.. (with S. Murdock).

"Introduction." pp. 1 - 8 in J. Siegel and D. Swanson (eds.) The Methods and Materials of Demography, Condensed Edition, Revised. (2004). Academic/Elsevier Press: Los Angeles. (with J. Siegel).

"Internal and Short Distance Migration." pp. 493-522 in J. Siegel and D. Swanson (eds.) The Methods and Materials of Demography, Condensed Edition, Revised. (2004). Academic/Elsevier Press: Los Angeles. (with T. Bryan and P. Morrison).

"Population Projections." pp. 561-601 in J. Siegel and D. Swanson (eds.) The Methods and Materials of Demography, Condensed Edition, Revised. (2004). Academic/Elsevier Press: Los Angeles. (with M.V. George, S. Smith, and J. Tayman).

"Glossary and Demography Timeline" pp. 751-786 in J. Siegel and D. Swanson (eds.) The Methods and Materials of Demography, Condensed Edition, Revised. (2004). Academic/Elsevier Press: Los Angeles. (with G.E. Stephan).

"Regional Survey." pp. 3-151 to 3-155 in Viability Assessment for A Repository at Yucca Mountain, Nevada. 1998. U.S. Department of Energy: Washington, D.C.

"Evaluation Approach for the Arkansas Pilot Rural Enterprise Center." pp. 114-119 in P. Shapira and J. Youtie (eds.) Evaluating Industrial Modernization Programs: Practices, Methods, and Results. 1995. Georgia Institute of Technology: Atlanta, GA. (with J. Opitz, C. Franklin, S. Miller, and F. Fenix).

"Confidence Intervals for Net Migration that Incorporate Measurement Errors in Census Counts." pp. 121-140 In K. V. Rao and J. Wicks (eds.) Issues in Applied Demography: Proceedings of the International Conference on Applied Demography. 1994. PSRC Press: Bowling Green, Ohio (with H. Kintner).

"Estimating Vital Rates from Corporate Databases: How Long Will General Motors' Salaried Retirees Live?" pp. 265-297 in H. Kintner, T. Merrick, P. Morrison, and P. Voss (eds.) Demographics: A Casebook For Business and Government. 1994. Westview Press: Boulder, Colorado (with H. Kintner).

"Overview of Demography and Management Issues in Business." pp. 92-93 In J. Wicks and D. Swanson (eds.) Issues in Applied Demography: Proceedings of the 1986 National Conference. 1986. PSRC Press: Bowling Green, Ohio. 1987.

"Public Opinion," Chapter II in A Report to the Governor and the Legislature: The Community College System in Washington. Washington State Board for Community College Education: Olympia, WA 1980. (with R. Bell).

C. Refereed Journal Articles

- 2022 Global Under-reporting of COVID-19 cases from January 1, 2020 to May 6, 2022." Current Science (<https://www.currentscience.ac.in/Volumes/123/06/0741.pdf>) (with S. Krantz and A Rao).
- 2022 Using Taylor's Law to Estimate Variance in Annual Unemployment by State." Review of Economics and Finance (<https://refpress.org/ref-vol20-a18/>) (with J. Tayman).
- 2022 "Two New Mathematical Equalities in the Life Table." Canadian Studies in Population (<https://doi.org/10.1007/s42650-022-00065-3>) (with L.M. Tedrow).
- 2022 "Forecasting a Tribal Population using the Cohort-Component Method: A Case Study of the Hopi." Population Research and Policy Review (<https://doi.org/10.1007/s11113-022-09715-5>).
- 2022 "Taylor's Law and the Relationship between Life Expectancy at Birth and Variance in Age at Death in a Period Life Table. Population Review 61 (1): 31-42. (with L. Tedrow).
- 2021 "An Example of Converting Clinical Study Mortality Data into a Life Table: The U.S. Population with Sickle Cell Disease." Open Journal of Public Health. 3 (1): 1-5.
2021. "On Mathematical Equalities and Inequalities in the Life Table: Something Old and Something New." Canadian Studies in Population 48 (June): 225-237 <https://link.springer.com/article/10.1007/s42650-021-00044-0> (with L. Tedrow).
- 2021 "Using Synthetic Adjustments and Controlling to Improve County Population Forecasts from the Hamilton-Perry Method." Population Research and Policy Review <https://doi.org/10.1007/s11113-021-09646-7> (with J. Tayman and J. Baker).
- 2021 "The Accuracy of Hamilton-Perry Population Projections for Census Tracts in the United States." Population Research and Policy Review. <https://doi.org/10.1007/s11113-020-09601-y> (with J. Baker and J. Tayman).
- 2020 "How Relevant is the Basic Reproductive Number Computed during COVID-19, Especially during Lockdowns?" Infection Control and Hospital Epidemiology Dec 14;1-7. doi: 10.1017/ice.2020.1376. Online ahead of print. (with A. Rao, S. Krantz, M. Bonsall, T. Kurien S. N. Byrareddy, R. Bhat and S. Kurapati).
2020. "Estimating the underlying death rate of a small population: A case study of counties in Kansas, Nebraska, North Dakota, and South Dakota." Transactions of the Kansas Academy of Science 123 (3-4): 353-369 (with J. Baker and A. Kposowa).

- 2020 "Estimating the Underlying Infant Mortality Rates for Small Populations, Even Those Reporting Zero Infant Deaths: A Case Study of 42 Counties in Mississippi." Journal of the Mississippi Academy of Sciences 65 (2): 183-197 (with R. Cossman).
2019. "A New Estimate of the Hawaiian Population for 1778, the Year of First European Contact." Hūlili 11 (2): 203-222.
2019. "Estimating the stochastic uncertainty in sample-based estimates of infant mortality in Ghana." Journal of Economic and Social Measurement 44: 161-175. (with J. Baker and A. Kposowa).
2019. "Estimating the underlying infant mortality rates for small populations, even those reporting zero infant deaths: A case study of 66 local health areas in British Columbia." Canadian Studies in Population 46 (2): 173-187
2019. The Civil War's Demographic Impact on White Males in the 11 Confederate States: An Analysis by State and Selected Age Groups." Journal of Political and Military Sociology 46 (1): 1-26 (with R. Verdugo).
2019. "Estimating the underlying infant mortality rates for small populations: An historical study of US counties in 1970." Journal of Population Research 36 (3): 233-244 (with Jack Baker).
- 2019 Estimating the underlying infant mortality rates for small populations, including those reporting zero infant deaths: A case study of counties in California." Population Review 58 (2): 1-22 (with J. Baker and A. Kposowa).
2018. "A Note on rescaling the arithmetic mean for right-skewed positive distributions." Review of Economics and Finance 14 (4):17-24 DOI Article ID: 1923-7529-2018-04-17-08 (with Jeff Tayman and Tom Bryan).
2017. "Using Modified Cohort Change and Child Woman Ratios in the Hamilton-Perry Forecasting Method." Journal of Population Research 34 (3): 209-231. (with J. Tayman).
2017. "The Civil War's Demographic Impact on White Males in Mississippi." Journal of the Mississippi Academy of Sciences 62 (3). (with R. Verdugo).
2016. "New Insights on the Impact of Coefficient Instability on Ratio-Correlation Population Estimates." Journal of Economic and Social Measurement 41: 121-143 (with J. Tayman).
2015. "On the Relationship among Values of the same Summary Measure of Error when it is used across Multiple Characteristics at the same point in time: An Examination of MALPE and MAPE." Review of Economics and Finance 5 (1): 1-14.
2013. "Consumer Demographics: Welcome to the Dark Side of Statistics." Radical Statistics 108: 38-46.
2012. "Socio-Economic Status and Life Expectancy in the United States, 1990-2010: Are We Reaching the Limits of Human Longevity?". Population Review 51 (2): 16-41 (with A. Sanford).
2012. "Population, the Status of Women, and Stability in Afghanistan." The Southern Africa Journal of Demography 13 (1): 5- 36 (with S. El-Baldry).
2012. "Using Cohort Change Ratios to Estimate Life Expectancy in Populations with Negligible Migration: A New Approach." Canadian Studies in Population 39: 83-90. (with L. Tedrow).

2012. "An Evaluation of Persons per Household (PPH) Data Generated by the American Community Survey: A Demographic Perspective." Population Research and Policy Review 31: 235-266. (with G. Hough).
2011. "On Estimating a De Facto Population and Its Components." Review of Economics and Finance 5:17-31 (with J. Tayman).
2011. "MAPE-R: A Rescaled Measure of Accuracy for Cross-Sectional, Sub-national Forecasts." Journal of Population Research 28: 225-243 (with T. Bryan and J. Tayman).
2011. "Immigration and its Effect on Demographic Change in Spain." The Open Demography Journal 4:22-33 (with R. Verdugo).
2010. "New Directions in the Development of Population Estimates in the United States?". Population Research and Policy Review 29 (6): 797-818 (with J. McKibben).
2010. "Socio-economic Status and Life Expectancy in Indiana, 1970-1990." The Open Demography Journal 3:1-7. (with N. Hoque).
- 2010 "Business Demography in the 21st Century." Population Research and Policy Review. 29 (1): 1-3 (with F. Yusuf).
- 2010 "Forecasting the Population of Census Tracts by Age and Sex: An Example of the Hamilton-Perry Method in Action." Population Research and Policy Review 29 (1): 47-63 (with A. Schlottmann and R. Schmidt).
2010. "Teaching Business Demography Using Case Studies". Population Research and Policy Review. 29 (1): 93-104 (With P. Morrison).
- 2010 "Towards a Comprehensive Quality Assurance System for Degree Programs in Higher Education." The Montana Professor 20(1): 13-20.
- 2009 "Socio-Economic Status and Life Expectancy in the United States, 1970-1990." Population Review 48 (1): 39-63 (with Mary McGehee and Nazrul Hoque)
(Reprinted in the Special 60th Anniversary Issue of Population Review, 2021)
- 2009 "The Socio-Demographic and Environmental Effects of Katrina: An Impact Analysis Perspective". The Open Demography Journal. 2 (11): 36-46. (with R. Forgette, J. McKibben, M. Van Boening, and L. Wombold).
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I. Book Reviews

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VIII. Papers Read at Professional Conferences

A. Contributed Refereed Papers

"Boosted Regression Trees for Small-Area Population Forecasting." Presented at the 2022 Conference of the Southern Demographic Association, Knoxville, TN (with J. Baker and J. Tayman).

"Expert Judgment & Standard Small Area Projection Methods: Population Forecasting for Water District Needs." Presented at the 2022 Conference of the Southern Demographic Association, Knoxville, TN (with T. Bryan, M. Hattendorf, K. Comstock, L. Starosta, and R. Schmidt).

"Repurposing record matching algorithms to identify blocks and block groups affected by Differential Privacy: Progress Report on a Pilot Project." Presented at the 2022 Small Area Estimation Conference, Session on Challenging Problems from SAE and Modern Data Science, May 26 (with T. Bryan).

"Producing Summary Statistics of COVID-19 cases and deaths over time: The case for using geometric measures, not arithmetic ones. Presented at the 2022 Conference of the Canadian Population Association, Session on Covid-19 and Mortality, May 10 (with R. Verdugo, A. Rao, and S. Krantz).

"Boosted Regression Trees for Small-Area Population Forecasting." Presented at the Annual Meeting of the Population Association of America, Session on Challenges Facing Small Area Forecasting and Estimation. Atlanta, GA. February 1st, 2022. (with J. Baker and J. Tayman).

"Taylor's Law and the Relationship between Life Expectancy at Birth and Variance in Age at Death in a Period Life Table." Presented at the Annual Meeting of the Population Association of America, Session on Mathematical Demography. Atlanta, GA. April 9th, 2022. (with L. M. Tedrow).

"Forecasting a Tribal Population using the Cohort-Component Method: A Case Study of the Hopi." Presented at the Annual Meeting of the Population Association of America, Session on Old Wine in New Bottles: Tools for Applied Demographers, Atlanta, GA, April 8th, 2022.

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"An Example of Converting Clinical Study Data into a Life Table: A Life Table for the U.S. Population with Sickle Cell Disease." Presented at the 2021 Applied Demography Conference, February 1-4 (<https://www.populationassociation.org/events-publications/adc-2021>).

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David Swanson. Presented at the 2021 Applied Demography Conference, February 1-4 (<https://www.populationassociation.org/events-publications/adc-2021>).

"The End of the Census." Presented at the Annual Meeting of the American Statistical Association, Philadelphia, PA 1-6 August, 2020 (with P. Walashek).

"Estimating the underlying infant mortality rates for small populations: A case study of counties in Estonia." Presented at the Annual Meeting of the Population Association of America, Austin, Texas, 10-13 April, 2019

"Constructing Life Tables from the Kaiser Permanente Smoking Study and Applying the Results to Models Designed to assess the Population Health Impact of Reduced Risk Tobacco Products." Presented at the Population & Public Policy Conference, Albuquerque, NM, 8-10 February, 2019 (with L. Wei, T. Hannel, R. Muhammad-Kah, T. Bryan and S. Chow).

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"A "Blind" Ex Post Facto Evaluation of Total Population and Total Household Forecast for Small Areas Made by Five Vendors for 2010: Results by Geography and Error Criteria." Presented at the 2012 Conference of the Canadian Population Society, Waterloo, Ontario, Canada. (with M. Cropper, J. McKibben, and J. Tayman).

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"Socio-Economic Status and Life Expectancy in Mississippi, 1970 to 1990." Presented at the 2009 Conference of the Canadian Population Society, 27-29 May, Ottawa, Ontario, Canada (with M. McGehee).

"An Evaluation of Data Generated By the American Community Survey." Presented at the 2008 Conference of the European Association for Population Studies, 9-12 July, Barcelona, Spain (with G. Hough).

"An Evaluation of Persons Per Household (PPH) Data Generated By the American Community Survey: A Demographic Perspective." Presented at the 2008 Conference of the Canadian Population Society, 4-6 June, Vancouver, British Columbia, Canada (with G. Hough).

"Assessing Katrina's Impact on the Mississippi Gulf Coast: A Report on Completed Research." Presented at the 2008 Conference of the Population Association of America, 17-19 April, New Orleans, LA (with R. Forgette and M. Van Boening).

"The Demographic Effects of Hurricane Katrina on the Mississippi Gulf Coast: An Analysis by Zipcode." Presented at the 2008 Conference of the Mississippi Academy of Sciences, 20-22 February, Olive Branch, Mississippi.

"Teaching Business Demography Using Case Studies with Demographic Cases." Presented at the 2007 special seminar on Business Demography, International Union for the Scientific Study of Population, 8-9 October, Sydney, Australia (with P. Morrison).

"New Directions in the Development of Population Estimates and Projections ." Presented at the 2007 Conference of the International Statistical Institute, Satellite Conference on Small Area Statistics, Pisa, Italy. 3-5 September. (with J. McKibben).

"Assessing Katrina's Demographic and Social Impacts on the Mississippi Gulf Coast: Preliminary Results ." Presented at the 2007 Conference of the American Statistical Association, 29 July – 3 August, Salt Lake City, UT (with M. Van Boening and R. Forgette).

"Assessing Katrina's Impact on the Mississippi Gulf Coast: Social Network Effects." Presented at the 2007 Applied Demography Conference, 7-9 January, San Antonio, Texas (with R. Forgette, M. Van Boening, and B. Dettrey).

"Forecasting the Population of Census Tracts by Age and Sex: An Example of the Hamilton-Perry Method in Action." Presented at the 2007 Applied Demography Conference, 7-9 January, San Antonio, Texas (with A. Schlottmann and R. Schmidt).

"Measuring Uncertainty in Population Data Generated by the Cohort-Component Method: A Report on Research in Progress." Presented at the 2007 Applied Demography Conference, 7-9 January, San Antonio, Texas.

"Toward Measuring Uncertainty in Population Data Generated by the Cohort-Component Method." Presented at the 2006 Annual Meeting of the British Society for Population Studies, 19-21 September, Southampton, England.

"Population Ageing and the Measurement of Dependency: The Case of Germany." Presented at the 2006 Meeting of the European Association for Population Studies. 20-24 June, Liverpool, England.

"Research on the Impacts of Hurricane Katrina on the Mississippi Gulf Coast." Presented at the Annual Meeting of the Southern Demographic Association, 3-5 November, 2005. Oxford, Mississippi.

"Contemporary Developments in Applied Demography within the United States." Presented at the 2005 Conference of the International Union for the Scientific Study of Population, 18-23 July, 2005. Tours, France. (with L. Pol).

"Controversy over Providing Special Census Tabulations to Government Security Agencies: the Case of Arab-Americans." Presented at the 2005 Conference of the International Union for the Scientific Study of Population, 18-23 July, 2005. Tours, France. (with S. El-Baldry).

"A Comparison of In-Class and On-line Student Evaluations." Presented at the Annual Meeting of the Mississippi Academy of Sciences, 16-18 February, 2005. Oxford, Mississippi.

"On MAPE-R as a Measure of Estimation and Forecast Accuracy." Presented at the Annual Meeting of the Southern Demographic Association. 14-16 October, 2004. Hilton Head. SC. (with C. Coleman).

"19th Century Roots of Contentious Litigation over Census Counts in the late 20th Century." Presented at the Hawaii International Conference on the Social Sciences, 16-19 June, 2004. Honolulu, HI (with P. Walashek).

"An Evaluation of the American Community Survey: Preliminary Results from a County Level Analysis of the Oregon Test Site." Presented at the Annual Meeting of the Mississippi Academy of Sciences, February 18th to 20th, 2004, Biloxi, Mississippi (with G. Hough).

"Advancing Methodological Knowledge within State and Local Demography: A Case Study." Presented at the Annual Meeting of the Southern Demographic Association, October 23rd to 25th, 2003, Alexandria, Virginia.

"Contemporary Developments in Applied Demography in the U.S." presented at the European Population Conference, Warsaw, Poland, August 23-26, 2003 (with L. Pol).

"Using Cases in the Teaching of Statistics." presented at the annual meeting of the World Association for Case Method Research and Application, Bordeaux, France, June 29th to July 2nd, 2003 (with R. Patten).

"MAPE-R: Its Features and Results from a National Block-Group Test." Presented at the Annual Meeting of the American Statistical Association, New York City, New York, August 13, 2002. (with T. Bryan, J. Tayman, and C. Barr).

"Applied Demography in Action: A Case Study of 'Population Identification'." Presented at the Annual Meeting of the Population Association of America, Atlanta, Georgia, May 10, 2002.

"New Directions in Population Forecasting." Presented at the 4th International Conference on Prediction and Non-Linear Dynamics, Tomas Bata University, Zlin, Czech Republic, September 25-26, 2001 (with S. Smith and J. Tayman).

"Leveraging Extant Data to Meet Local Information Needs: A Case Study in Team Applied Demography." Presented at the Annual Meeting of the Population Association of America, March, 2000, Los Angeles, California (with P. Morrison, C. Popoff, I. Sharkova, and J. Tayman).

"We are What We Measure: Toward A New Approach for Assessing Population Forecast Accuracy." Presented at the Annual Meeting of the Southern Demographic Association, October 29th, 1999, San Antonio, Texas. (with J. Tayman and C. Barr).

"On Measuring Accuracy in Subnational Demographic Forecasts." Presented at the 52nd Congress of the International Statistical Institute, Helsinki, Finland, August 18, 1999 (with J. Tayman and C. Barr).

"Population Estimates from Remotely Sensed Data: A Discussion of Recent Technological Developments and Future Research Plans." Presented at the Annual Meeting of the Canadian Population Society, Lennoxville, Quebec, Canada, June, 1999 (with J. Wicks, R. Vincent, and J. Luiz Pereira De Almeida).

"Teaching Statistics to Non-Specialists in an Intercultural Setting: Addressing Issues of Understanding and Retention in a Modern Learning Environment." Presented at the Mid-Term Conference of the Sociology of Education Research Committee, International Sociological Association, Joensuu, Finland, June, 1997. (with J. McKibben).

"A Computer-Based Curriculum For Service Courses In Statistics." Presented at the International Conference On Problems of Statistical Education, St. Petersburg, Russia, July, 1996 (with J. McKibben).

"In Defense of The Net Migrant." Presented at the 1996 Annual Meeting of the Population Association of America, New Orleans, Louisiana (with S. Smith).

"What Is Applied Demography?" Presented at the 1996 Annual Meeting of the Population Association of America, New Orleans, Louisiana (with T. Burch and L. Tedrow).

"Alternative Measures For Evaluating Population Forecasts: A Comparison of State, County, and Sub-county Geographic Areas." Presented at the 1995 Annual Meeting of the Population Association of America, San Francisco, California (with J. Tayman).

"Changes in Factories, Changes in Accuracies: On the Relationship Between Economic Structure and the Ratio-Correlation Method of Population Estimation." Presented at the 1994 Annual Meeting of the Southern Demographic Association, Atlanta, Georgia (with J. McKibben).

"Forecasting Health Benefits Populations." Presented at the XIVth International Symposium on Forecasting, Stockholm, Sweden (with H. Kintner).

"Between A Rock and A Hard Place: The Evaluation of Demographic Forecasts." Presented at the XIVth International Symposium on Forecasting, Stockholm, Sweden (with J. Tayman).

"Construction of Confidence Intervals for Population Forecasts Generated by the Cohort-Component Method." Presented at the 1994 Annual Meeting of The Population Association of America, Miami, Florida (with D. Arnold, J. Carlson, H. Kintner, and C. Williams).

"Ties that Bind: Families, Organizational Demography, and Health Benefits." Presented at the 1994 Annual Meeting of The Population of America, Miami, Florida (with H. Kintner).

"Measuring the Utility of Population Projections." Presented at the 1994 Annual Meeting of The Ohio Academy of Science. Toledo, Ohio (with J. Tayman).

"Mean Square Error Confidence Intervals for Intercensal Net Migration Estimates: A Case Study of Arkansas 1980-1990." Presented at the 1993 Annual Meeting of the Southern Demographic Association, New Orleans, Louisiana (with H. Kintner and M. McGehee).

"Estimating Demographic Rates From Employer Administrative Database." Presented at the 1993 Annual Meeting of the International Union for the Scientific Study of Population, Montreal, Quebec (with H. Kintner).

"Evaluation of Ratio-Correlation and Difference-Correlation Methods for Estimating County Populations: The Case of Post-Industrial Indiana." Presented at the 1993 Annual Meeting of the American Statistical Association, San Francisco, California (with J. McKibben).

"Ratio-Correlation: A Short-Term County Population Projection Method." Presented at the 1993 International Symposium on Forecasting. Pittsburgh, Pennsylvania (with D. Beck).

"The Relationship Between Life Expectancy and Socioeconomic Status In Arkansas, 1970 and 1990." Presented at the 1993 Annual Meeting of the Population Association of America, Cincinnati, Ohio.

"Measurement Errors in Census Counts and Estimates of Intercensal Net Migration." Presented at the 1993 Annual Meeting of the Population Association of the America, Cincinnati, Ohio (with H. Kintner).

"Ratio-Correlation as a Short-Term County Population Projection Method: A Case Study for Washington State." Presented at the 1992 Annual Meeting of the Southern Demographic Association, Charleston, South Carolina (with D. Beck).

"Adult Transfer Students: Predicting Who Will Finish and Who Will Drop Out." Presented at the 1992 Annual Meeting of the Pacific Northwest Association of Institutional Researchers and Planners, Bellingham, Washington (with S. Hedman and L. Nelson).

"Measurement Errors in Census Counts and Estimates of Intercensal Net Migration." Presented at the 1992 Annual Meeting of the American Statistical Association, Boston, Massachusetts (with H. Kintner).

"The Disposal of Household Hazardous Waste: Results From a Survey of Pierce County, Washington." Presented at the 1992 Annual Meeting of the Northwest Scientific Association, Bellingham, Washington.

"A Variation of the Housing Unit Method For Estimating the Population of Small, Rural Areas: A Case Study of the Local Expert Procedure." Presented at the 1992 Annual Meeting of the Population Association of America, Denver, Colorado (with J. Carlson and L. Roe).

"A System for Placing Confidence Intervals Around Estimated the Population of Small, Rural Areas: A Case Study of the Local Expert Procedure." Presented at the 1992 Annual Meeting of the Population Association of America, Denver, Colorado (with J. Carlson and L. Roe).

"Perspectives on Change in Employer Health Benefits Populations." Presented at the 1991 Annual Meeting of the Population Association of America, Washington, D.C. (with H. Kintner).

"Evaluating Socioeconomic Impact Models: An Adoption of Winter's Method to the Yucca Mountain Project." Presented at the 1990 Annual Meeting of the American Statistical Association, Anaheim, California (with J. Carlson, J. Hollingsworth, and C. Williams).

"The Development of Small Area Socioeconomic Data to be Utilized for Impact Analysis: Rural Southern Nevada." Presented at the 1990 International High Level Radioactive Waste Management Conference, Las Vegas, Nevada (with J. Carlson and C. Williams).

"Identifying Factors Associated with the Subjective Feelings of One's Quality of Health." Presented at the 1990 U.S. Uniformed Services Conference of Family Physicians, Richmond, Virginia (with W. F. Miser).

"Demographic Issues for Washington State." Session on Regional Demography, 1989 Annual Meeting of the Rural Sociological Society, Seattle, Washington.

"Intercensal Net Migration Among the Three Major Regions of Iraq, 1957-1977." Presented at the 1989 Annual Meeting of the Population Association of America, Baltimore, Maryland (with A. Al-Jiboury).

"VCR Households: A Comparison of Early and Recent Adopters." Presented at the 1988 Annual Meeting of the Broadcast Education Association, Las Vegas, Nevada (with B. Klopfenstein).

"Technical Skills and Training Needs of Applied Demography." Presented at the 1987 Annual Meeting for the American Statistical Association, San Francisco, California (with L. S. Rosen and H. J. Kintner).

"Causes of Death in Infancy and the Proposed Redefinition of the Neonatal Period." Presented at the 1987 Annual Meeting of the North Central Sociological Association, Cincinnati, Ohio (with E. G. Stockwell and J. Wicks).

"The Impact of Census Error Adjustments on Ohio Population Projections." Presented at the 1987 Annual Meeting of the North Central Sociological Association, Cincinnati, Ohio (with K. Vaidya, R. Yehya, B. Bennett and R. Prevost).

"Projecting Household VCR Penetration: A Demographic Approach." Presented at the 1987 Annual Meeting of the Population Association of America, Chicago, Illinois (with B. Klopfenstein).

"A State Based Regression Model For Estimating Substate Life Expectancy: Tests Using 1980 Data." Presented at the 1987 Annual Meeting of the American Statistical Association, San Francisco, California.

"An Analysis of VCR Adopter Characteristics and Behavior." Presented at the 1987 Annual Meeting of the International Communication Association, Montreal, Quebec, Canada (with B. Klopfenstein).

"Estimating Life Expectancy For Health Service Areas: A Test Using 1980 Data For Indiana." Presented at the 1986 Annual Meeting of the American Statistical Association, Chicago, Illinois.

"Converging Trends in the Relationship Between Infant Mortality and Socioeconomic Status." Presented at the 1986 Annual Meeting of the North Central Sociological Association, Toledo, Ohio (with E. Stockwell and J. Wicks).

"Geographic Variation of Longevity in Ohio, 1930 and 1980." Presented at the 1986 Annual Meeting of the North Central Sociological Association, Toledo, Ohio (with E. Stockwell).

"Identifying Extreme Errors in Ratio-Correlation Estimates of Population." Presented at the 1986 Annual Meeting of the Population Association of America, San Francisco, California (with R. Prevost).

"Missing Survey Data in End-Use Energy Models: An Overlooked Problem." Presented at the 1985 Annual Meeting of the American Statistical Association, Las Vegas, Nevada.

"Fecundability Among Ethnic Groups in Hawaii." Presented at the 1985 Annual Meeting of the North Central Sociological Association, Louisville, Kentucky.

"Issues in Energy End-Use Survey Research." Presented at the 1985 Conference of the American Council for an Energy Efficient Society, San Cruz, California (with S. M. Buller, R. J. Canter, L. Guliasi, and R. M. Wong).

"Improving the Measurement of Temporal Change in Regression Models Used for County Population Estimates." Presented at the 1983 Annual Meeting of the Population Association of America, Pittsburgh, Pennsylvania (with B. Baker and J. Van Patten).

"Municipal Population Estimation: Practical and Conceptual Features of the Housing Unit Method." Presented at the 1983 Annual Meeting of the Population Association of America, Pittsburgh, Pennsylvania (with B. Baker and J. Van Patten).

"Getting at the Factors Underlying Trends Using Statistical Decomposition Techniques." Presented at the 1980 Annual Meeting of The College and University Systems Exchange, Phoenix, Arizona.

"Allocation Accuracy in Population in Estimates: An Overlooked Criterion with Fiscal Implications." Presented at the 1980 Annual Meeting of The American Statistical Association, Houston, Texas.

"Graphic Display of Demographic Data." Presented at the 1979 Annual Meeting of The Population Association of America, Philadelphia, Pennsylvania (with L. M. Tedrow).

"A Method of Estimating Annual Age-Standardized Mortality Rates for Counties: Results of a Test Using Washington State Data." Presented at the 1978 Annual Meeting of The American Statistical Association, San Diego, California.

"Preliminary Results of an Evaluation of the Utility of Ridge Regression for Making County Population Estimates." Presented at the 1978 Annual Meeting of the Pacific Sociological Association.

B. Contributed Non-Refereed Papers

"Why Do Group Health Benefit Populations Change Size? A Case Study of General Motors Salaried Population, 1983-1990." Presented at the 1994 Applied Demography Conference, Bowling Green, Ohio (with H. Kintner).

"An Evaluation of the Demographic Components of a Proprietary Economic Forecasting and Simulation System: The REMI Model as used by SAIC, Inc. for the Yucca Mountain Project in Nevada." Presented at the 1994 Applied Demography Conference, Bowling Green, Ohio (with Y. Zhao and J. Carlson).

"On the Utility of Lagged Ratio-Correlation as a Short-Term County Population Projection Method: A Case Study of Washington State." Presented at the 1994 Applied Demography Conference, Bowling Green, Ohio (with J. Tayman and D. Beck).

"The Producers Perspective." Presented at the 1994 Annual Meeting of Federal-State Cooperative Program for Population Projections, Session on The Utility of Population Projections, Miami, Florida.

"Confidence Intervals for Net Migration Estimates that Incorporate Measurement Errors in Census Counts." Presented at the 1992 Applied Demography Conference, Bowling Green, Ohio (with H. Kintner).

"Baseline Projections of Household Solid Waste Generation: A Case Study of Pierce County, Washington." Presented at the 1990 Applied Demography Conference, Bowling Green, Ohio.

"Confidence Intervals for Estimates of Intercensal Net Migration." Presented at the 1990 Applied Demography Conference, Bowling Green, Ohio (with H. Kintner).

"Estimating Migration in a Sparsely-Populated Specialized Economic Area: The Yucca Mountain High-Level Nuclear Waste Repository." Presented at the 1990 Applied Demography Conference, Bowling Green, Ohio (with J. Carlson).

"Development of Demographic Data Utilizing Key Informants in Rural Incorporated Places." Presented at the 1990 Applied Demography Conference, Bowling Green, Ohio (with L. K. Roe and J. Carlson).

"Poverty and Infant Mortality." Presented at the June, 1989 Meeting of the Washington State Child Health Research and Policy Group, Seattle, Washington.

"Some Results of the 1988 'Research Experience for Undergraduates' Program in Demography." Poster Session at the 1988 Applied Demography Conference, Bowling Green, Ohio (with L. Tedrow).

"Overview of the Survey of Applied Demographers." Presented at the 1987 Annual Meeting of the Population of Association of America, Chicago, Illinois (with H. Kintner).

"Applied Demography." Presented to the Department of Sociology, Western Washington University, October, 1986.

"Preliminary Results From the 1986 Survey Demographers." Presented at the 1986 Annual Meeting of the Population Association of America, San Francisco, CA (with H. Kintner et al.).

"Survey Findings." Presented at the Public Hearing on Public Affairs Programming and Commercial Television, June, 1984 San Francisco, California.

"Comparative Analysis of Change in Average Household Size With Reference to IRS Data on Average Exemptions Per Return: Census Results From Selected Municipalities in Washington, 1970, 1977, and 1978." Presented at the October, 1979 meeting of The Task Force on Sub-County Population Estimates Federal-State Cooperative Program for Population Estimates, Washington, D. C. (with T. J. Lowe).

"Recent Trends in Household Size for Rural, Predominantly White, Non-Hispanic Communities: Special Census Results From Three Towns in Washington, 1976 and 1979." Presented at the October, 1979 meeting of The Task Force on Sub-County Population Estimates, Federal-State Cooperative Program for Population Estimates, Washington, D. C. (with T. J. Lowe).

IX. Invited Presentations

"Modeling and the Covid-19 Pandemic: A Local Area Perspective." Presented at the Annual Meeting of the Federal-State Cooperative Program for Population Projections (Virtual), May 13-14, 2021.

"Using a Simple Population Forecasting Method to Assess Economic and Health Characteristics of a Population of Interest." Presented at the Department of Public and Regional Economics, Aoyama Gakuin University, Tokyo, Japan, 7 November 2018

"Using a Population Forecasting Method to Assess the Demographic Impact of Natural and Man-made Disasters." Presented at the Department of Sociology, Kyoto University, Kyoto, Japan, 5 November 2018

"Cohort Change Ratios and Their Applications." Presented as part of the Open Seminar, Foreign Scholar Lecture Series, National Institute for Population and Social Security Research, Tokyo, Japan, 31 October 2018 (<http://www.ipss.go.jp/int-sem/e/lec2.html>)

"On Equality and Inequality in Stationary Populations." Presented at the 4th International Symposium on the Human Mortality Database, Berlin, Germany, May 23, 2017 (with Lucky Tedrow).

"Use of Demography in the Public Sector." presented in an invited session on demography and policy at the 2017 Conference of the Population Association of American, Chicago, IL.

"The Washington State Census Board and Its Demographic Legacy." Presented at the Center for Studies in Demography and Ecology, University of Washington. Seattle, Washington, January 8, 2016.

"Aging in the Western Hemisphere, 2015-2035." Presented at the analytic exchange on Demographic Change and Mobility in Aging Regions to 2035. Co-sponsored by the U.S. National Intelligence Council and the Bureau of Intelligence and Research, U.S. State Department. Arlington, VA. July 17, 2015.

"The Current Status of Applied Demography: A Four-Field View with an Eye toward the Future." Plenary Presentation. 8th International Conference on Population Geographies, University of Queensland, Brisbane, Australia. July 1-3, 2015.

"A New Estimate of the Hawaiian Population for 1778, the Year of First European Contact." Presented as part of the Colloquium Series, Department of Sociology, University of Hawai'i. February 13th, 2015.

"Measuring Uncertainty in Population Forecasts: A New Approach Employing the Hamilton-Perry Method." Presented at the Population Institute Methods Workshop, Penn State University, June 24th, 2014. State College, PA (with Jeff Tayman).

"Measuring Uncertainty in Population Forecasts: A New Approach Employing the Hamilton-Perry Method." Presented at the Annual Conference of the Federal-State Cooperative Program for Population Projections, Boston, MA, April 30th, 2014. (with Jeff Tayman).

"Measuring Uncertainty in Population Forecasts: A New Approach." Presented at the Joint Eurostat/UNECE Work Session on Demographic Projections, October 29-31, 2013. Rome, Italy (with Jeff Tayman).

"People of the Inland Empire: Changes in Ethnicity, Age and Race, Presented at the "Practically Speaking" Development Series, Center for Sustainable Suburban Development, University of California Riverside, June 11th, 2013. Riverside, CA.

"A Loss Function Approach to Examining ACS Estimates: A Case Study of 2010 "Persons Per Household" Estimates for California Counties." Presented at the Workshop on "The Benefits (and Burdens) of the American Community Survey" sponsored by the Committee on National Statistics, National Academies of Science. June 14-15, 2012, Washington, DC (with George Hough).

"Practical Demography." Keynote address presented at the Warren Kalbach Conference, March 18-19, 2011, Edmonton Society of Demographers, University of Alberta, Edmonton, Alberta, Canada.

"Developing Small Area Population Estimates for Use in Health Information Systems." Presented in the Introductory Plenary Session at the 19th International Conference of the Forum for Interdisciplinary Mathematics, 18-20 December 2010, Patna University, Patna, India. (with J. McKibben and K. Faust).

"Perspectives on the American Community Survey." Presented at the 2010 Conference of the Latin American Association for Population Studies, 15-19 November, Havana, Cuba.

"New Directions for the Decennial Census?" Presented in the Invited Session, What if the 2020 Census Was the First Census: What Would We do?, 2010 Conference of the American Statistical Association, 31 July – 5 August, Vancouver, British Columbia, Canada.

"Demographics and Housing." Presented at the Randall Lewis Seminar, Blakely Center for Sustainable Suburban Development, Riverside, California, 17 June 2010.

"The Possibilities for using the Housing Unit method." Presented at Statistics Canada, Ottawa, Ontario, 28 May, 2009.

"The Future of Suburbs." Presented at Pitney Bowles Business Decisions. Toronto, Ontario, 27 May 09.

"Socio-economic Status and Life Expectancy in the United States: 1970 to 1990." Presented at the School of Public Policy, University of Texas- San Antonio, San Antonio, TX. 21 April 2009.

"Small Area Estimation and Health Information Systems" Presented at the Small Area Measurement Consultation Conference, Institute for Health Metrics and Evaluation, University of Washington. Seattle, WA, 10 April 2009.

"Aging and other Population Trends and their Implications for Suburbs." Presented as part of the 'Leadership Lenexa' Seminar Series, Lenexa Chamber of Commerce. Lenexa, KS. 27 June 2008.

"How the Changing U.S. Census will Affect Decision-Making." Presented at the Randall Lewis Seminar, Blakely Center for Sustainable Suburban Development, Riverside, California, 15 May 2008.

"An Evaluation of Persons Per Household (PPH) Data Generated By the American Community Survey: A Demographic Perspective." Presented at the American Community Survey, Multi-Year Estimates Meeting, 15 November 2006, U.S. Census Bureau, Suitland, Maryland.

"Counting the Gulf Coast: A Demographer Gauges Katrina's Impact in Mississippi." Department of Sociology, University of California Irvine, 23 October 2007, Irvine, CA.

"Assessing Katrina's Impact on the Mississippi Gulf Coast: A Report on Completed Research." Poster presented at the 2007 Post-Katrina Forum Gulf States Alliance: Network Science and Recovery, 19-21 August, Biloxi, MS (with R. Forgette, M. Van Boening).

"The Needs of Researchers in Regard to Population Estimates." Conference on U.S. Census Bureau Population Estimates: Meeting User Needs." Sponsored by Council of Professional Associations on Federal Statistics. 19 July 2006. Alexandria, VA.

"The Impact of Hurricane Katrina on the Mississippi Gulf Coast." Annual Exhibition of the Coalition for National Science Funding, 7 June 2006. Washington, DC.

"The Impact of Hurricane Katrina on the Mississippi Gulf Coast." Annual CLARITAS Client Conference, 30-29 April, 2006, San Diego, CA.

"The Impact of Hurricane Katrina on the Mississippi Gulf Coast. Annual Meeting of the Population Association of America, Session of the Committee on Population Statistics. 30 March 2006. Los Angeles, CA.

"Demographic Changes Affecting Undergraduate Enrollment in Mississippi." College of Liberal Arts Faculty Forum, 22 March 2005. University of Mississippi.

"The Changing Demography of the CSGS Region." Plenary Keynote Address, Annual Meeting of the Conference of Southern Graduate Schools, 26 February 2005. Biloxi, MS.

"An Evaluation of the American Community Survey: Results from the Oregon Test Site." Presented at the Annual Meeting of the American Statistical Association, August 8th to 10th, 2004. Toronto, Ontario, Canada (with G. Hough).

"Evidence From Oregon." Presented at the Annual Meeting of the Population Association of America, April 1st to 3rd, 2004. Boston, Massachusetts (with G. Hough).

"The Impact of Demographic Factors on Business: Selected Examples." Presented to Faculty of the H.E.L.P. Institute, Kuala Lumpur, Malaysia, 25 April 2003

"Results of the BScBA Program Self-Evaluation Study." Presented at the External Accreditation Peer Review Team's On-Site Visit, Finnish Ministry of Education, Valamo, Finland, October 8-9, 2002.

"Demographic Constraints on Regional Development." Presented at the Technology and Economic Development in the Periphery (TEDIP) Dissemination Seminar, Joensuu University, Savonlinna, Finland, June 13th, 2002.

"International Education in Finland: Issues and Challenges." Presented to the Rural Studies Workshop, Institute for Rural Research Studies, Helsinki University, Mikkeli, Finland, February 1st, 2002

"The International BBA Program of the Helsinki School of Economics and Business Administration." Presented to the President of Finland, Mikkeli, Finland, May 15th, 2001.

"Providing International Education: A Finnish Example of the European Experience." Presented at the 4th Strategy Seminar on Strategic Alliances and Partnerships in International Education, Kuala Lumpur, Malaysia, April 7th, 2001.

"On Measuring Accuracy in Subnational Demographic Estimates." Presented at the National Conference on Population Estimates Methods, Sponsored by the Population Estimates Branch, U.S. Bureau of the Census, June 8th, 1999. Suitland, Maryland (with J. Tayman and C. Barr).

"Census Errors and Census 2000: The Role of Local Government." Presented at the Public Stakeholders Meeting of the Southern Nevada Census 2000 Committee, March 23rd, 1999, Las Vegas, Nevada.

"The Food Consumption Survey." Presented at the Total System Performance Assessment Technical Exchange, U.S. Department of Energy/ U.S. Nuclear Regulatory Commission. Las Vegas, Nevada, November 6th, 1997.

"Amargosa Valley Population Survey." Presented to the U.S. National Advisory Committee on Nuclear Waste, U.S. Nuclear Regulatory Commission. 94th Meeting, Las Vegas, Nevada, September 23rd, 1997.

"An ACS Performance Assessment." Presented in the session "The American Community Survey – Uses and Issues." Annual Meeting of the American Statistical Association, Anaheim, California, August 13th, 1997.

"The Region's Changing Demographics." Presented at the International Council of Shopping Centers' 1996 Meeting, Skamania Lodge, Skamania, Washington, August, 1996.

"Local Population Trends." Presented at the Chamber of Commerce Leadership Program." West Linn, Oregon, March, 1996.

"Oregon's Population Trends." Presented at the Strategic Budget Conference of Oregon State Agency Directors, Salem, Oregon, March, 1996.

"Evaluation Plan for the Arkansas Network Based Technology Deployment Program." Presented at the Workshop on Manufacturing Modernization: Evaluation Practices, Methods and Results. National Institute of Standards and Technology, Atlanta, Georgia, September 18-20, 1994.

"Estimates of the Current Cost of Health Care in Arkansas." Presented to the Governor's Task Force on Health Care Reform. Little Rock, Arkansas, April 13, 1994.

"An Overview of Impact Analysis." Presented at the Local Development Association Meeting, Heber Springs, Arkansas 1993.

"Applied Demography for Urban Studies." Two-day workshop presented at Loyola University, Chicago, Illinois, 1993.

"Confidence Intervals for Net Migration Estimates that Incorporate Measurement Errors in Census." Presented at the Central Arkansas Chapter of the American Statistical Association, November, 1992 (with H. Kintner).

"Demographic Aspects of Labor Force Trends in Arkansas." Presented at the March 5th, 1993 Arkansas Business Leaders Symposium, Arkansas College, Batesville, Arkansas.

"Decennial Census Products and Their Use in Research." Presented in the Research Conference Series, Center for Mental Health Research, University of Arkansas for Medical Sciences, November 18th, 1992.

"Factor Analysis and Related Analytical Techniques." Presented to the Uniformed Services Physicians' Fellowship Program, Madigan Army Medical Center, April 17th, 1992.

"A Variation of the Housing Unit Method for Estimating the Age and Gender Distribution of Small, Rural Areas: A Case Study of the Local Expert Procedure." Presented at the Invited Paper Session Methods of Small Area Population Estimation. Annual Meeting of the American Statistical Association, San Francisco, California, August, 1993 (with J. Carlson, L. Rowe and C. Williams).

"A First Bite in a Seven Course Meal: Results from the 1990 Census." Presented to the City Club of Tacoma, June, 1991 (with W. Opitz).

"A New Method for Projecting Small Area Populations." Presented to the Center for Business and Economic Research, College of Business, University of Nevada, Las Vegas, March, 1991.

"Socio-Economic Impact Analysis for the Yucca Mountain Nuclear Waste Project: Insights from Demography." Presented to the Department of Sociology, Michigan State University, February, 1991.

"Ratio-Correlation as a Short-Term, Subnational Population Forecasting Method: A Case Study Using Washington State Data." Presented to the Demography Division, Statistics Canada, Ottawa, Ontario, February 11, 1991.

"Demographics! Demographics! Demographics!" Presented to members of the Private Industry Council, Pierce County, Washington, March, 1990.

"Marx vs. Malthus: An Empirical Approach to Examining Orthodoxy." Presented in the Colloquium Series "Living In A Fragile Environment," Valparaiso University, January, 1990.

"Small Area Socio-Economic Forecasting," Presented to the Faculty Club, Valparaiso University, January, 1990.

"Local, National, and International Demographic Trends." Presented to the Washington Agriculture and Forestry Leadership Program, Pacific Lutheran University, January, 1990.

"Some Problems in Small Area Forecasting." Presented at the ICPSR Summer Program in Quantitative Methods, University of Michigan, July, 1989.

"Washington State Population Issues." Presented at the Washington State Public School Social Studies Educators Retreat, Pilgrim Firs, Washington, October, 1987.

"Why are American Babies Dying Before Their First Birthday?" Presented at the October, 1987 Interdepartmental Colloquium, Pacific Lutheran University.

"Subnational Population Estimation and Its Relation to Emerging Legal Challenges in the United States." Presented at the November, 1986 Brown-bag session of The Population Studies Center, University of Michigan.

"Population Trends in North Central Ohio." Presented at the November, 1986 meeting of The Social Science Club, Firelands College.

"The Multiple Regression Approach to Deriving Local Area Population Estimates." Presented at the April, 1985 meeting of the Northwest Ohio Chapter of The American Statistical Association, Bowling Green, Ohio.

"Population and Enrollment Forecasting." Presented at the March, 1983 meeting of the Anchorage Demographic Group, Anchorage, Alaska.

"Trends in Washington's Population." Presented at the November, 1979 meeting of the Seattle Economists' Club, Seattle, Washington.

X. Testimony

A. Legislative and Regulatory

Oral and written Testimony, "*Why 2+2 Should Never Equal 3: Getting Intercensal Population Estimates Right the First Time*," House Government Reform Subcommittee on Federalism and the Census oversight hearing Washington, DC. September 6, 2006.

Oral and written Testimony, Nuclear Regulatory Commission, Advisory Committee On Nuclear Waste, September 25, 1997, Las Vegas, Nevada.

Oral Testimony on Oregon's Population Trends. Presented to the Interim Committee On Growth Management, Oregon House of Representatives, February, 1996.

Written Testimony on "The Proposed Options For Incorporating Information From The Post-Enumeration Survey into The Intercensal Population Estimates produced By the Bureau of the Census." Public Hearing Docket (No. 920895-2195) U.S. Bureau of the Census. August 31, 1992.

"Results From the 1988 Recycling Survey." Presented to the Subcommittee on Solid Waste Management, Pierce County Council, January, 1989.

Written Testimony on "Plans for Conducting the 1990 Census in Alaska." Subcommittee on Census and Population, Hearing Conducted in Anchorage, Alaska, August 19, 1987.

Written Testimony on "Federal Statistics and National Data Needs." Subcommittee on Energy, Nuclear Proliferation and Government Processes of the Committee on Government Affairs, United States Senate, 98th Congress, 1st Session. Committee Print (S. Print 98-191) Washington: 1984.

Oral and Written Testimony, Labor Committee, Alaska House of Representatives, 1981, 1982, 1983.

Oral and Written Testimony, Finance Committee, Alaska House of Representatives, 1981, 1982, 1983.

Oral and Written Testimony, Finance Committee, Washington State Senate, 1979.

Oral and Written Testimony, Finance Committee, Hawaii State House of Representatives, 1974.

B. Judicial

Deposed and Testifying Expert Witness. 2022. Case A-17-762364-C. Estate of Joseph P. Schrage Jr & Kristina. D. Schrage v. Allan Stahl. Eighth Judicial Court, Clark County, Las Vegas, Nevada.

Deposed and Testifying Witness. 2021. Civil No. CV 6417-203, State of Arizona, General Adjudication of All Rights in the Little Colorado River System and Source, Phoenix, AZ

Deposed and Testifying Expert Witness. 2012. Board of Education, Shelby County, Tennessee et al. v. Memphis City Board of Education et al. / Board of County Commissioners, Shelby County, Tennessee (third party plaintiff) v. Robert E. Cooper et al (third party defendant)." (Constitutionality of a Tennessee state law). Baker, Donelson, Bearman, Caldwell and Berkowitz, PC. Memphis, TN.

Deposed Expert Witness. 2009. "Quest Medical Services v. FMIC." (Demographic Effects of Hurricane Katrina on New Orleans in a case involving a Medical Service Provider). . Podvey, Meanor, Catenacci, Hildner, Coccoziello, and Chattman, P.C., Newark, NJ.

Deposed and Testifying Expert Witness. 2007. "Spring Hill Hospital, Inc. v. Williamson Medical Center and Maury Regional Hospital." (Evaluation of population forecasts in a case involving a proposed hospital). Miller and Martin, PLLC, Nashville.

Deposed and Testifying Expert Witness. 1994. Arkansas Supreme Court. (Statistical evaluation of the accuracy of the number of qualified signatures on a public referendum as determined by a sample).

Deposed Expert Witness. 1983. "Anchorage, et al., vs. J. Hammond et al." (Lawsuit brought by local governments against the state of Alaska on how populations are determined for purposes of state revenue sharing to local governments).

XI. Service

A. Professional

Co-editor, Special Issue on Population Forecasting, *Population Research and Policy Review* (2023) (with J. Baker, I. Grossman, and T. Wilson).

Mortality Expert Panel, Society of Actuaries Research Institute, February, 2022 -

Interview, "Census Bureau's use of Synthetic Data worries Researchers." A story that appears in Associate Press News, May 27, 2021
<https://apnews.com/article/census-2020-technology-data-privacy-business-be938fa5db887a0ae6858dff0be217ef>

External Advisory Board, Geo-Spatial and Population Studies Research Center, University of New Mexico, April 2019 -

Chair, Estimates and Projections Session I, 2022 Applied Demography Conference February 1st.

Interview: "Information for Real Estate Agents." Wallethub, April 24th, 2019.
<https://wallethub.com/edu/best-worst-cities-to-be-a-real-estate-agent/18713/#expert=dauid-a-swanson>

Interview: "Demographic Formula Reveals Surprisingly Short Careers for MLB Pitchers." A story that appears in UPI's Science News, August 3rd, 2018 (<https://www.upi.com/Demographic-formula-reveals-surprisingly-short-careers-for-MLB-pitchers/3841533304869/>).

Editorial Board, *Population Research and Policy Review*, 2014-2021

Advisory Board, Online Program in Applied Demography, Pennsylvania State University, 2017-2021

Advisory Board, Nantucket Data Platform Project, Nantucket, Massachusetts, 2017-2020

Reviewer, Proposals for a special issue of *Population Research and Policy Review*, 2017.

Co-organizer, Conference on Applied Demography and Public Policy, University of Houston, Houston, TX, January, 2017.

Chair, Applied Demography Track Committee, 2017 Program Committee, Population Association of America. 2016-17.

2017 Program Committee, Population Association of America. 2016-2017.

Invited Commentary, "Compare Hawai'i and Mississippi," on the question, "Is Hawai'i a racial paradise?" Zocalo Public Square, September 15th, 2015
(<http://www.zocalopublicsquare.org/2015/09/15/is-hawaii-a-racial-paradise/ideas/up-for-discussion/#David+A+Swanson>).

Poster Session Judge, "8th International Conference on Population Geographies, Brisbane, Australia, June 30th to July 3rd, 2015.

Discussant, Session 1130, "Demographic and Statistical Approaches to Small Area Estimation." Population Association of American, April 30th to May 1st, 2014. Boston, MA.

Session Chair, "Mortality and Later Life Health." Social Science History Association, 1-4 November 2012, Vancouver, BC, Canada.

Grant Proposal Reviewer. "FR/38/2-220/11 - Defining the Demographic Prospects of Georgia and Providing their Software," Shosta Rustaveli National Science Foundation of Georgia, Republic of Georgia (December, 2011).

Session Organizer and Chair, "Population Projections," Applied Demography Conference, 8-10 January 2012, San Antonio, Texas.

Interview: "Experts Predict Bright Future." A story that appears in The Telegraph. (Calcutta, India) December 21, 2010.

Interview: "Census Bureau releases detailed statistics on smaller Inland areas." A story written by David Olson that appears in the Press-Enterprise, December 14, 2010

Interview: "Inland area lags behind state, nation in returning census forms." A story written by David Olson that appears in The Press-Enterprise, March 31, 2010

Interview: "Government 'a Counting: Does the U.S. Census Need a 21st-Century Makeover?." A story written by Katie Moisse that appears in Scientific American, March 25, 2010

Interview: "Some Hispanics puzzle over race question on census form." A story written by Randy Cordova that appears in the Arizona Republic, March 23, 2010.

Interview: "The census inspires a sense of civic duty, distrust and fear." A story written by Robert L. Smith that appears in The Cleveland Plain Dealer, March 16, 2010

Interview: "Campaign counts on snowbird surveys in Palm Springs." A story written by Kate McGinty that appears in The Desert Sun, March 13, 2010

Interview: "Census Bureau reaching out in Inland area to communities least likely to be counted." A story written by David Olson that appears in The Press-Enterprise, January 28, 2010

Interview: "Countdown to the Count-up." A story written by Bettye Miller that appears in UCR: The Magazine of UC Riverside Winter, 2010, pp. 22-23.

Session Chair, "The 2010 Census." Applied Demography Conference, 10-12 January 2010, San Antonio, Texas.

Session Organizer and Chair, "Expert Witness Work and the Applied Demographer," Applied Demography Conference, 10-12 January 2010, San Antonio, Texas.

Co-Program Organizer (with Nazrul Hoque and Lloyd Potter), Applied Demography Conference, 10-12 January 2010, San Antonio, Texas.

Discussant, Session 1704, "Using Demography in the Business and Public Sectors." 2009 Conference of the International Union for the Scientific Study of Population, Marrakech, Morocco, 27 September – 2 October 2009.

Associate Editor, Open Demography Journal, 2009-2010

Facilitator, Census Advisory Committee of Professional Associations, U.S. Census Bureau, 2009-10

Chair, Committee representing the Population Association of America, Census Advisory Committee of Professional Associations, U.S. Census Bureau. 2008-2009

Census Advisory Committee of Professional Associations, U.S. Census Bureau. 2004-2010

Member, Development Committee, Population Association of America, 2008-2013.

Chair and Conference Organizer, Psychology and Social Sciences Section, Mississippi Academy of Sciences, 2007-8.

Chair, Session on "Fertility: Social Issues and Reproduction." Annual Meeting of the Southern Demographic Association, 13 October 2007, Birmingham, AL.

Presenter and Discussant, "Symposium for School Districts that will be affected by the Toyota Assembly Plant near Tupelo, Mississippi." School of Education, University of Mississippi, 30 March 2007.

Organizer, Symposium: "the Psychological and Social Impacts of Hurricane Katrina." 2007 Conference of the Mississippi Academy of Sciences 22 February, Starkville, Mississippi.

Program Organizer, Applied Demography Conference, 9-11 January 2007, San Antonio, TX.

Chair and Conference Organizer, Psychology and Social Sciences Section, Mississippi Academy of Sciences, 2006-7.

Reviewer, Using the American Community Survey: Benefits and Challenges, Committee on Functionality and Usability of Data from the American Community Survey, Committee on National Statistics, National Research Council. Washington, DC: National Academy of Sciences Press. 2007.

Chair, Session on "Anxiety, Ambiguity, and Multiculturalism in Statistical Education," Annual Meeting of the American Statistical Association, 10 August 2006, Seattle, WA

Vice-Chair, Psychology and Social Sciences Section, Mississippi Academy of Sciences, 2005-6.

Local Arrangements Coordinator, Annual Meeting of the Southern Demographic Association University of Mississippi, October, 2005.

Editor, Population Research and Policy Review, Official Journal of the Southern Demographic Association, July 1st, 2004- July 1st, 2007.

Member, Advisory Board, Fulbright Academy of Science and Technology, 2003-2008.

Participant, Users Perspective Meeting, Panel on the Functionality and Usability of Data from the American Community Survey, Committee on National Statistics of the National Academies, April 2005, Washington, DC.

Technical Review Panel Member, Small Business Innovative Initiative Grants, National Institutes of Health, 2002.

Chair, National Committee on Applied Demography, Population Association of America, 2001-2.

Publications Officer, Government Statistics Section, American Statistical Association, 2001-2.

Member, National Committee on Applied Demography, Population Association of America, 1999 to 2003.

Organizer and Moderator, "Population Controls for the American Community Survey," Annual Meeting of the Southern Demographic Association, University of Mississippi, Oxford, Mississippi, November, 2005.

Organizer and Chair, "New Directions in Local Area Estimation and Forecasting,"

Annual Meeting of the Population Association of America, New York, New York, March, 1999

Technical Review Panel Member, Small Business Innovative Initiative Grants, National Institutes of Health, 1997.

Organizer and Chair, Panel Discussion on "Surf's Up! Building, Accessing, and Linking Demography's Internet Sites," Annual Meeting of the Southern Demographic Association, Memphis, Tennessee, October, 1996.

Chair, Session on "Computer Support of Statistical Education," The International Conference On Statistical Education In The Modern World: Ideas, Orientations, Technologies, St. Petersburg, Russia, July, 1996.

Chair, Membership Committee, Population Association of America, 1996 to 1998.

Technical Advisory Committee, Oregon Survey Research Laboratory, University of Oregon, 1996-97.

Textbook Reviewer, *Life in a Business Oriented Society* (by Richard Caston), Allyn and Bacon Publishers, 1996.

Member, Editorial Board, Population Research and Policy Review, 1995 to 1997, 2007-current.

Organizer and Chair, Session on "Estimates and Projection," 1996 Annual Meeting of the Population Association of America.

Co-Organizer, Sessions and Papers on State and Local Demography, 1995 Annual Meeting of the Population Association of America.

Member, Committee on Applied Demography, Population Association of America, 1994 to 1997.

Chair, Session on "Population, Environment and Development," 1994 Annual Meeting of The Southern Demographic Association, Atlanta, Georgia.

Secretary-Treasurer, Southern Demographic Association, 1994-1997 and 2004-2007.

Chair, Session on "Demographics of School and College Enrollment." 1994 Applied Demography Conference, Bowling Green, Ohio.

Organizer, Session on "Should Projections be Privatized?" and Session on "The Utility of Population Projections." 1994 Annual Meeting of the Federal-State Cooperative Program on Population Projections, Miami, Florida.

Member, Delegation to visit U.S. Senators RE the FY 1994 Budget for the U.S. Bureau of the Census, sponsored by The Population Association of American, July, 1993.

Member, Senior Council, Ohio Academy of Science, 1993-95.

Roundtable Discussion Leader on "School District Demography" 1993 Annual Meeting of the Population Association of America, Cincinnati, Ohio.

Organizer, Session on "Methods of Forecasting and Estimating," 1993 Annual Workshop of the National Association for Welfare Research and Statistics, Scottsdale, Arizona.

Arkansas State Representative to the Federal-State Cooperative Program for Population Projections, 1992 to 1995.

Member, National Peer Review Committee, Socio-economic Studies, High Level Radioactive Waste Repository, 1992, Yucca Mountain, Nevada.

Organizer and Chair, Session on "Projection and Forecasting Special Populations," 1990 North American Conference on Applied Demography, Bowling Green, Ohio.

National Chairman, Federal -State Cooperative Program for Population Projections, 1993-94.

Discussant, Session on "Survey Research to Support Social Statistics," 1990 Annual Meeting of the American Statistical Association, Anaheim, California.

Panelist, "Applied Demography and the Population Association of America," given at the 1990 Annual Meeting of the Population Association of America, Toronto, Ontario. May, 1990.

External Examiner, "A Model for Fertility Change," Ph.D. Dissertation submitted by N. Sugathan, Department of Demography, University of Kerala, 1989.

Participant, National Resource Persons Network, Office of Minority Health Resource Center, U.S. Public Health Service, 1989.

Member, Washington State Child Health Research and Policy Group, 1989-1993.

Discussant, Session on "Is the Non-Metropolitan Population Turnaround Over?" 1989 Annual Meeting of the Rural Sociological Society, Seattle, Washington.

Organizer and Chair, Session on "Demographic Issues and The Law," 1988 National Conference on Applied Demography, Bowling Green, Ohio.

Chair, State and Local Demography Interest Group, Population Association of America, 1988-90.

Organizer and Chair, Session on Methodological Advances In State and Local Demography. 1988 Annual Meeting of the Population Association of America, New Orleans, Louisiana.

Member, Subcommittee on Academic Outreach, Business Demography Committee, Population Association of America, 1987-1988.

Roundtable Discussion Leader, "Marketing Your Organization's Demographic Expertise and Resources." 1987 Annual Meeting of The Population Association of America, Chicago, Illinois.

Judge, North Central Sociological Association Undergraduate Student Paper Competition, 1987.
Co-Organizer, 1st Biennial Conference on Applied Demography, held at Bowling Green State University, September 26-27, 1986.

Member, State Advisory Committee on Population Forecasts, Ohio Data Users Center, Ohio Department of Development, 1986-1987.

Discussant, Session on Estimating and Forecasting Demographic Characteristics of Small Areas, 1986 Annual Meeting of the Population Association of America, San Francisco, California.

Discussant, Session on Estimates and Projections for State and Local Areas, 1985 Annual Meeting of the Population Association of America, Boston, Massachusetts.

Speaker, Panel on Careers in Applied Demography, 1985 Annual Meeting of the Population Association of America, Boston, Massachusetts.

Discussant, Session on Issues in State and Local Demography, 1984 Annual Meeting of the Population Association of America, Minneapolis, Minnesota.

Alaska State Representative to the Federal State Cooperative Program for Population Projections, 1981-1983.

Discussant, Session on Forecasting Energy Demand, Northwest Utilities Conference, 1980 Annual Meeting, Portland, Oregon.

Discussant, Session on Mathematical Models in Sociology, 1978 Annual Meeting of the Pacific Sociological Association, Spokane, Washington.

Member, Editorial Board, Applied Demography, Population Association of America, 1985 to 1993.

External Examiner, "Unique Competencies of International Non-Governmental Organizations (INGOs): Empirical Explorations from India." Sociology Dissertation by Pranaya Kumar Swain, Ph.D. Candidate, Indian Institute of Technology-Kanpur, Kanpur, Uttar Pradesh, India. 1995.

Editorial Referee, Demography, 2022 (1 paper)

Editorial Referee, Demographic Research 2021 (1 paper)

Editorial Referee, Population Research and Policy Review, 2021 (1 paper)

Editorial Referee, Spatial Demography, 2020 (1 paper)

Editorial Referee, Journal of Engineering and Applied Research, 2019 (1 paper)

Editorial Referee Spatial Demography, 2019 (1 paper),

Editorial Referee, Demography, 2018 (1 paper)

Editorial Referee, Canadian Studies in Population, 2018 (1 paper)

Editorial Referee, Journal of Mathematical Biology, 2018 (1 paper)

Editorial Referee, Demography, 2017 (1 paper)

Editorial Referee, Population, Space and Place, 2017 (1 paper)

Editorial Referee, Population Research & Policy Review, 2017 (1 paper)

Editorial Referee, Demography, 2016 (1 paper).

Editorial Referee, Review of Economics and Finance, 2016 (1 paper)

Editorial Referee, Journal of Population Research, 2016 (1 paper)

Editorial Referee, Population Studies, 2015 (1 paper).

Editorial Referee, The American Statistician, 2014 (1 paper)

Editorial Referee, Journal of Population Research. 2014. (1 paper).

Editorial Referee, Journal of Population Research. 2013. (1 paper)

Editorial Referee, Open Demography Journal. 2012. (1 paper)

Editorial Referee, Disasters Journal. 2012 (1 paper)

Editorial Referee, Population Research and Policy Review, 2011 (2 papers)

Editorial Referee, Canadian Journal of Sociology, 2011 (1 paper).

Editorial Referee, Journal of Population Research, 2011 (1 paper).

Editorial Referee, Journal of Population Research, 2010 (1 paper).

Editorial Referee, Population Research and Policy Review, 2010 (1 paper).

Editorial Referee, American Sociological Review, 2010 (1 paper).

Editorial Referee, Demography. 2010 (1 paper).

Editorial Referee, Population Health Metrics. 2010 (1 paper).

Editorial Referee, Journal of Planning Education and Research, 2009 (1 paper).

Editorial Referee, Population Research and Policy Review, 2009 (1 paper).

Editorial Referee, Population Research and Policy Review, 2008 (2 papers).

Editorial Referee, Population Studies, 2008 (1 paper).

Editorial Referee, Journal of the Mississippi Academy of Sciences, 2008 (2 papers) .

Editorial Referee, Population Research and Policy Review, 2007 (1 paper).

Editorial Referee, Journal of Population Research, 2007 (2 papers).

Editorial Referee, City and Community, 2006 (1 paper).

Editorial Referee, Journal of Economic and Social Measurement, 2005 (1 paper).

Editorial Referee, International Journal of Forecasting, 2004 (1 paper).

Editorial Referee, Demography, 2001 (1 paper).

Editorial Referee, Population Research and Policy Review, 1999 (1 paper).

Editorial Referee, International Journal of Forecasting, 1997 (1 paper).

Editorial Referee, Population Research and Policy Review 1996 (1 paper).

Editorial Referee, Demography, 1993 (1 paper).

Editorial Referee, Demography, 1991 (1 paper).

Editorial Referee, Demography, 1987 (1 paper).

Editorial Referee, The Energy Journal, 1987 (1 paper).

Editorial Referee, Demography, 1986 (1 paper).

Editorial Referee, Human Biology, 1985 (1 paper).

Editorial Referee, Demography, 1984 (1 paper).

Editorial Referee, Demography, 1981 (1 paper).

Editorial Referee, Social Biology, 1981 (1 paper).

Editorial Referee, Demography, 1980, (1 paper).

Reviewer, Proceedings of the 1992 International Conference on Applied Demography (1 paper).

B. Academic

Reviewer, Long range demographic and Enrollment projections for California," as part of the "Framework for UC's Growth and Support" project, at the request of the UC Provost, Aimee Dorr, 2017.

Faculty Chair, Graduate Student Awards Committee, Department of Sociology, University of California Riverside, 2016-2017

Faculty Chair, Technology Committee, Department of Sociology, University of California Riverside, 2016-2017.

Faculty Member, Undergraduate Studies Committee, Department of Sociology, University of California Riverside, 2010-2015.

Faculty Chair, Undergraduate Program Review Committee, Department of Sociology, University of California Riverside, 2010-2011.

Interim Director, Blakely Center for Sustainable Suburban Development, University of California Riverside, 2008-2009.

Member, Leadership Institute Steering Committee, University of Mississippi, 2006-7.

Chair, Provost's Task Force on Undergraduate Education, University of Mississippi, 2004-5.

Member, Faculty Grant Review Committee, College of Liberal Arts, University of Mississippi, 2004-5.

Member, Ad Hoc Committee on Off-Campus Programs, College of Liberal Arts, University of Mississippi, 2003-4.

Member, Curriculum and Policy Committee, College of Liberal Arts, University of Mississippi, 2003-7.

BScBA Program Representative, Academic Council, Helsinki School of Economics, 2001-3.

International Summer Term Governing Board, Mikkeli Polytechnic College, 2001-3.

Campus Council, Mikkeli Business Campus, Helsinki School of Economics, 1999-2003.

Member, Dean's Executive Council, School of Urban and Public Affairs, Portland State University, 1995-97.

Member, UALR 2000 Response Group, University of Arkansas at Little Rock, 1994-95.

Mentor in Demography, Arkansas Delta Research, Education and Development Foundation, West Memphis, Arkansas, 1992-93.

Member, Urban Demography Subcommittee, Masters of Social Science Committee, University of Arkansas at Little Rock, 1992-93.

Member, East Campus Facilities Usage Group, Pacific Lutheran University, 1991-92.

Member, Provost's Ad Hoc Committee for Faculty Research, Pacific Lutheran University, 1990-92.

Member, Center For Social Research Committee, Division of Social Sciences, Pacific Lutheran University, 1987-89.

Member, Graduate Studies Committee, Department of Sociology, Bowling Green State University, 1986-87.

Library Representative, Department of Sociology, Bowling Green State University, 1986-87.

Member, Search Committee for the Assistant Director of Research Services, the Graduate College, Bowling Green State University, 1985.

Representative, Washington Community College Computing Consortium, 1981.

President, Sociology Graduate Student Association, University of Hawaii, 1974-75

Member, Executive Committee, Department of Sociology, University of Hawaii, 1974-75

Member, Graduate Admission Committee, Department of Sociology, University of Hawaii, 1975-76.

B. Community

2022 Pro Bono Consulting, Department of City Planning (Kendra Taylor et al.), Atlanta, GA,

2018- Member, Public Advisory Board, Caring Nurses Home Health Service, Las Vegas, NV.

2016 - 2022 President, University of Hawai'i Alumni Association, Las Vegas, NV Chapter

2016 - 2017 Secretary, Board, "Kimo Leads the Way," a non-profit organization in Las Vegas with a mission to ease the suffering of child cancer patients and their Parents.

2015-2016 Vice-President, University of Hawai'i Alumni Association, Las Vegas Chapter

- 1987- As an annual donor and fund raiser, participate(d) in the endowment of the Demography Scholarship, Western Washington University Foundation, Bellingham, Washington.
- 2010 As a representative of the University of Hawai'i Alumni Association, represented the University of Hawai'i to prospective university students and their parents at the Laguna Beach High School Annual "College Round-up," 6 October, Laguna Beach, CA,
- 2008 As a donor, established the David L. Swanson Endowed Scholarship for first generation college students, Eastern Washington University Foundation, Cheney, Washington.
- 2003-2007 As a donor and fund raiser, helped establish the E. Walter Terrie Endowed Graduate Student Award for the Southern Demographic Association, Florida State University Foundation, Tallahassee, Florida.
- 2007 Donor, Schiller Scholarship and Jobes Scholarship, Department of Sociology, Pacific Lutheran University, Tacoma, Washington.
- 2006 Demographic Advisor, Town of Walls, Mississippi (Pro Bono Assistance)
- 2003-2005 Mississippi State Director, National Association of Medics and Corpsmen.
- 2001 - As an annual donor and fund raiser, helped establish the Gary K. Sakihara Graduate Student Award, Department of Sociology, University of Hawai'i at Mānoa, University of Hawai'i Foundation, Honolulu, Hawai'i.
- 2003-2007 Annual donor, unrestricted funds for the Department of Sociology and Anthropology, University of Mississippi Foundation, Oxford, Mississippi
- 2001-2003 Representative, Savo Provincial Higher Education Council, Mikkeli, Finland
- 1999-2000 Member, Census 2000 Advisory Committee, City of Las Vegas, Las Vegas, Nevada
- 1996-1997 Member, Board of Directors, Mt. Hood Brewing Company, Portland, Oregon.
- 1994-1995 Member, Governor's Task Force on Hispanic Issues, State of Arkansas.
- 1994. Technical Demographic Advisor, Evangelical Lutheran Church in America, Research and Planning Office, National Headquarters, Chicago, Illinois (Pro Bono Assistance).
- 1992-1994. Technical Demographic Advisor, Catholic Church Diocese Officer, Little Rock, Arkansas (Pro Bono Assistance).
- 1993. Technical Coordinator, Governor's Task Force on Health Care Reform, State of Arkansas.
- 1988-1990. Survey and Research Consultant, Prince of Peace Lutheran Church, Des Moines, Washington (Pro Bono Assistance).
- Life Member, 101st Airborne Division Association.

Life Member, National Association of Corpsmen and Medics.

Life Member, Western Washington University Alumni Association

XII. Research and Professional Consulting

Demographic Consultant, Bryan GeoDemographics, 2021-

Wrongful Death Loss Consultant, O'Reilly Law Group, Las Vegas, Nevada. 2019-2022.

Demographic Consultant, "Forecast of Hopi Tribal Members et al." The Hopi Tribe, Kykotsmovi, AZ, 2017-2022.

Demographic and Statistical Consultant, ALCS LLC, Richmond, VA, 2016 - 2018

Course Development Consultant, Department of Sociology, Penn State University, 2016-2017

Demographic Consultant, Watts Guerra, LLC. San Antonio, TX. 2016.

Demographic Consultant. "Conseil Scolaire Francophone de la Columbia-Britannique et al. v. Her Majesty the Queen et al." SCBC, Vancouver registry, No. S103975. McCarthy Tetrault LLP. Vancouver, British Columbia, Canada. 2013-2014.

Demographic Consultant, Kemp Communications, Las Vegas, Nevada. 2011.

Demographic Consultant, "Population Projections." Miller and Martin, PLLC. Nashville, TN. 2010.

Demographic Consultant, Third Wave Research, Madison, WI. "Agent-Based Population Projections. 2009-2010 .

Demographic Consultant, Third Wave Research, Madison, WI. "Population Projections for the Nine Census Divisions, 2010-2020, by Single Years of Age and Sex. 2009.

Demographic Consultant, Kemp Communications, Las Vegas, Nevada. 2009.

Demographic Consultant, McKibben Demographics. "Planning a Charter School in the Lagniappe Area of New Orleans, Louisiana," Grant funded by the Smart Foundation. 2009.

Demographic Consultant, "Quest Diagnostics, Inc. v. FMIC." Podvey, Meanor, Catenacci, Hildner, Coccoziello, and Chattman, P.C., Newark, NJ. 2008-2009

Demographic Consultant, "Socio-Economic Economic Resilience and Dynamic Micro-Economic Analysis for a Large-Scale Catastrophe, Grant funded by The Southeast Regional Research Initiative (SERRI), with R. Forgette and M. Van Boening, University of Mississippi, Principal Investigators, 2009-2010

Demographic Consultant, "Ochsner Clinical Foundation v. Continental Casualty Company." Fisher Kanaris P. C., Chicago, IL, 2007.

Demographic and Statistical Consultant, Hurricane Katrina: Its Impact on the Population and Candidates for Endovascular Surgery in the Primary and Secondary Service Areas of Garden Park Hospital," Lemle and Kelleher, PLLC, Shreveport, LA. 2007.

Demographic Consultant, "Population Projections." Miller and Martin, PLLC. Nashville, TN. 2006-2007.

Demographic Consultant. "Evaluation of Methods for Estimating the Foreign Born Population." U.S. Census Bureau. 2006-2008.

Demographic Consultant, "Estimated Number of Employees with Health Insurance by Employee Type (Private Sector and Government), Size of Establishment, and City: Clark County, Nevada." 2004. Regulatory Economics, Inc. Henderson, NV.

Demographic Consultant, "Estimating and Forecasting the Size of U.S. Lifestyle Segments." Third Wave Research, Inc. Madison, Wisconsin, 2003; 2002; 1996.

Demographic Consultant, Nevada Consulting Alliance, "Evaluation of Population and Related Projections of Nevada." 2002.

Demographic Consultant, Nevada Consulting Alliance, "Critique of the State Demographer's 2002 Population Estimate for Clark County." 2002.

Consulting Scientist to Consulting Senior Scientist, Science Applications International Corporation, 1988-2002.

Demographic Consultant, Senecio Software, Inc. "Remote Sensing Estimates of Population." 1999-2002.

Demographic Consultant and Consulting Team Leader, Washoe County, Nevada, "Development of a Small Area Population Estimation System. 1999.

Consultant/Resource Faculty, "Applied Demographic Research in Migration." National Science Foundation (with L. M. Tedrow, Director), 1999.

Demographic Consultant, Parsons Brinckerhoff and SaudConsult, "Review and Revision of the Population Forecast for Jubail, Saudi Arabia." 1999.

Demographic Consultant, Nevada Consulting Alliance, "Revision of the Nevada County-level Economic and Demographic Forecasting Model," Nevada State Demographer's Office, 1998-99

Demographic and Statistical Estimation Consultant, "MetroMail Household Income/Asset Estimation Project," Third Wave Research, Inc. Madison, Wisconsin, 1996-97.

Demographic Consultant and Census Enumerator/Crew Leader Training Instructor, "American Community Survey Evaluation Project," Multnomah Progress Board, Portland, Oregon, 1997.

Demographic Consultant, "Initial Evaluation of the American Community Survey Portland Test Site Results," U.S. Bureau of the Census, 1996-97.

Enrollment and Demographic Consultant, "Enrollment Forecasts and Attendance Zone Adjustments," Hillsboro 1J School District, Oregon, 1995-1996

Enrollment and Demographic Consultant, "Enrollment Forecasts," Newberg School District Newberg School District, Oregon, 1996.

Demographic Consultant, "Higher Education Trends," NORED, Inc., Olympia, Washington, 1995

Demographic and Enrollment Consultant, "Enrollment and Market Area Profiles," Portland Community College, Portland, Oregon, 1995.

Consultant/Resource Faculty, "Applied Demographic Research in Migration" National Science Foundation (with L. M. Tedrow, Director), 1994.

Demographic Consultant, General Motors Research and Development Labs, GM North America Operations Center Michigan, 1988 to 1994.

Demographic Consultant, "Tribal Membership Forecasts," Lummi Tribal Business Council, Whatcom County, Washington, 1991.

Statistical Consultant, Iceberg Seafoods, Anchorage, Alaska, 1991-92, 1997-99, 2000.

Demographic Consultant, State of Connecticut Department of Health, "Small Area Population Estimation System" (with D. Pittenger and E. Schroeder), 1990.

Survey Research Consultant, Policy Division, Washington State Office of Financial Management, Olympia, Washington, 1990.

Demographic Consultant, Battelle Pacific Northwest Laboratories, Richland, Washington. "Hanford Environmental Dose Reconstruction Project," Subcontract No. 041581-A-K1. Richland, Washington, 1988-1990.

Survey Research Consultant, Choosing Our Future, Inc., Menlo Park, California, 1984.

Survey Research Consultant, "Household Characteristics and Residential Energy Use," Pacific Gas and Electric Company, San Francisco, California, 1983-1984.

Demographic Consultant, "Sub-county Estimation," U.S. Bureau of the Census, 1983.

Population and Enrollment Consultant, Anchorage Community College, 1983

Demographic Consultant, University of Phoenix, 1982.

Demographic Consultant, KVOS TV, Inc., Bellingham, WA., 1972, 1974.

Survey Research Consultant, Ewa Mental Health Clinic, Honolulu, Hawaii, 1975.

Information Systems Consultant, Hawaii Center for Environmental Education, Honolulu, HI. 1973.

Demographic Consultant, America Friends of Hebrew University of Jerusalem, Inc., New York, N. Y., 1973.

XIII. Memberships in Associations

Academic Central, Casualty Actuarial Society (2016 to present)

American Statistical Association (1975 to present)

Canadian Population Society (Life Member)

European Association for Population Studies. (1999 to 2018)

Fulbright Academy for Science and Technology (2003 to 2009)

Fulbright Association (1994-97, 2002 to 2010)

Population Association of America (1975 to present)

Mississippi Academy of Sciences (Life member)

Southern Demographic Association (1992 to present)

Western Social Science Association (2015 to 2017)

XIII. Selected Awards and Honors

2022 E. Walter Terrie Award for State and Local Demography, for "Boosted Regression Trees for Small-Area Population Forecasting." Selected as the best paper on an applied topic at the 2022 Conference of the Southern Demographic Association, Knoxville, TN (with J. Baker and J. Tayman).

2020-21 Edward A. Dickson Emeritus Professor Award, University of California Riverside

2016 E. Walter Terrie Award for State and Local Demography, for "Using Modified Cohort Change and Child-Woman Ratios in the Hamilton-Perry Forecasting Method." Selected as the best paper on an applied topic at the 2016 Annual Meeting of the Southern Demographic Association, October 12th, 2016, Athens, Georgia. (with J. Tayman).

Fulbright Specialist Roster (in Applied Demography, appointed March 2014 for a five year term).

Merit Increase to Professor VIII, University of California Riverside, (June) 2013.

Certificate of Appreciation, US Census Bureau (for service on behalf of Census 2010). (September) 2010.

Outstanding American Award 2006, National Association of Medics and Corpsmen (for service on behalf of Hurricane Katrina victims).

Research Fellow, Social Science Research Center, Mississippi State University (appointed, October 2005).

RAND "Research Summer Institute" Scholarship (July), 2004,

Fulbright "German Studies Seminar," (June), 2003,

1999 E. Walter Terrie Award for State and Local Demography, for "We are What We Measure: Toward A New Approach for Assessing Population Forecast Accuracy." Selected as the best paper on an applied topic at the 1999 Annual Meeting of the Southern Demographic Association, October 29th, 1999, San Antonio, Texas. (with J. Tayman and C. Barr).

Hammer Award (as part of a research team evaluating the American Community Survey, U.S. Bureau of the Census), Vice-President of the United States of America, July, 1999,

Performance Award, Science Applications International Corporation, 1999.

Task Achievement Program Award, U.S. Department of Energy, Yucca Mountain Project, 1998.

Certificate of Appreciation, Community Based Leadership Institute, Minority Affairs Division, American Association of Retired Persons, 1992.

Fulbright Lecturing Award, 1990-91, Department of Demography, University of Kerala, Trivandrum, India.

Nominee, Outstanding Contributor to Graduate Education, 1985-86, Graduate Student Senate, Bowling Green State University, 1986.

East-West Center Fellowship, 1980. *East-West Center*, Honolulu, Hawai'i.

Graduate with honors (cum laude), Western Washington State College, 1972.

Alpha Kappa Delta, National Sociology Honorary Society

Phi Theta Kappa, National Community College Honorary Society, Kappa Epsilon Chapter

XIV. Languages

English (US): Native Language

Swedish: Reading and Speaking, Good; Writing, Fair.

Finnish: Reading and Speaking, Poor; Writing, Very Poor.

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF MISSISSIPPI
GREENVILLE DIVISION**

DYAMONE WHITE, ET AL.,

Plaintiffs,

Civil Case No. 4:22-CV-62-MPM-JMV

v.

STATE BOARD OF ELECTION COMMISSIONERS,

ET AL.,

Defendants.

EXPERT REPORT OF DR. CHRISTOPHER W. BONNEAU

I. Introduction and Qualifications

I was retained as an expert by the defendants to ascertain whether Black voters in Mississippi's state supreme court elections in District 1 lack equal opportunity to elect their preferred candidates, in violation of the Voting Rights Act. Additionally, I have examined the differences between other elections in that District as well as responded to certain claims made by the plaintiffs' experts. My findings and conclusions are solely mine and are based on Mississippi-specific voter registration and election data, research I have conducted in the writing of two books and multiple articles and chapters about judicial elections, and the findings of other scholars who have studied judicial elections. I am compensated at a rate of \$300/hour. I previously served as an expert for the defendants in *Alabama State*



Conference of the NAACP, et al. v. State of Alabama, et al. (Case No: 2:16-CV-731-WKW, 2020) and for the plaintiffs in *Greg Lopez, Rodney Pelton, and Steven House v. Jena Griswold, Colorado Secretary of State, and Judd Choate, Director of Elections* (Case No: 1:22-CV-00247-PAB).

I am Professor of Political Science at the University of Pittsburgh, where I have taught since 2002. I received my BA from Valparaiso University in Political Science, Theology, and Humanities, an MA in political science from Ball State University, an MA in political science from Michigan State University, and a PhD in political science from Michigan State University.

My scholarly research primarily focuses on the nature of judicial elections. My studies have focused on all aspects of these elections (e.g., voter participation, voter knowledge, campaign fundraising, campaign spending, electoral contestation, electoral competition, the consequences of electing judges). I take an empirical approach to this topic: given that we have judicial elections in the United States, how do they actually work? I have spent most of my scholarly career seeking to answer questions about judicial elections and respond to critics of them using empirical data. I have utilized a variety of research designs and statistical techniques in this work. I have conducted surveys of voters as well as conducted experiments. Statistically, I have used everything from regression to Bayesian analysis of nonlinear models. The studies cited below, both mine and those of others, follow accepted scientific principles to study social scientific phenomenon.

To date, I have coauthored 3 books, co-edited two books, published numerous peer-reviewed scholarly journal articles (including in the most selective

and prestigious journals in the discipline) and book chapters, and received multiple grants for my research from the National Science Foundation. I have also spoken at numerous academic conferences, universities, bar associations, and legislative committees on the topic of judicial elections. My research has won multiple disciplinary awards and from 2014-2020, I was co-editor of *State Politics and Policy Quarterly*, a peer-reviewed journal that publishes cutting edge research on state politics. A current version of my CV can be found in Appendix B.

II. Facts About State Supreme Court Elections

1. Judicial elections have been a part of political life since the 1820's. Indeed, Mississippi was the first state to have elections for all its judges. One of the central arguments for electing judges was to provide them with some independence from other political actors (Shugerman 2012).
2. Judicial elections were historically partisan elections, just like elections for other political offices. In 1910, North Dakota changed to nonpartisan elections for judges, where parties would not control access to the ballot by nominating candidates and candidates would appear on the ballot without partisan affiliation (Shugerman 2012).
3. Most states that elect state supreme court judges in competitive elections do so statewide, with the exceptions of Illinois, Kentucky, Louisiana, and Mississippi. In Kentucky and Louisiana, the state is divided into 7 districts, with each district electing a member of the supreme court. In Illinois, Cook County receives three judges, and the other four districts in the state receive

one judge each. In Mississippi, the state is divided into three districts, with each district electing three state supreme court judges.

4. Among the other states that elect judges in district-based elections, only Illinois has a district with more than one justice, but the other districts there only elect one justice. Illinois elections are also partisan elections for a judge's first term (with judges keeping their seats in retention elections), while Mississippi's elections are nonpartisan.
5. Electing judges remains quite popular with the public in those states with judicial elections, with polls (both nationwide and within states) showing between two-thirds and three-fourths of voters preferring to elect their judges (e.g., Bonneau and Hall 2009).
6. The data in paragraphs 6-12 are based on all partisan and nonpartisan state supreme court elections (elections that have the potential to be contested) that were held between 1990-2014. Not all studies referenced utilized data from the entire time period; something published in 2005 cannot rely on 2014 data. But, regardless of the specific time periods used in each study, the results reported are remarkably consistent. For specific details of each individual study, please consult them (citations listed in the references).
7. Nonpartisan elections for state supreme courts have less voter participation (higher levels of ballot roll-off) than partisan elections (Hall and Bonneau 2008, 2013; Bonneau and Hall 2009; Bonneau and Loepp 2014).

Interestingly, during this time period, only Mississippi had an election where *more* people voted in the state supreme court race than the highest race on

the ballot. In 2002, incumbent Chuck McRae was defeated in an election that featured higher voter participation than the US Senate race that year (Hall 2015).

8. District-based elections for the state supreme court do not result in less campaign spending overall, controlling for all other relevant factors (Bonneau 2005a; Bonneau and Hall 2009). Likewise, there are no differences in the amount of money raised by candidates in district-based elections compared to statewide elections, other things being equal (Bonneau 2007a).
9. District-based elections for the state supreme court are less likely to be contested (Bonneau and Hall 2003, 2009; Hall and Bonneau 2006, 2008).
10. Elections in nonpartisan states are less likely to be contested than elections in partisan states (Bonneau and Hall 2003, 2009; Bonneau and Loepp 2014).
11. Incumbent justices are more likely to be defeated in partisan elections compared to nonpartisan elections. Moreover, incumbent justices are more likely to lose in nonpartisan district-based elections than they are in nonpartisan statewide elections (Bonneau 2005b).
12. District-based state supreme court elections have lower levels of electoral competition compared to statewide races (Bonneau 2007b; Bonneau and Hall 2009). That is, candidates win with higher percentages of the vote in districts compared to statewide races. The same is true for nonpartisan states: candidates win with higher percentages of the vote in nonpartisan races compared to partisan races.

III. General Facts about Mississippi Judicial Elections

13. Since the 1832 Constitution, judges in Mississippi have been elected by the citizens of the state. Originally, only white men could vote and run for elected office. African-American men were formally granted voting rights in 1868 and women in 1920.
14. Article 6, Section 145 of the Mississippi Constitution provided for judges to be elected from 3 districts in the state. In 1950, Section 145B provided for a Supreme Court of 9 justices, 3 from each of the judicial districts.
15. Thus, while each district has 3 justices, each race is for a single-seat. That is, each seat is labeled Place 1, Place 2, Place 3 and candidates need to specify which seat they are contesting in elections where more than one seat is on the ballot.
16. The labeling of a seat by noting if it is for Place 1, 2, or 3, has no substantive meaning: all “places” within a district have the same electoral constituency, the same term of office, etc. The labeling of the “place” is solely administrative. There is no advantage to winning Place 1 versus, say, Place 2. This can be illustrated by Justice Griffis. In 2016, Griffis unsuccessfully challenged Justice Kitchens for the District 1, Place 3 seat. In 2019, Justice Griffis was appointed to the Court for the District 1, Place 1 seat, which he retained by winning reelection in 2020. Thus, there is nothing special about Place 1 versus Place 2 or 3, or any other combination.
17. Article 6, Section 145 states that judges should be “elected,” but does not specify the type of elections that are to occur. In 1994, Mississippi passed a

law stating, “a judicial office is a nonpartisan office and a candidate for election thereto is prohibited from campaigning or qualifying for such an office based on party affiliation” (Ms. Code 23-15-976). This change had bipartisan support (at least in the state Senate) and was approved by the US Department of Justice (Kritzer 2020).

18. Each justice has a term of office of 8 years. If a vacancy occurs due to death or retirement, the Governor has the authority to appoint a replacement. Currently, 6 of the 9 justices (1 African-American judge and 5 white judges) on the Mississippi Supreme Court obtained their position by gubernatorial appointment. They all subsequently won additional terms to the bench.
19. All eligible candidates run for a seat in the general election with no political party affiliation listed on the ballot; there are no primaries. If no candidate receives >50% of the vote, the top 2 candidates advance to a runoff election. Voter participation in runoff elections is significantly lower than it is in general elections (e.g., Report of Oliver Diaz, Jr. in this case).
20. While these races are officially nonpartisan, that does not mean that parties are not involved or that candidates are not affiliated with political parties.
21. In Justice Diaz’s report for this case (p. 3-4), he notes that “despite the fact that elections for the Supreme Court are non-partisan, such elections include many of the same features as partisan elections for political office” and “political parties and party leaders can and do make [and] endorse Supreme Court candidates.”

22. Interestingly, between 2002-2008, 8 of the 9 state supreme court elections in Mississippi involved television advertising and over \$2 million was spent. This is higher than the other nonpartisan states of Kentucky and Louisiana. Illinois, which also has district-based elections, had more spending on advertising (Hall 2015).
23. Justice Diaz's report (p. 17) also notes that in the District 1, Place 1 election in 2020, according to *Mississippi Today*, Justice Griffis was endorsed by the state Republican Party and Judge Westbrook had the support of numerous Democratic state leaders and groups.

IV. Facts about Judicial Elections in District 1

24. Since 2000, African-Americans have won 3 elections to the Mississippi Supreme Court from District 1 and lost 3 elections. In Districts 2 and 3, African Americans have won 0 races and lost 1 race.
25. In this time period, only 1 incumbent in District 1 (a white incumbent) lost his bid for reelection, Justice Smith in 2008.
26. Every election in District 1 has been contested during this time period, except 2: both elections involved Justice King, an African-American.
27. This means that there was no opposition to Justice King in his bids for reelection. Interestingly, in both elections where Justice King was uncontested on the ballot, an African-American candidate unsuccessfully challenged another incumbent in District 1. This is illustrative of the incumbency advantage candidates enjoy in Mississippi.

28. Thus, incumbent justices—both white and African-American—overwhelmingly win their bids to retain their seats. And, in fact, it is only the white judges who could potentially lose their seats because they are being challenged.
29. Among the contested races since 2000, the closest race was the 2020 race, where Justice Griffis (a white incumbent) defeated Judge Latrice Westbrook (an African-American lower court judge) by only 3%.
30. Thus, in District 1, the results of these elections do not support a finding of racial discrimination: African-American justices invariably win their bids for reelection (and, indeed, since 2000, are never challenged), and when an African-American judge challenges an incumbent, their elections are relatively close. Indeed, Justice Diaz writes in his report (p. 34), “an incumbent Black justice is far more likely to be reelected to the seat than a similarly-credentialed Black attorney who does not have experience on the Court.” The data presented above go further: an incumbent Black justice is far more likely to be reelected than a similarly-credentialed *white* attorney who does not have experience on the Court.
31. Indeed, in District 1, African-American state supreme court candidates who challenge incumbents receive an average of 46.5%, while white candidates who challenge incumbents receive an average of 42.5% of the vote.
32. Comparing the vote of similarly-situated African-American candidates to white candidates in these elections shows no evidence of racial bias in voting.

33. While there are a limited number of elections, and thus it is not possible to draw definitive conclusions, comparing African-American supreme court candidates to other African-American candidates on the ballot in the same election can be informative.

34. In 2012, in the counties that comprise District 1, President Obama (an African-American) received 229,978 votes. Albert Gore, Jr. (a white candidate for the U.S. Senate, but not the former Vice-President) received 198,285 votes, significantly fewer than President Obama. Earle Banks, an African-American candidate (who is a Democrat) for the state supreme court, received only 170,513. William Waller, Jr. (the white Republican incumbent) received 213,375 votes. Had Banks performed as well as President Obama, he would have easily won election. Instead, President Obama received almost 60,000 more votes than Banks. In the same election, Justice King won reelection unopposed. So, in that election, there was an African-American President candidate who won the vote total for District 1, an incumbent African-American justice who ran unopposed, and an African-American candidate challenging an incumbent. This pattern suggests that Banks' race was not the reason he lost; rather, he lost because voters, the same voters who supported President Obama, determined that he was not the best candidate.

35. More recently, in 2020, President Biden received 220,405 votes in the counties that comprise District 1. Mike Espy, an African-American candidate for the U.S. Senate, outperformed President Biden and received 229,498

votes in these counties. Once again, Justice King ran unopposed for his seat. Latrice Westbrooks, an African-American challenger to Justice Kenny Griffis, received only 190,455 votes; Justice Griffis was reelected with 202,530 votes, so had Westbrooks not underperformed Espy by close to 40,000 votes, she would have won her election.

36. In both 2012 and 2020, the leading vote-getter in the counties that comprise District 1 was an African-American candidate: President Obama in 2012 and Mike Espy in 2020. These Democratic African-American candidates outperformed their Republican white opponents. In both 2012 and 2020, Justice King (an African-American) ran unopposed for his seat on the bench.

37. Examining the 2012 and 2020 elections does not lead to the conclusion that the nonincumbent African-American candidates for the state supreme court lost because of their race. They may have lost because the election was nonpartisan and so it was more difficult for voters to identify their preferred candidate. They may have lost because they were not incumbents. They may have lost because voters did not think they were the best candidate for the job. But, given the vote patterns described above and the performance of other African-American candidates in the same counties on the same ballot, it is highly unlikely these candidates lost because they are African-American.

IV. Response to Plaintiffs' Expert Report of Dr. Orey

38. One of the best predictors of how individuals will vote is partisan identification (e.g., Campbell et al. 1960).

39. Because judicial elections in Mississippi are nonpartisan, Dr. Orey states in his report (p.12), “high levels of racial polarization...cannot have been driven by political party affiliation.”
40. However, Bonneau and Cann (2015) found that there are high levels of partisan voting even in nonpartisan elections. That is, voters registered as Democrats vote for the Democratic candidate (and the same for Republicans) even if the partisan identification of the candidates is not on the ballot.
41. Salter (2017) argues this holds in Mississippi as well: “Folks who tend to vote Republican have found a way to learn the identity of judicial candidates favored by Republicans and the same has been true for Democrat [sic] voters seeking to back Democrat [sic] judicial candidates.”
42. Justice Diaz’s report (p. 3-4), notes this as well: “Despite the fact that elections for the Supreme Court are non-partisan, such elections include many of the same features as partisan elections for political office. Successful campaigns are expensive, and elections are influenced by outside interest groups. In addition, even though elections are non-partisan, political parties and party leaders can and do make endorse [sic] candidates.”
43. Justice Diaz goes on to say (p. 16) that “political parties may, however, participate in Supreme Court elections by supporting candidates” and “parties, or leading State party figures, can and do endorse Supreme Court candidates.”
44. Thus, even though the party affiliation of candidates does not appear on the ballot, this does not mean that the partisan affiliation of candidates is

irrelevant; this, rather than racial polarization, could be the reason for the observed voting patterns.

45. Justice Diaz writes (p. 28), "White candidates are generally understood to be associated with the Republican party, and Black candidates with the Democratic party."

46. Indeed, in his expert report in *Hinds County Republican Party v. Hinds County* (2014), Dr. Orey stated (p. 2-3), "Results reveal that blacks provided an average of approximately 96% of their vote to Democratic candidates. In comparison, blacks provided roughly 65% of their votes to black candidates. Based on the data examined in this analysis, we can conclude that blacks support for Democratic candidates proves to be stronger when compared to their support for candidates strictly on the grounds of race."

47. Based on Justice Diaz's and Dr. Orey's reports, we would expect Black voters to choose candidates based on *party* and not based on race. And even though judicial elections in Mississippi are technically nonpartisan, we know from Justice Diaz that party influence in these elections is high and we know from Bonneau and Cann (2015) that voters are able to identify the partisan affiliation of candidates running in nonpartisan elections.

48. This explains the current composition of the justices from District 1: Justice King (African-American, Democrat), Justice Kitchens (White, Democrat), Justice Griffis (White, Republican). All of these justices have won elections as incumbents, and Justice Kitchens' election in 2008 (where he defeated Justice Smith) is the only case of an incumbent losing in District 1 since 2000.

49. In the 2008 election, there were three candidates: incumbent Justice Smith, Jim Kitchens, and Ceola James. Only James is African-American. Yet, in the general election, James came in 3rd place and did not advance to the run-off. Given that there were three candidates in the race (2 White, and 1 African-American), if James was the preferred candidate of African-Americans, she would have advanced to the run-off, with the two white candidates splitting the white vote. In fact, James only received 10% of the vote (and African-Americans are a far larger share of registered voters than 10%).

50. While an African-American candidate has not won a statewide election in Mississippi, this is not true for elections in District 1. In 2012, President Obama won 53.9% of the vote in District 1, outpacing state supreme court candidate Earle Banks by almost 10 percentage points. In 2020, Mike Espy received 54.8% of the vote in District 1, outpacing state supreme court candidate Latrice Westbrooks by 6 percentage points. Indeed, Espy even outperformed President Biden in District 1.

51. The evidence strongly suggests that African-American candidates are able to win elections in District 1 (for statewide offices as well as state supreme court) under its current boundaries.

52. Indeed, the plaintiff's examination of the 2019 elections for other offices using the same geographic boundaries as District 1 illustrates this: an African-American Democrat won an open seat on the Transportation Commission while another African-American candidate barely lost a seat to an incumbent on the Public Service Commission. This, once again, shows the

power of incumbency. The winning African-American candidate for the Transportation Commission had a larger margin of victory than the white candidate for the Public Service Commission. Race cannot be the determinant of these elections since one African-American candidate won and the other lost.

53. This does not support the third precondition of *Thornburg v. Gingles* (1986): the majority group does not vote as a bloc such that it will usually defeat the minority group's preferred candidate. In fact, the mixed success of African-American candidates in District 1 elections strongly suggests that voters (both white and Black) are making decisions based on the suitability of the candidates themselves.

V. Conclusion

54. My examination of the evidence in this case does not reveal evidence of racially polarized voting sufficient to deny Black voters equal opportunity to elect their preferred candidates in District 1 state supreme court elections in Mississippi.

55. African-American candidates do have success in running for the state high court bench and for other offices in District 1. Indeed, incumbent African-American judges often run unopposed, a sign that potential challengers view these incumbents as strong candidates and unlikely to be defeated.

56. As is true with other offices, voters in Mississippi make decisions for the state supreme court largely on the basis of political party, as shown in the reports of Dr. Orey and Justice Diaz.

57. Nonincumbent African-American candidates for the state supreme court perform significantly worse than other African-American candidates on the same ballot in District 1, indicating that race is not the determinative factor in their defeat.

I reserve the right to update this report based on additional facts, testimony, and/or materials.



Chris W. Bonneau

January 2, 2023

DATE

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Appendix A: District 1 Mississippi State Supreme Court General Elections,**2000-2020**

Year	Winner	Loser	Winner Pct. of Vote
2000	Smith	Vollor	52.2
2004	Waller	Grindstaff	74.4
2004	<i>Graves</i>	Richardson	56.8*
2008	Kitchens	Smith	53.5
2012	Waller	<i>Banks</i>	55.6
2012	<i>King</i>		100.0%
2016	Kitchens	Griffis	54.0
2020	Griffis	<i>Westbrooks</i>	51.5
2020	<i>King</i>		100.0%

Incumbents in **bold**.African-American candidates in *italics*.

* Election decided in run-off

Appendix B

CHRIS W. BONNEAU
Curriculum Vitae
January 2023

Department of Political Science
University of Pittsburgh
Pittsburgh, PA 15260

Email: [REDACTED]
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Academic Positions

- Professor, Department of Political Science, University of Pittsburgh, February 2019 - present
- Associate Professor, Department of Political Science, University of Pittsburgh, September 2008 - January 2019
- Assistant Professor, Department of Political Science, University of Pittsburgh, August 2002 - August 2008

Administrative Positions

- Director of Graduate Studies, 2022-present
- Co-Chair, Institutional Conflict of Interest Committee, 2022-present
- Co-Director, Center for American Politics and Society (CAPS), 2013-2014
- Interim Director of Undergraduate Studies, 2008-2009

Education

- Ph.D., Political Science (American Politics, Research Methods, Positive Political Theory), Michigan State University, 2002.
- M.A., Political Science, Michigan State University, 1999.
- ICPSR Summer Program, University of Michigan. 1999.
- M.A., Political Science, Ball State University. 1998.
- B.A., Political Science, Theology, and Humanities, Valparaiso University, 1997.

Grants

- \$47,872. University of Pittsburgh Chancellor's Seed Grant, "Pitt Prison Education Project" (Chris W. Bonneau, Nancy Glazener, Cory Holding, and Shalini Puri, co-Principal Investigators). September 1, 2018-August 31, 2020.

- \$26,578. National Science Foundation, “Collaborative Research: A Workshop on the Normative Implications of Empirical Research in Law and Courts” (SES 1228172, SES 1228306; Brandon L. Bartels and Chris W. Bonneau, co-Principal Investigators). September 1, 2012-August 31, 2013.
- \$990. University of Pittsburgh School of Arts and Sciences, Type II Research Expenses Grant. Summer, 2010.
- \$80,000. National Science Foundation, “Collaborative Research: An Individual-Level State Supreme Court Database” (SES 0518491, SES 0516409, SES 0516600; Chris W. Bonneau, Paul Brace, and Kevin Arceneaux, co-Principal Investigators). September 1, 2005-August 31, 2006.
- \$4,000. University of Pittsburgh School of Arts and Sciences, Type I Third Term Research Stipend. Summer 2005.
- \$7,950. National Science Foundation, “Doctoral Dissertation Research: Money and State Supreme Court Elections” (SES 0108906; Chris W. Bonneau and Melinda Gann Hall, co-Principal Investigators). July 1, 2001-June 30-2002.

Awards

- 2021 Chancellor’s Distinguished Teaching Award.
- 2017 Pi Sigma Alpha Award for the Best Paper presented at the 2017 Annual Meeting of the Southern Political Science Association for “‘Stronger Together’: Political Ambition and the Presentation of Women Running for Office” (with Kristin Kanthak).
- 2016 Virginia Gray Best Book Award given by the State Politics and Policy Section of the American Political Science Association for the best political science book published on the subject of U.S. state politics or policy in the preceding three calendar years for *Voters’ Verdicts: Citizens, Campaigns, and Institutions in State Supreme Court Elections* (with Damon M. Cann).

Publications

Books:

- Bonneau, Chris W. and Damon M. Cann. 2015. *Voters’ Verdicts: Citizens, Campaigns, and Institutions in State Supreme Court Elections*. Charlottesville, VA: University of Virginia Press. *Winner of the 2016 Virginia Gray Best Book Award given by the State Politics and Policy Section of the American Political Science Association for the best political science book published on the subject of U.S. state politics or policy in the preceding three calendar years.*
- Bonneau, Chris W. and Melinda Gann Hall. 2009. *In Defense of Judicial Elections*. New York: Routledge.

- Hammond, Thomas H., Chris W. Bonneau, and Reginald S. Sheehan. 2005. *Strategic Behavior and Policy Choice on the U.S. Supreme Court*. Stanford: Stanford University Press.

Edited Books:

- Bonneau, Chris W. and Melinda Gann Hall. 2016. *Judicial Elections in the 21st Century*. New York: Routledge.
- Bartels, Brandon L. and Chris W. Bonneau. 2015. *Making Law and Courts Research Relevant: The Normative Implications of Empirical Research*. New York: Routledge.

Peer-Reviewed Journal Articles:

- Bonneau, Chris W. and Kristin Kanthak. 2021. “Desk Rejecting ‘Against Desk Rejects!’ ” *PS: Political Science and Politics* 54: 690-693.
- Bonneau, Chris W., Kristin Kanthak, Amanda Leifson, and Shane M. Redman. 2021. “The Review Process and the Citation Gap: The Role of the Editor’s Nudge.” *Journal of Politics* 83: 772-776.
- Bonneau, Chris W. and Kristin Kanthak. 2020. “‘Stronger Together’: Political Ambition and the Presentation of Women Running for Office.” *Politics, Groups, and Identities* 8 (3): 576-594.
- Bonneau, Chris W., Jarrod Kelly, Kira Pronin, Shane Redman, and Matthew Zarit. 2017. “Evaluating the Effects of Multiple Opinion Rationales on Supreme Court Legitimacy.” *American Politics Research* 45 (May): 335-365.
- Bonneau, Chris W. and Damon Cann. 2015. “Party Identification and Vote Choice in Partisan and Nonpartisan Judicial Elections.” *Political Behavior* 37 (March): 43-66.
- Bonneau, Chris W. and Eric Loepp. 2014. “Getting Things Straight: The Effects of Ballot Design and Electoral Structure on Voter Participation.” *Electoral Studies* 34 (June): 119-130.
- Hall, Melinda Gann and Chris W. Bonneau. 2013. “Attack Advertising, the *White* Decision, and Voter Participation in State Supreme Court Elections.” *Political Research Quarterly* 66 (March): 115-126.
- Bonneau, Chris W. and Damon M. Cann. 2011. “Campaign Spending, Diminishing Marginal Returns, and Campaign Finance Restrictions in Judicial Elections.” *Journal of Politics* 73 (October): 1267-1280.
- Bonneau, Chris W., Melinda Gann Hall, and Matthew J. Streb. 2011. “*White* Noise: The Unrealized Effects of *Republican Party of Minnesota vs. White* on Judicial Elections.” *Justice System Journal* 32 (3): 247-268.

- Bonneau, Chris W. and Heather Marie Rice. 2009. "Impartial Judges? Race, Institutional Context, and U.S. State Supreme Courts." *State Politics and Policy Quarterly* 9 (Winter): 381-403.
- Hall, Melinda Gann and Chris W. Bonneau. 2008. "Mobilizing Interest: The Effects of Money on Citizen Participation in State Supreme Court Elections." *American Journal of Political Science* 52 (July): 457-470.
- Bonneau, Chris W., Thomas H. Hammond, Forrest Maltzman, and Paul J. Wahlbeck 2007. "Agenda Control, the Median Justice, and the Majority Opinion on the U.S. Supreme Court." *American Journal of Political Science* 51 (October): 890-905.
- Bonneau, Chris W. 2007. "The Effects of Campaign Spending in State Supreme Court Elections." *Political Research Quarterly* 60 (September): 489-499.
- Bonneau, Chris W. 2007. "Campaign Fundraising in State Supreme Court Elections." *Social Science Quarterly* 88 (March): 68-85.
- Bonneau, Chris W. 2006. "Vacancies on the Bench: Open Seat Elections for State Supreme Courts." *Justice System Journal* 27 (2): 143-159.
- Hall, Melinda Gann and Chris W. Bonneau. 2006. "Does Quality Matter? Challengers in State Supreme Court Elections." *American Journal of Political Science* 50 (January): 20-33.
- Bonneau, Chris W. 2005. "Electoral Verdicts: Incumbent Defeats in State Supreme Court Elections." *American Politics Research* 33 (November): 818-841.
- Ames, Barry, David C. Barker, Chris W. Bonneau, and Christopher J. Carman. 2005. "Hide the Republicans, the Christians, and the Women: A Response to 'Politics and Professional Advancement Among College Faculty.'" *The Forum* 3 (2): Article 7.
- Bonneau, Chris W. 2005. "What Price Justice(s)? Understanding Campaign Spending in State Supreme Court Elections." *State Politics and Policy Quarterly* 5 (Summer): 107-125.
- Bonneau, Chris W. 2004. "Patterns of Campaign Spending and Electoral Competition in State Supreme Court Elections." *Justice System Journal* 25 (1): 21-38.
- Bonneau, Chris W. and Melinda Gann Hall. 2003. "Predicting Challengers in State Supreme Court Elections: Context and the Politics of Institutional Design." *Political Research Quarterly* 56 (September): 337-349.
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- Bonneau, Chris W. and Kristin Kanthak. 2020. "Women's Political Ambition and the 2016 Election." In *Good Reasons to Run: Women and Political Candidacy*, edited by Shauna L. Shames, Rachel I. Bernhard, Mirya R. Holman, and Dawn Langan Teele. Philadelphia: Temple. Pages 167-174.

- Bonneau, Chris W. and Heather Marie Rice. 2017. "Judicial Selection in the States: A Look Back, A Look Ahead." In *Routledge Handbook of Judicial Politics*, edited by Robert M. Howard and Kirk A. Randazzo. New York: Routledge. Pages 340-351.
- Bonneau, Chris W. 2016. "Fundraising and Spending in State Supreme Court Elections." In *Judicial Elections in the 21st Century*, edited by Chris W. Bonneau and Melinda Gann Hall. New York: Routledge. Pages 79-92.
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- Bonneau, Chris W. and Brandon L. Bartels. 2014. "The Normative Implications of Empirical Research: A Research Agenda." In *Making Law and Courts Research Relevant: The Normative Implications of Empirical Research*, edited by Brandon L. Bartels and Chris W. Bonneau. New York: Routledge. Pages 3-13.
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- Bonneau, Chris W. 2009. "Judicial Elections: Facts vs. Myths." In *The Rule of Law: Perspectives on Legal and Judicial Reform in West Virginia*, edited by Russell S. Sobel. Morgantown, WV: West Virginia University. Pages 63-69.
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- Bonneau, Chris W. and Tara W. Stricko-Neubauer. 2006. "The United States Supreme Court: Continuity and Change." In *Developments in American Politics 5*, edited by Gillian

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- Hammond, Thomas H., Chris W. Bonneau, and Reginald S. Sheehan. 2006. "A Court of Appeals in a Rational Choice Model of Supreme Court Decision-Making." In *Institutional Games and the U.S. Supreme Court*, edited by James R. Rogers, Roy B. Flemming, and Jon R. Bond. Charlottesville, VA: University of Virginia Press. Pages 127-172.
- Bonneau, Chris W. and Melinda Gann Hall. 2004. "The Wisconsin Judiciary." In *Wisconsin Government and Politics*, 8th edition, edited by Ronald E. Weber. New York: McGraw-Hill. Pages 171-196.
- Hall, Melinda Gann and Chris W. Bonneau. 2000. "The Wisconsin Judiciary." In *Wisconsin Government and Politics*, 7th edition, edited by Ronald E. Weber. New York: McGraw-Hill. Pages 174-202.

Law Reviews:

- Bonneau, Chris W. and Shane M. Redman. 2015. "Much Ado About Nothing: The Irrelevance of *Williams-Yulee v. The Florida Bar* on the Conduct of Judicial Elections." *Vanderbilt Law Review En Banc* 68: 31-41.

Book Reviews:

- Bonneau, Chris W. 2019. Review of *Judicial Merit Selection: Institutional Design and Performance for State Courts*, by Greg Goelzhauser. *Law and Politics Book Review* 29: 134-135.
- Bonneau, Chris W. 2017. Review of *Supreme Democracy: The End of Elitism in Supreme Court Nominations*, by Richard Davis. *Congress and the Presidency* 45 (March): 112-114.
- Bonneau, Chris W. 2016. Review of *Justices on the Ballot: Continuity and Change in State Supreme Court Elections*, by Herbert M. Kritzer. *Perspectives on Politics* 14 (March): 235-236.
- Bonneau, Chris W. 2012. Review of *Electing Judges: The Surprising Effects of Campaigning on Judicial Legitimacy*, by James L. Gibson. *Law and Politics Book Review* 22 (October): 469-472.
- Bonneau, Chris W. 2007. Review of *Supreme Conflict: The Inside Story of the Struggle for Control of the United States Supreme Court*, by Jan Crawford Greenburg. *Law and Politics Book Review* 17 (June): 499-501.
- Bonneau, Chris W. 2006. Review of *The Politics of Precedent on the U.S. Supreme Court*, by Thomas G. Hansford and James F. Spriggs, II, and *Judging on a Collegial Court: Influences on Federal Appellate Decision Making*, by Virginia A. Hettinger, Stefanie A. Lindquist, and Wendy L. Martinek. *Perspectives on Politics* 4 (December): 776-777.

- Bonneau, Chris W. 2006. Review of *Reforming the Court: Term Limits for Supreme Court Justices*, edited by Roger C. Cramton and Paul D. Carrington. *Law and Politics Book Review* 16 (May): 361-363.
- Bonneau, Chris W. 2003. Review of *Judicial Review in State Supreme Courts: A Comparative Study*, by Laura Langer. *Publius: The Journal of Federalism* 33 (Summer): 166-168.

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- Bonneau, Chris W. and Heather Marie Rice. 2020. "The Judicial System of the USA." In *The USA and Canada 2020* 22nd edition, edited by Dominic Heaney. London: Routledge.
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- Bonneau, Chris W. and Sean Craig. 2017. "*Caperton v. A.T. Massey Coal Co.* (2009)." In *Encyclopedia of American Civil Rights and Liberties: Revised and Expanded Edition*, 2nd edition, edited by Kara E. Stooksbury, John M. Scheb II, and Otis H. Stephens, Jr. Santa Barbara: ABC-CLIO. Pages 127-129.
- Bonneau, Chris W. and Heather Marie Rice. 2017. "The Judicial System of the USA." In *The USA and Canada 2017* 19th edition, edited by Dominic Heaney. London: Routledge. Pages 110-115.
- Bonneau, Chris W. and Heather Marie Rice. 2015. "The Judicial System of the USA." In *The USA and Canada 2016* 18th edition, edited by Neil Higgins. London: Routledge. Pages 117-125.
- Bonneau, Chris W. and Heather Marie Rice. 2014. "The Judicial System of the USA." In *The USA and Canada 2015* 17th edition, edited by Neil Higgins. London: Routledge. Pages 111-118.
- Bonneau, Chris W. and Heather Marie Rice. 2013. "The Judicial System of the USA." In *The USA and Canada 2014* 16th edition, edited by Neil Higgins. London: Routledge. Pages 104-110.
- Bonneau, Chris W. and Brent D. Boyea. 2013. "State Courts: Past, Present, and Future." In *Oxford Handbook of State and Local Government*, edited by Donald P. Haider-Markel. Oxford: Oxford University Press.

- Bonneau, Chris W. and Mark S. Hurwitz. 2012. "The Judicial System of the USA." In *The USA and Canada 2013* 15th edition, edited by Neil Higgins. London: Routledge. Pages 102-108.
- Stricko, Tara W. and Chris W. Bonneau. 2011. "Judicial Decision Making." In *International Encyclopedia of Political Science*, edited by Bertrand Badie, Dirk Berg-Schlosser, and Leonardo Morlino. Thousand Oaks, CA: Sage. Pages 1367-1370.
- Rice, Heather Marie and Chris W. Bonneau. 2009. "Judicial Branch." In *Political Encyclopedia of U.S. States and Regions*, edited by Donald P. Haider-Markel. Washington, DC: CQ Press. Pages 817-819.
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- Rice, Heather Marie, Chris W. Bonneau, and Mark S. Hurwitz. 2009. "Judges." In *Political Encyclopedia of U.S. States and Regions*, edited by Donald P. Haider-Markel. Washington, DC: CQ Press. Pages 815-817.

Opinion:

- Bonneau, Chris W. and Kristin Kanthak. 2021. "Democracy Demands High Levels of Participation." *Pittsburgh Post-Gazette*, October 31, 2021.
- Bonneau, Chris W. and Kristin Kanthak. 2019. "The Thriving Field of State Politics." *The Chronicle of Higher Education*, August 13, 2019.
- McCoy, Chris and Chris W. Bonneau. 2018. "Convoluting Judicial Amendment Subverts Voters." *The Daily Reflector*, November 5, 2018.
- Bonneau, Chris W. 2018. "NC Needs to Stop Messing with Its Judiciary." *Raleigh News and Observer*, May 18, 2018.
- Bonneau, Chris W. 2016. "2016: The Year We Knew Nothing." *The Cresset*. 80 (Advent): 10-11.
- Bonneau, Chris W. and Sean Craig. 2015. "*King v. Burwell* and the Future of the PPACA." *Retina Today* 10 (May/June): 16-21.
- Bonneau, Chris W. 2013. "Political Science Professor: Many Good Reasons for Idea of Electing Judges." *The Oklahoman*, September 8, 2013.
- Bonneau, Chris W. 2013. "PA System of Electing Judges Works." *Philadelphia Inquirer*, February 15, 2013.
- Bonneau, Chris W. 2012. "Are Judicial Elections A Real Problem In Michigan?" *Detroit News*, June 19, 2012.

- Bonneau, Chris W. 2012. "True 'Merit' in Judicial Selection." *Philadelphia Inquirer*, April 8, 2012.
- Bonneau, Chris W. 2011. "A Bum Rap on Elected Judges." *Washington Post*, May 26, 2011.
- Lazos, Sylvia R. and Chris W. Bonneau. 2010. "Appoint Judges? No Thanks. Elections Ensure Certain Safeguards." *Las Vegas Review Journal*, October 31, 2010.
- Bonneau, Chris W. 2010. "Should Judges Be Elected? Yes." *The Costco Connection* 25 (May): 17.
- Bonneau, Chris W. 2008. "2008: A Transformative Election." *The Cresset* 73 (Advent/Christmas): 24-25.

Other:

- Bonneau, Chris W. and Kristin Kanthak. 2018. "In Memoriam: Tom Carsey." *State Politics and Policy Quarterly* 18 (June): 119-121.
- Bonneau, Chris W. 2018. "The Case for Partisan Judicial Elections." Federalist Society White Paper.
- Bonneau, Chris W. 2017. "NSF Dissertation Improvement Grants." *The Legislative Scholar* 2 (Spring): 18-19.
- Bonneau, Chris W. 2012. "A Survey of Empirical Evidence Concerning Judicial Elections." Federalist Society White Paper.
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- Bonneau, Chris W. 2008. "Formal Theory and Judicial Politics: Contributions and Cautions." *Law and Courts Newsletter* 18 (Summer): 4-6.

Current Projects

- Transparency from Start to Finish: A How-to Guide for the Social Sciences with Kristin Kanthak and Lee D. Walker.

Conference/Workshop Participation

2022

- Participant in "Desk Rejections in Political Science Journals." Roundtable at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 7-10, 2022.

2020

- Participant in “State of the Field: Judicial Politics Research in 2020.” Roundtable at the Annual Meeting of the Southern Political Science Association, San Juan, PR, January 9-11, 2020.
- “Candidate Over Party: Split Ticket Voting in Judicial Elections” (with Damon M. Cann). Paper Presented at the Annual Meeting of the Southern Political Science Association, San Juan, PR, January 9-11, 2020.

2019

- “Candidate Over Party: Split Ticket Voting in Judicial Elections” (with Damon M. Cann). Paper Presented at the Annual Meeting of the American Political Science Association, Washington, DC, August 29-September 1, 2019.
- “How You Like Me Now? Evolving Perceptions in the 2016 Presidential Election” (with Kristin Kanthak). Paper Presented at the Annual Meeting of the Southern Political Science Association, Austin, TX, January 17-19, 2019.

2018

- “The Review Process and the Citation Gap: The Role of an Editor’s Nudge” (with Kristin Kanthak, Amanda Leifson, and Shane Redman.” Paper Presented at the Annual Meeting of the American Political Science Association, Boston, MA, August 30-September 2, 2018.
- Participant on “The Impact of Human Subjects Guidelines and Informed Consent Scripts on Data Access and Research Transparency.” New York City, May 21, 2018.
- Participant on “Teaching Introductory Courses in Political Science: Big Ideas.” Roundtable at the Annual Meeting of the Southern Political Science Association, New Orleans, LA, January 4-6, 2018.
- “Women’s Political Ambition and the 2016 Presidential Election” (with Kristin Kanthak). Paper Presented at the Annual Meeting of the Southern Political Science Association, New Orleans, LA, January 4-6, 2018.

2017

- “Women’s Political Ambition and the 2016 Election” (with Kristin Kanthak). Paper Presented at the Good Reasons to Run Conference, University of Pennsylvania, November 11, 2017.
- “Women’s Political Ambition and the 2016 Election” (with Kristin Kanthak). Paper Presented at the 2017 Conference on New Research on Gender and Political Psychology, Tulane University, October 22-24, 2017.
- “‘Stronger Together’: Political Ambition and Women Running for Office” (with Kristin Kanthak). Paper Presented at the Annual Meeting of the American Political Science Association, San Francisco, CA, August 31-September 3, 2017.

- Participant in “Evolving Practices for Data Management and Sharing: A Data-PASS Workshop.” Harvard University, June 14, 2017.
- “Criminal Sentencing and the Cost of Appeal” (with Sean Craig and Kira Pronin). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 6-9, 2017.
- “Judicial Selection in a Time of Uncertainty: Irrelevant or More Relevant Than Ever.” Conference on The U.S. Judicial System in a Trump Presidency. Center for American Political Responsiveness. Penn State University. March 17-18, 2017.
- “‘Stronger Together’: Political Ambition and the Presentation of Women Running for Office” (with Kristin Kanthak). Paper Presented at the Annual Meeting of the Southern Political Science Association, New Orleans, LA, January 12-14, 2017. *Winner of the 2017 Pi Sigma Alpha Award for the Best Paper presented at the 2017 Annual Meeting of the Southern Political Science Association.*

2016

- Participant on “Meet the Editors: Publishing in Political Science.” Roundtable at the Annual Meeting of the Southwestern Political Science Association, Las Vegas, NV, March 23-26, 2016.
- “Judicial Selection in the States: A Look Back, A Look Ahead” (with Heather Marie Rice). Paper Presented at the Annual Meeting of the Southern Political Science Association, San Juan, PR, January 7-9, 2016.

2015

- “Evaluating the Effects of Multiple Opinion Rationales on Supreme Court Legitimacy” (with Jarrod Kelly, Kira Pronin, Shane Redman, and Matthew Zarit). Paper Presented at the Annual Meeting of the American Political Science Association, San Francisco, CA, September 3-6, 2015.
- Participant on “Evaluating the Latest Wave of State Judicial Elections Scholarship.” Roundtable at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 16-19, 2015.
- “Evaluating the Effects of Multiple Opinion Rationales on Supreme Court Legitimacy” (with Jarrod Kelly, Kira Pronin, Shane Redman, and Matthew Zarit). Paper Presented at the Annual Meeting of the Southern Political Science Association, New Orleans, LA, January 15-17, 2015.

2014

- Participant on “The Politics of Electing Judges: Bonneau and Cann’s *Voters’ Verdicts*, Gann Hall’s *Attacking Judges*, and Kritzer’s *Justices on the Ballot*.” Roundtable at the Annual Meeting of the American Political Science Association, Washington, DC, August 28-31, 2014.

- “Judicial Elections and the Illusion of Pandering” (with Kira Pronin). Paper Presented at the Annual Meeting of the American Political Science Association, Washington, DC, August 28-31, 2014.
- “Institutions, War Chests, and Candidate Deterrence” (with Damon Cann). Paper Presented at the Fourteenth Annual State Politics and Policy Conference, Bloomington, IN, May 15-17, 2014.
- “Judicial Elections and the Illusion of Pandering” (with Kira Pronin). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 3-6, 2014.
- Participant in “Justice At Risk: Research Opportunities and Policy Alternatives Regarding Judicial Selection.” Invited Conference Sponsored by the American Judicature Society, American Constitution Society, and Vanderbilt University School of Law. Nashville, TN, March 20-21, 2014.

2013

- “Incumbency, Ballot Cues, and State Supreme Court Elections” (with Damon Cann). Paper Presented at the Annual Meeting of the American Political Science Association, Chicago, IL, August 29-September 1, 2013.
- “Individual-Level Factors and Voter Participation in Judicial Elections” (with Damon Cann). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago IL, April 11-14, 2013.
- “Getting Things Straight: How Ballot Design Affects Participation in Judicial Elections” (with Eric Loepp). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago IL, April 11-14, 2013.
- Participant in “An Uncommon Dialogue: What Do We Want In Our Judges and How Do We Get There?” Invited Conference Sponsored by The Federalist Society, The Aspen Institute, and the Institute for the Advancement of Legal Studies, Colorado Springs, CO, March 28-29, 2013.

2012

- Participant on “Roundtable on the 2012 U.S. Elections: Expectations, Forecasts, and Divination.” Roundtable at the Elections, Public Opinion, and Parties Conference, Oxford, UK, September 7-9, 2012.
- “Individual-Level Factors and Voter Participation in Judicial Elections” (with Damon Cann). Paper Presented at the Elections, Public Opinion, and Parties Conference, Oxford, UK, September 7-9, 2012.
- “State Courts in the U.S: Past, Present, and Future” (with Brent D. Boyea). Paper Presented at the XXX International Congress of the Latin American Studies Association, San Francisco, CA, May 23-26, 2012.

- “Party Identification and Vote Choice in Partisan and Nonpartisan Judicial Elections” (with Damon Cann). Paper Presented at the Annual Meeting of the Southern Political Science Association, New Orleans, LA, January 12-14, 2012.

2011

- “Party Identification and Vote Choice in Partisan and Nonpartisan Judicial Elections” (with Damon Cann). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, March 31-April 3, 2011.
- Participant on “Evaluating How Judges Are Selected in the U.S.: Exploring the Normative Implications of Empirical Research.” Roundtable at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, March 31-April 3, 2011.

2010

- Participant on “Authors Meet Critics: *In Defense of Judicial Elections*.” Roundtable at the Annual Meeting of the American Political Science Association, Washington, DC, September 2-5, 2010.
- “Campaign Contributions in Judicial Elections” (with Brent Boyea, Damon Cann, and Victoria Farrar-Myers). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 22-25, 2010.

2009

- Participant in “Workshop on the Identification and Integration of Law and Courts Data.” University of South Carolina, Columbia, SC, November 7, 2009.
- “Negativity and Television Advertising in State Supreme Court Elections” (with Melinda Gann Hall). Paper Presented at the Annual Meeting of the American Political Science Association, Toronto, ON, September 3-6, 2009.
- “Contributions to Judicial Campaigns: Assessing Comprehension in an Environment without Partisan Signals” (with Brent Boyea, Damon Cann, and Victoria Farrar-Myers). Paper Presented at the Annual Meeting of the American Political Science Association, Toronto, ON, September 3-6, 2009.
- “Going Negative: Attack Advertising in State Supreme Court Elections” (with Melinda Gann Hall). Paper Presented at the Ninth Annual State Politics and Policy Conference, Chapel Hill, NC, May 22-23, 2009.
- “Contributor Decisions in Judicial Elections: Explaining the Impact of Partisan and Nonpartisan Election Formats” (with Brent Boyea, Damon Cann, and Victoria Farrar-Myers). Paper Presented at the Ninth Annual State Politics and Policy Conference, Chapel Hill, NC, May 22-23, 2009.

- “The Effect of Campaign Contributions on Judicial Decisionmaking” (with Damon Cann). Paper Presented at the Annual Meeting of the Southern Political Science Association, New Orleans, LA, January 8-10, 2009.
- Participant on “Conducting Judicial Research.” Roundtable at the Annual Meeting of the Southern Political Science Association, New Orleans, LA, January 8-10, 2009.

2008

- “Campaign Contributions, Judicial Decisionmaking, and Institutional Context” (with Damon Cann). Paper Presented at the Annual Meeting of the American Political Science Association, Boston, MA, August 28-31, 2008.
- Participant on “The State of Judicial Elections Research.” Roundtable at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 3-6, 2008.
- “Campaign Contributions, Judicial Decisionmaking, and Institutional Context” (with Damon Cann). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 3-6, 2008.
- “Judging Under Constraint: Institutions and State Supreme Court Decisionmaking” (with Kevin T. Arceneaux and Paul Brace). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 3-6, 2008.

2007

- “On Consensus in State Supreme Courts” (with Kevin T. Arceneaux and Paul Brace). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 12-15, 2007.
- “Does Money Buy Voters? Campaign Spending and Citizen Participation in State Supreme Court Elections” (with Melinda Gann Hall). Paper Presented at the Seventh Annual State Politics and Policy Conference, Austin, TX, February 23-24, 2007.
- Participant on “Authors Meet Critics: *Strategic Behavior and Policy Choice on the U.S. Supreme Court* and *The Politics of Precedent on the U.S. Supreme Court*.” Roundtable at the Annual Meeting of the Southern Political Science Association, New Orleans, LA, January 4-6, 2007.
- “Race and the Politics of Criminal Cases on State Supreme Courts” (with Heather Marie Rice). Paper Presented at the Annual Meeting of the Southern Political Science Association, New Orleans, LA, January 4-6, 2007.

2006

- “Judicial Independence and Minority Interests” (with Daniel Berkowitz and Karen Clay). Paper Presented at the Conference on Empirical Studies of Courts and Judges, Harvard Law School, November 10, 2006.

- “Educating the Public: The Effects of Judicial Independence on Minority Interests” (with Daniel Berkowitz and Karen Clay). Paper Presented at the Annual Meeting of the International Society for New Institutional Economics, Boulder, CO, September 21-24, 2006.
- “Judicial Independence, Elections, and Minority Interests” (with Daniel Berkowitz and Karen Clay). Paper Presented at the Annual Meeting of the American Law and Economics Association, Berkeley, CA, May 5-6, 2006.
- “Mobilizing Interest: The Effects of Money on Ballot Rolloff in State Supreme Court Elections” (with Melinda Gann Hall). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 20-23, 2006.

2005

- “On the Nature of Ballot Rolloff in Contemporary State Supreme Court Elections” (with Melinda Gann Hall). Paper Presented at the Annual Meeting of the American Political Science Association, Washington, DC, September 1-4, 2005.
- “Do We Really Know It Because We See It? Reconceptualizing Strategic Behavior on the United States Supreme Court” (with Thomas H. Hammond). Paper Presented at the Annual Meeting of the American Political Science Association, Washington, DC, September 1-4, 2005.
- “Voter Participation in State Supreme Court Elections: Can the Electorate Judge Quality?” (with Melinda Gann Hall). Paper Presented at the Fifth Annual State Politics and Policy Conference, East Lansing, MI, May 13-14, 2005.
- “Conceptualizing ‘Sincere’ and ‘Strategic’ Behavior on the U.S. Supreme Court: How Can We Empirically Tell the Difference?” (with Thomas H. Hammond). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 7-10, 2005.

2004

- “Vacancies on the Bench: Open Seat Elections for State Supreme Courts.” Paper Presented at the Annual Meeting of the American Political Science Association, Chicago, IL, September 2-5, 2004.
- “Selecting the Majority Opinion on the Supreme Court” (with Forrest Maltzman, Paul J. Wahlbeck, Thomas H. Hammond, and Saul Brenner). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 15-18, 2004.
- “Dollars and Sense: Campaign Contributions and State Supreme Court Elections.” Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 15-18, 2004.

2003

- “Challengers, Margins, and State Supreme Court Elections” (with Melinda Gann Hall). Paper Presented at the Annual Meeting of the American Political Science Association, Philadelphia, PA, August 28-31, 2003.
- Participant on “Teaching Methods to Undergraduates.” Roundtable at the Annual Meeting of the Southwestern Political Science Association, San Antonio, TX, April 16-19, 2003.
- “Understanding the Dynamics of Campaign Spending in State Supreme Court Elections.” Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 3-6, 2003.
- “Predicting Campaign Spending in State Supreme Court Elections.” Paper Presented at the Third Annual State Politics and Policy Conference, Tucson, AZ, March 14-15, 2003.

2002

- “Money, Judges, and Votes: The Effects of Campaign Spending in State Supreme Court Elections.” Paper Presented at the Annual Meeting of the American Political Science Association, Boston, MA, August 29-September 1, 2002.
- “Campaign Spending in State Supreme Court Elections.” Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 25-28, 2002.
- Participant on “State of the Discipline: State Courts.” Roundtable at the Annual Meeting of the Southwestern Political Science Association, New Orleans, LA, March 27-30, 2002.

2001

- “A Court of Appeals in a Rational-Choice Model of Supreme Court Decision-Making” (with Thomas H. Hammond and Reginald S. Sheehan). Paper Presented at the Conference on Institutional Games and the U.S. Supreme Court, College Station, TX, November 2-3, 2001.
- “Money and Votes in State Supreme Court Elections.” Paper Presented at the Annual Meeting of the American Political Science Association, San Francisco, CA, August 30-September 2, 2001.
- “Incumbents, Challengers, and the Politics of Judicial Elections” (with Melinda Gann Hall). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 19-22, 2001.
- “Procedural Justice, Fairness, and Local Courts in the United States.” Paper Presented at the Interim Meeting of the Research Committee on Comparative Judicial Studies, International Political Science Association, Cape Town, South Africa, January 7-9, 2001.

2000

- “Fairness, Institutional Legitimacy, and the Courts.” Paper Presented at the Annual Meeting of the American Political Science Association, Washington, DC, August 31-September 3, 2000.

- “Challengers in State Supreme Court Elections” (with Melinda Gann Hall). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 27-30, 2000.

1999

- “Toward a Rational Choice Spatial Model of Supreme Court Decision-Making: Making Sense of Certiorari, the Original Vote on the Merits, Opinion Assignment, Coalition Formation and Maintenance, and the Final Vote on the Choice of Legal Doctrine” (with Thomas H. Hammond and Reginald S. Sheehan). Paper Presented at the Annual Meeting of the American Political Science Association, Atlanta, GA, September 2-5, 1999.
- “Perspectives on the Feminist Critique of the Judiciary: A Q-Methodological Approach” (with Ralph E. Baker). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 15-17, 1999.
- “Public Perceptions of the Judiciary: Legitimacy and the Feminist Critique” (with Ralph E. Baker). Paper Presented at the Annual Meeting of the Western Political Science Association, Seattle, WA, March 25-27, 1999.

1998

- “Justice Ruth Bader Ginsburg and the ‘Feminine Voice’” (with Ralph E. Baker). Paper Presented at the Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 23-25, 1998.

Invited Talks

- Buckeye Justice Forum. “Judicial Elections in Ohio.” October 19, 2022.
- Ohio Association for Justice’s Advocates Circle. “Partisan Judicial Elections: Lessons for Ohio.” August 31, 2022.
- PaperClip Communications. “Strategies on Governing in Uncertain Times.” April 25, 2022.
- Allegheny College, Law and Policy Program. “Nonpartisan(?) Judicial Elections.” September 17, 2021.
- Pennsylvania Leadership Conference October Briefing. “Judicial Selection.” October 19, 2019.
- Federalist Society Texas Statewide Conference. “Proposed Reforms to Texas Judicial Selection.” September 14, 2019.
- University of South Alabama. Department of Political Science. “Nonpartisan (?) Judicial Elections.” March 13, 2019.
- University of Oklahoma. Department of Political Science. “Nonpartisan (?) Judicial Elections.” February 11, 2019.

- Federalist Society Counsels Summit. “Judicial Elections.” August 17, 2018.
- Federalist Society Justices Summit. “Judicial Elections.” August 16, 2018.
- American Legislative Exchange Council. “State Judicial Selection.” August 10, 2018.
- Institute for Humane Studies Policy Research Seminar. “Reforming Our Institutions: Judicial Reform.” July 21, 2018.
- John Locke Foundation. “Selecting Judges in North Carolina: Time For a Change?” May 7, 2018.
- St. Louis University Chapter of the Federalist Society. “The Case for Partisan Judicial Elections.” March 29, 2018.
- Triangle Lawyers Chapter of the Federalist Society. “Judicial Selection.” February 15, 2018.
- Federalist Society Pennsylvania Statewide Conference. “What Is the Right Method for Choosing Judges?” October 19, 2017.
- Florida Bar Convention. “The Constitution Revision Commission and Florida’s Judiciary.” June 22, 2017.
- Clemson University. Department of Political Science. “‘Stronger Together’: Political Ambition and the Presentation of Women Running for Office.” November 11, 2016.
- U.S. Government and Politics Advanced Placement Reading Professional Night. “The Supreme Court and the 2016 Presidential Election.” June 5, 2016.
- Princeton University. Department of Politics Public Law Colloquium. “Institutions, War Chests, and Candidate Deterrence.” November 12, 2015.
- Slippery Rock University. Department of Political Science. “Electing Judges: Partisan Influences in Judicial Elections.” October 26, 2015.
- Little Rock Lawyers Chapter of the Federalist Society. “Discussion on Judicial Selection.” June 23, 2015.
- Valparaiso University. Department of Political Science. “Electing Judges: Partisan Influences in Judicial Elections.” May 1, 2015.
- Grove City College. Department of Political Science. “Electing Judges: Partisan Influences in Judicial Elections.” April 9, 2015.
- Temple University. Department of Political Science. “War Chests as Entry Deterrence with Strategic Delay.” March 27, 2015.
- Tulsa Lawyers Chapter of the Federalist Society. “Oklahoma Supreme Court Judicial Selection Reform: Elections vs. Appointment vs. Nominating Committee.” November 21, 2013.

- The Ohio State University. Department of Political Science. “Getting Things Straight: The Effects of Ballot Design and Electoral Structure on Voter Participation.” October 16, 2013.
- Utah State University. Department of Political Science. “Negativity and Television Advertising in State Supreme Court Elections.” March 5, 2013.
- University of Texas-Arlington. Department of History. “What We Know (and Don’t Know) About Judicial Elections.” February 22, 2013.
- University of North Carolina. Department of Political Science. “Party Identification and Vote Choice in Partisan and Nonpartisan Judicial Elections.” January 11, 2013.
- Federalist Society National Lawyers Convention, State Courts Leadership Luncheon. “State Judicial Elections.” November 15, 2012.
- Tallahassee Lawyers Chapter of the Federalist Society. “Judicial Merit Retention in Florida.” October 15, 2012.
- University of California, Davis. Department of Political Science. “Party Identification and Vote Choice in Partisan and Nonpartisan Judicial Elections.” May 22, 2012.
- Indiana University. Maurer School of Law. University Center of Law, Society, and Culture Symposium on Judicial Selection. April 21, 2011.
- State Bar of Minnesota Appellate Practice Institute, Minneapolis, MN. “Law, Politics, and the Election of Judges.” March 4, 2011.
- Rutgers University. Department of Political Science. “Negativity and Television Advertising in State Supreme Court Elections.” February 25, 2011.
- Boise State University. Canadian Studies Program. “Why We Should Elect Judges.” February 15, 2011.
- University of Nevada, Las Vegas. Boyd School of Law, American Constitution Society. “Destroying the Myths of Judicial Reformers.” October 21, 2010.
- University of Nevada, Las Vegas. College of Liberal Arts, University Forum Lecture Series. “Judicial Selection in Nevada: The Consequences of Change.” October 20, 2010.
- University of Nevada, Las Vegas. Boyd School of Law. “Why We Should Elect Judges.” October, 20, 2010.
- Grove City College. “Why We Should Elect Judges.” February 19, 2009.
- Louisiana State University. Department of Political Science. “Mobilizing Interest: The Effects of Money on Citizen Participation in State Supreme Court Elections.” October 29, 2007.

- University of South Carolina. Department of Political Science. “Mobilizing Interest: The Effects of Money on Citizen Participation in State Supreme Court Elections.” October 22, 2007.
- Penn State University–Fayette. “Trends and Issues in Electing Judges.” December 1, 2005.
- Georgia State University. Department of Political Science. “Mobilizing Interest: Money, Quality, and Ballot Rolloff in State Supreme Court Elections.” October 27, 2005.
- University of Georgia. Department of Political Science. “Mobilizing Interest: Money, Quality, and Ballot Rolloff in State Supreme Court Elections.” October 24, 2005.
- West Virginia University. Department of Political Science. “Electoral Verdicts: Incumbent Defeats in State Supreme Court Elections.” April 30, 2004.

Expert Witness

For Plaintiffs

- *Greg Lopez, Rodney Pelton, and Steven House v. Jena Griswold, Colorado Secretary of State, and Judd Choate, Director of Elections*. Civil Case No: 1:22:CV-00247-PAB). 2023.

For Defendants

- *Dyamone White, et al. v. State Board of Elections Commissioners, et al.* Civil Case No: 4:22-CV-62-MPM-JMV. 2023.
- *Alabama State Conference of the NAACP, et al. v. State of Alabama, et al.* Civil Case No: 2:16:CV-731-WKW). 2020.

Courses Taught

Undergraduate

- American Political Process
- Research Methods in Political Science
- Constitutional Law: Governmental Powers
- Constitutional Law: Civil Rights and Civil Liberties
- Judicial Process
- Seminar in American Politics: The Supreme Court
- Seminar in American Politics: Judicial Selection
- Seminar in American Politics: Politics, Science, and Sports

- Inside-Out: Race and the Criminal Justice System
- Inside-Out: Mass Incarceration
- Sports and American Politics
- American Politics Through Film

Graduate

- Empirical Methods of Research (Research Design)
- Advanced Research Methods (Maximum Likelihood)
- Judicial Politics
- Dissertation Overview Seminar

Professional, University, and Department Service

Profession

- Co-Editor, *State Politics and Policy Quarterly*, June 2014-May 2020.
- Panelist, Doctoral Dissertation Improvement Grant Panel, Political Science Program, National Science Foundation, 2015-2017.
- Panelist, Law and Social Science Program, National Science Foundation, 2009-2011.
- Review Editor, *Justice System Journal*, 2010-2013.
- Editorial Board Member, *American Politics Research*, 2016-present.
- Editorial Board Member, *Social Science Quarterly*, 2012-present.
- Editorial Board Member, *State Politics and Policy Quarterly*, 2008-2011, 2020-present.
- Editorial Board Member, *Justice System Journal*, 2006-2010, 2014-2015.
- Editorial Board Member, Routledge Law and Courts Series, 2012-present.
- Treasurer, Law and Courts Section of the American Political Science Association, 2012-2014.
- Member, Executive Committee, State Politics Section of the American Political Science Association, 2011-2013.
- Section Chair, Judicial Politics Section, 2012 Annual Meeting of the Southern Political Science Association.
- Section Chair, State Politics Section, 2008 Annual Meeting of the American Political Science Association.

- Section Chair, Positive Political Theory Section, 2008 Annual Meeting of the Southern Political Science Association.
- Section Chair, Political Methodology Section, 2003 Annual Meeting of the Southwestern Political Science Association.
- Chair, 2021 E. E. Schattschneider Award Committee, American Political Science Association.
- Chair, 2020 C. Neal Tate Award Committee, Southern Political Science Association.
- Member, Committee to Select New Publisher for *State Politics and Policy Quarterly*, 2019.
- Member, Committee to Select New Editor for the *Journal of Law and Courts*, 2020.
- Member, 2018 Nominations Committee, Law and Courts Section of the American Political Science Association.
- Member, 2016 C. Neal Tate Award Committee, Southern Political Science Association.
- Member, 2016 Lasting Contribution Award Committee, Law and Courts Section of the American Political Science Association.
- Member, 2015 Service Award Committee, Law and Courts Section of the American Political Science Association.
- Chair, 2011 Nominations Committee, Law and Courts Section of the American Political Science Association.
- Member, 2009 Nominations Committee, Law and Courts Section of the American Political Science Association.
- Member, 2005 Teaching and Mentoring Award Committee, Law and Courts Section of the American Political Science Association.
- Member, 2004 Pi Sigma Alpha Award Committee, Southwestern Political Science Association.
- Reviewer for *American Journal of Political Science*; *American Political Science Review*; *American Politics Research*; Atomic Dog Publishing; CQ Press; *Election Law Journal*; *Electoral Studies*; *Journal of Comparative Economics*; *Journal of Empirical Legal Studies*; *Journal of Law and Courts*; *Journal of Law, Economics, and Organization*; *Journal of Legal Studies*; *Journal of Policy Analysis and Management*; *Journal of Politics*; *Journal of Theoretical Politics*; *Judicature*; *Justice System Journal*; *Law and Society Review*; Longman Publishing; McGraw-Hill Publishers; National Science Foundation; NYU Press; Oxford University Press; *Party Politics*; Pearson Publishing; *Political Analysis*; *Political Behavior*; *Political Science Research and Methods*; *Political Research Quarterly*; *Politics, Groups, and Identities*; *Public Administration Review*; Routledge; Roxbury Publishing; *Social Science*

Quarterly; Stanford University Press; *State and Local Government Review*; *State Politics and Policy Quarterly*; Temple University Press; Time-Sharing Experiments for the Social Sciences (TESS); University of Chicago Press; University of Michigan Press; University of Virginia Press.

- Member, Executive Committee of the Indiana Political Science Association, 1999-2000.
- Reader, AP Government and Politics Exam, 2004-2006, 2008-2010.
- Table Leader, AP Government and Politics Exam, 2011-2012, 2014-2016.
- Question Leader, AP Government and Politics Exam, 2017-2018.
- Exam Leader, AP Government and Politics Exam, 2019-2021.
- Annual Meeting of the American Political Science Association: Discussant 2004, 2006, 2009, 2010, 2011, 2013, 2014, 2017; Chair 2005, 2010, 2011, 2016, 2017.
- Annual Meeting of the Midwest Political Science Association: Discussant 2003, 2004, 2005, 2006, 2007, 2010, 2011, 2013; Chair 2005, 2010, 2011, 2013.
- Annual Meeting of the Southern Political Science Association: Discussant 2003, 2004, 2005, 2006, 2008, 2009, 2012, 2016, 2017; Chair 2006, 2008, 2009, 2012.
- Annual Meeting of the Southwestern Political Science Association: Discussant 2003; Chair 2003.
- Annual State Politics and Policy Conference: Discussant 2015, 2016; Chair 2014, 2015, 2016.
- Conference on Empirical Studies of Courts and Judges: Discussant 2006.

University

- President, University Senate: 2018-2021.
- Member, Board of Trustees Athletics Committee: 2022-present.
- Member, Board of Trustees Budget Committee: 2018-2022.
- Member, Provost's Advisory Committee on Instructional Excellence, 2022-present.
- Member, Planning Committee for Pitt Diversity Forum 2020: Advancing Social Justice: A Call to Action.
- Member, Search Committee for Vice Provost for Faculty Affairs: 2020.
- Member, Search Committee for Vice Provost for Faculty Development and Diversity: 2020.
- Member, Search Committee for Vice Provost for Graduate Studies: 2020.
- Member, Executive Committee of Task Force for Reimagining Pitt Education: 2020.

- Member, Plan for Pitt 2025 Steering Committee: 2020-2021.
- Member, Arts and Sciences Tenure Council: 2015-2017, 2021-present.
- Alternate member, Arts and Sciences Tenure Council: 2012-2013.
- Co-Chair, Faculty Affairs Committee: 2017-2018.
- Member, Senate Tenure and Academic Freedom Committee: 2011-2018
- Member, Faculty Senate: 2011-2013, 2017-2018.
- Member, Faculty Assembly: 2010-2013, 2016-2018.
- Member, Dietrich School of Arts and Sciences Graduate Council: 2010-2012, 2020-2022.
- Member, Mellon Fellowship Selection Committee: 2008.
- Member, College of Social Science Screening Committee, Michigan State University: 2001.

Department

- Member, Chair's Advisory, Planning, and Budgeting Committee: 2009-2011, 2020-present.
- Member, Formal Theory Search Committee: 2006-2007.
- Member, American Politics Search Committee: 2005-2006, 2012-2013, 2017-2018 (Chair).
- Member, Political Behavior Search Committee: 2016-2017.
- Member, Computational Social Science Search Committee: 2019-2020.
- Chair, Structural Racism Search Committee: 2021-2022, 2022-2023.
- Member, Graduate Awards Committee: 2002-2007, 2011-2013; Chair 2022-present.
- Member, Graduate Admissions Committee: 2005-2011 (Chair, 2007-2011), 2013-2014, 2016-2017, 2021-present.
- Member, Graduate Education Committee: 2011-2014, 2016-2017, 2018-2021; Chair 2022-present.
- Member, Undergraduate Education Committee: 2015-2018.
- Coordinator, Political Methodology Speaker Series: 2004-2008.
- American Politics Exam/Paper Committee (19): Zachary Auter, Ian Cook, Sean Craig, Derek Culp, Brent Dupay, Amanda Leifson, Eric Loepp, Nicole Loncaric, Morgan Marietta, Stephanie McLean, Brandon Myers, Traci Nelson, Heather Rice, Nathaniel Ropski, Tara Stricko, Matt Tarpey, James Tinnick, Eric Wagner, Matthew Weinstein, Michelle Wier.

- Methodology Exam Committee (17): Zachary Auter, Andrea Castagnola, Katharine Floros, Hakan Gunaydin, Jennifer Laks Hutnick, Leslie Marshall, Shawna Metzger, Marilia Mochel, Juan Negri, Lauren Perez, Dana Puia, Juan Carlos Rodriguez-Raga, Daniel Tirone, Sofia Vera, Yu Xiao, Qing Yang, Juan Antonio Rodriguez-Zepeda.
- Comparative Politics Exam/Paper Committee (3): Agustin Grijalva, Dan London, Dana Puia.
- Dissertation Committees Chaired (4):
 - Maria Andrea Castagnola (Adjunct Professor, University of Torcuato Di Tella, and consultant for World Bank)
 - Shane Redman (Senior Data Project Manager and Project Management and User Support Lead, ICPSR)
 - Tara Stricko (Associate Professor of Political Science, Kennesaw State University)
 - Lawrence (LJ) Zigerell (Associate Professor of Political Science, Illinois State University)
- Dissertation Committees Served ():
 - Oliver Bateman (writer)
 - Todd Curry (Western Michigan University; Associate Professor of Political Science, University of Texas–El Paso)
 - Agustin Grijalva (Professor of Law, Universidad Andina, Ecuador)
 - Jonathan Hack (Visiting Assistant Professor of Political Science, Lehigh University)
 - Jenna Becker Kane (Temple University; Associate Professor of Political Science, West Chester University)
 - Brandon Lenoir (Assistant Professor, College of Strategic Communication, High Point University)
 - Stephanie McLean (Senior Research Analyst, Royal Canadian Mounted Police)
 - Juan Carlos Rodriguez-Raga (Associate Professor of Political Science, Universidad de los Andes, Colombia)
 - Matt Tarpey (Assistant Professor, Pittsburg State University)

References

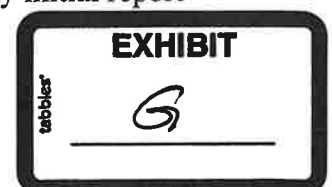
Available Upon Request

Scope of Report and Summary of Conclusions

I was asked to address Dr. Swanson's report, in particular his analysis regarding racial disparities in voter participation and disparities in proximity to polling places.

My conclusions are as follows:

- First, Dr. Swanson overestimates both Black and White turnout in Mississippi. His estimates of Black turnout are further biased because he fails to account for racial differences in the extent to which people overreport voting in surveys. The unreliability of Dr. Swanson's estimates is easily established because his overall turnout estimates imply that there were hundreds of thousands more voters participating than the vote counts reported by the Mississippi Secretary of State.
- Second, in light of Dr. Swanson's analyses and criticisms, I conducted additional analyses that do not rely on self-reports of voter turnout, which confirm that Black voter turnout in Mississippi is in fact lower than White voter turnout. These analyses yield estimates of turnout for Black and White voters that are similar to each other despite the use of multiple data sources and methods of estimation, which is evidence that they are reliable. These estimates also are closer to the true turnout numbers based on actual vote counts reported by the Mississippi Secretary of State than Dr. Swanson's, which further shows that these estimates are more reliable.
- Third, polling place distance in isolation, as reported by Dr. Swanson, is a poor indicator of Black voter turnout or relative ease of access to the voting process. Among other things, scholarly studies of polling place distance typically account for access to a vehicle, among other factors, because the effects of polling place distance are different depending on whether a person has a car. However, Dr. Swanson fails to consider access to a vehicle in his analysis. As I note, Black people in Mississippi are more than three times as likely to lack access to a car than White people. The increased difficulty in accessing polling places that results from this disparity in access to a car is far more salient than the minor purported "advantage" Black Mississippians have in terms of polling place distance, assuming Dr. Swanson's analysis of relative polling place distance is correct.
- Fourth, there are many aspects of polling place experience that could discourage voting apart from polling place distance. Considering wait times, for instance, shows that Black people have longer wait times in Mississippi than White people.
- Finally, with respect to Senate Factor 5 overall, Black people in Mississippi face discrimination in education, income, housing, employment, and criminal justice that dramatically affect life outcomes, including voting. In both my initial report



and again here, I have provided evidence to demonstrate the existence and effects of long-term and contemporary discrimination on the ability of Black Mississippians to participate in the political process.

Dr. Swanson's Estimates of Voter Turnout by Race

Dr. Swanson's estimates of voter turnout by race are based on his analysis of the Current Population Survey Voting and Registration Supplement (CPS). Dr. Swanson estimates based on the CPS that 69.8% of White non-Hispanic Mississippi residents and 72.9% of Black alone or in combination Mississippi residents voted in the 2020 General Election. In total, Dr. Swanson estimates that 1,531,000 Mississippians voted in the November 2020 General Election, a turnout rate of 70.3%.¹

However, the official vote counts certified by the Mississippi Secretary of State show that only 1,313,759 votes² were cast for President (the highest participation race) in Mississippi in the November 2020 general election, which represents 58.7% of the citizen voting age population of Mississippi.³ Dr. Swanson's estimate is nearly 12 percentage points higher than the true turnout rate based on actual votes cast and overestimates the vote total by more than 200,000 votes. This 12% overestimation shows that CPS is not reliable as a benchmark for voter turnout. As I discuss below, neither is it a reliable benchmark for voter turnout by race.

As noted above, by race, Dr. Swanson estimates based on the CPS that 69.8% of White non-Hispanic Mississippi residents and 72.9% of Black alone or in combination Mississippi residents voted in the 2020 General Election. Similarly, he concludes in his report that, based on his analysis of a Mississippi State University Poll, in 2020 reported voter "frequency," or the number of people in Mississippi who say that they always vote, was "68.22% for Whites and 72.1% for Blacks"⁴—rates close to those estimated from the CPS. However, based on my research into the matter, Dr. Swanson's analysis is flawed because his analysis of *both* surveys suffers from the same problem: he fails to adjust or otherwise account for overreporting generally, and for differential overreporting of voter turnout by race in particular.

Dr. Swanson acknowledges the issue of overreporting in his report when positing that the purported advantage he claims Black Mississippians have in terms of proximity to polling places "may offset to some degree the likelihood of over-reporting."⁵ This supposition is incorrect, as I will show below. But for now, this statement shows that Dr. Swanson and I agree that overreporting of voting in surveys is a known issue. However, new research shows that not only

¹ Swanson Report, p. 70.

² Mississippi Secretary of State. "Official Results." Available online from <https://www.sos.ms.gov/elections/electionresults/2020%20GE%20Statewide%20Recapitulation%20Report.pdf>. Accessed 20 Jan 2023.

³ U.S. Census Bureau. "Citizen Voting Age Population by Race and Ethnicity." Available online from <https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/cvap.html>. Accessed 20 Jan 2023.

⁴ Swanson Report, p. 84.

⁵ Swanson Report, p. 84.

does the CPS overestimate turnout for all groups, it does so differentially by race, such that it consistently overestimates Black turnout even more so than White turnout.⁶ This research finds that it is not appropriate to conclude that there is no gap in turnout between Black and White Mississippi voters based on the CPS.

In their 2022 article, which was published recently in a peer-reviewed political science journal, Ansolabehere, Fraga, and Schaffner compare estimates of voter turnout by race from the CPS for multiple states to the Cooperative Election Study as well as to statewide voter files for those states where race is recorded. They find systematic overreporting of voting in the CPS for all racial groups. However, they also show that overreporting is more pronounced among Black voters. Ansolabehere, Fraga, and Schaffner find that the tendency to overreport voting differently by race leads the CPS to underestimate the size of the racial gap in turnout between Black and White voters in multiple states. The bias may stem from problems with the CPS sample, such as a difference in attrition from the survey, or from differences in the tendency to overreport voting.⁷ As a result of these problems with the CPS, researchers should “use caution when making inferences about variation in turnout rates by racial and ethnic groups”⁸ based on the CPS alone.

In sum, Dr. Swanson’s opinion that 69.8% of White non-Hispanic Mississippi residents and 72.9% of Black alone or in combination Mississippi residents voted in the 2020 General Election, as well as his similar opinions about turnout in other elections, is not correct.

Dr. Swanson’s Criticisms of My Analysis

In my initial report, I used CPS data to estimate 56% White and 53% Black turnout in Mississippi for the November 2020 General Election. These estimates are relatively close to the observed turnout rate of 58.7% based on Secretary of State data, and substantially closer than the over 70% turnout figure Dr. Swanson presents.

However, Dr. Swanson is correct that the estimates in my initial report reflect a calculation error. When I was working with the table of CPS data I used, I thought that the educational attainment variable that I was using excluded children. However, it actually reports educational attainment for people ages 15 and older, so for each educational level, the total includes teens aged 15-17. There are no children younger than that in the “Less than High School” category, as evidenced by the fact that cells F10, F11, F12 are 0. Dr. Swanson correctly points out that primarily, this error affects the “Less than High School” calculations and not the other educational levels.⁹ I also calculated total turnout for both racial groups incorrectly. When

⁶ Ansolabehere, Stephen, Bernard L. Fraga, and Brian F. Schaffner. "The Current Population Survey Voting and Registration Supplement Overstates Minority Turnout." *The Journal of Politics* 84.3 (2022): 1850:1855.

⁷ Ansolabehere et al. 2022: 1853-54.

⁸ Ansolabehere et al. 2022: 1854.

⁹ Dr. Swanson’s assessment of the source of this error is not accurate. He writes “Here, Dr. Burch is vague about the source of the information she presents in the pre-ceding exhibit and does not describe the steps she undertook to produce it. Since these statistics of voting by

Column F is subtracted from the denominator, the turnout figures calculated using CPS are consistent with those presented in Dr. Swanson's report.

When I wrote my initial report, I relied on the CPS to estimate turnout by education because the estimates that I produced were in line with turnout based on the actual vote count and thus did not lead me to believe that something was amiss. I also was unaware of the Ansolabehere et al. article that was published right before I wrote this report-- I last researched turnout and the CPS only a few weeks before that article was published. I found the new article when reviewing the literature again in response to the estimates of turnout in Dr. Swanson's report, which I found surprising. I now think, based on the strong evidence of bias in the CPS, it makes sense to "use caution when making inferences about variation in turnout rates by racial and ethnic groups,"¹⁰ and therefore that the CPS really should be considered only in comparison with estimates from other data sources that estimate voter turnout by race in ways that do not rely on self-reporting.

Methodology and Analysis of Validated Voter Turnout: Cooperative Election Study

Because, as discussed above, turnout estimates in the CPS are unreliable not just because of overreporting in general, but because of differences in overreporting by race in particular, I conducted additional analyses which employed alternative methods of looking at turnout by race that do not rely on self-reported voter turnout. These additional analyses also are consistent with my conclusion that Black voter turnout is lower than white turnout and inconsistent with those produced by Dr. Swanson.

Because much of the bias in turnout estimates based on the CPS has to do with differential overreporting of voting by race,¹¹ it is necessary to examine alternative sources that do not depend on self-reporting of turnout to estimate turnout by race in Mississippi. First, I examine the 2020 Cooperative Election Study (CES), which contains a sample of 462¹²

education level by state are not readily available in official published tables . . ." Swanson Report, p. 75. In fact, I downloaded a table from the census website using their online table generator; I have included that table in the Appendix. I did not conduct "an analysis and interpretation of the CPS "raw data" (or CPS "PUMS") data alluded to earlier" and my error was not in working with the raw data or writing software code. Swanson Report, p. 76. Instead, I calculated turnout from this table, dividing the numerator, column G, over the denominator, column B. That was incorrect. I also should have subtracted Column F, not in universe, from the denominator as well.

¹⁰ Ansolabehere et al. 2022: 1854.

¹¹ Ansolabehere et al. 2022; see also Enamorado, Ted, and Kosuke Imai. "Validating self-reported turnout by linking public opinion surveys with administrative records." *Public Opinion Quarterly* 83.4 (2019): 723-748.

¹² This number is above the minimum sample size to detect small effects (Cohen's $d = .2$) with a standard level of statistical power ($=.8$) and significance level of .05. See Singh, Ajay S., and Micah B. Masuku. "Sampling techniques & determination of sample size in applied statistics research: An overview." *International Journal of economics, commerce and management* 2.11 (2014): 1-22.

Mississippi adults (unweighted).¹³ The CES, although it is a survey, independently validates voter registration and turnout for respondents by attempting to match respondents to a database of registered voters maintained by Catalist, a corporation that maintains a national database of voters.¹⁴ Catalist updates their information on voter registration and history with data directly from states.¹⁵ In my analysis, I use the measure of validated voter turnout rather than self-reported voter turnout to estimate racial gaps in turnout, distinguishing this survey from the unvalidated self-reported turnout from CPS or Mississippi State University analyzed by Dr. Swanson.

To analyze the survey, I employ logit regression analysis. Generally, regression analysis is a statistical technique that is designed to look for relationships between an independent variable and a dependent variable.¹⁶ Multiple regression analysis also may involve the use of control variables, which would allow for the analysis of the relationship between an independent variable and a dependent variable after accounting for these additional factors.¹⁷ I examine the relationship between a respondent's race and their validated voter turnout. Because the dependent variable, validated voter turnout, is dichotomous, I use logit rather than ordinary-least-squares regression.¹⁸ However, because logit coefficients are difficult to interpret for lay readers, I include the regression tables of my results in the Appendix and report the results graphically in Figures 1 and 2 below.¹⁹

In the Mississippi sample of the CES,²⁰ the CES team was able to validate that 53% of Mississippi respondents voted in the 2020 General Election. This estimate, while lower than the 58.7% benchmark, is still much closer to the actual turnout than the 70.3% number estimated by

¹³ Ansolabehere, Stephen, Brian F. Schaffner, and Sam Luks, COOPERATIVE ELECTION STUDY, 2020: COMMON CONTENT. [Computer File] Release 2: August 4th, 2021. Cambridge, MA: Harvard University [producer] <http://cces.gov.harvard.edu>.

¹⁴ Ansolabehere, Stephen, Brian F. Schaffner, and Sam Luks, "Guide to the 2020 Cooperative Election Study." Release 2: August 4th, 2021. Cambridge, MA: Harvard University [producer] <http://cces.gov.harvard.edu>: 19.

¹⁵ Ansolabehere et al., "Guide to the 2020 Cooperative Election Study," 2021.

¹⁶ Chatterjee, Samprit, and Jeffrey S. Simonoff. *Handbook of regression analysis*. John Wiley & Sons, 2013.

¹⁷ Chatterjee and Simonoff 2013: 10.

¹⁸ Logit regression is designed for predicting dependent variables that take on only two values, rather than ordinary-least-squares regression, which is for dependent variables that are continuous. Chatterjee and Simonoff 2013: 150.

¹⁹ The columns in the figures report the estimated probability of voting and are calculated using the equation $\text{pr}(\text{voting}) = \frac{1}{1 + e^{-(B_0 + xB_1 \dots)}}$, where $B_0, B_1 \dots$ are the estimated coefficients in the models.

²⁰ Including only Mississippi U.S. Citizens in the analysis and weighting by the variable "commonweight." All CES respondents are adults.

Dr. Swanson from the CPS. Breaking the CES data down further by race,²¹ 60% of White respondents and 46% of Black respondents voted in Mississippi in the 2020 General Election. My regression analysis of validated turnout by race in the CES confirms these percentages, finding the same large, statistically significant gap between Black and White Mississippi voters. As I report in Figure 1, calculating the probability of voting in the 2020 General Election (based on the regression coefficients in the first column of Table 2 in the appendix) shows that 60% of White respondents voted in the 2020 General Election, compared with 46% of Black Mississippi respondents.

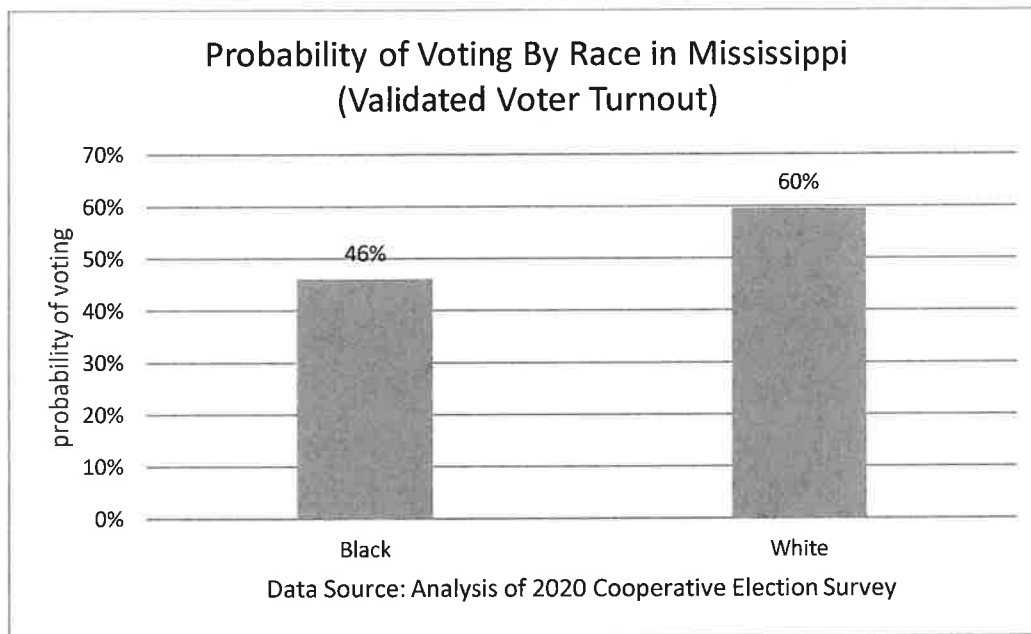


Figure 1: Probability of voting by race in Mississippi. Source: Author's analysis of 2020 CES included in column 1 of table 2 in the appendix.

It is also worth noting that the CES allows us to examine overreporting of voting. Comparing self-reported voter turnout to validated voter turnout shows substantial overreporting of voting. The CES team was able to validate in Catalist that 74% of the White Mississippi respondents who said they voted actually did so, but were only able to validate that 57% of the Black Mississippi respondents who said they voted did so.²² Thus, as the CES shows, corroborating the recent work of Ansolabehere et al. discussed supra, differential over-reporting of voter turnout by race is an important phenomenon that affects estimates of voter turnout in Mississippi and demonstrates the problems with relying only on self-reported voting to estimate racial differences in turnout.

²¹ The CES race question analyzed in this report asks: “What racial or ethnic group best describes you?” and provides the following responses: White, Black, Hispanic, Asian, Native American, Middle Eastern, Two or More Races, Other.

²² For this analysis, which includes reported voter turnout, I weighted the sample by the variable “commonpostweight.”

Effects of Educational Discrimination on Black Voter Turnout

In his report, Dr. Swanson argued that Black Mississippians vote at higher rates than White Mississippians at every educational level and thus argued that educational attainment does not detrimentally affect Black voter turnout. This conclusion is inaccurate because it relies on the CPS, which I have shown to produce biased estimates, and because it ignores the point that I make in my original report with respect to differences in educational attainment by race in Mississippi. I discuss these two points below.

My original purpose for including the CPS analysis in my first report was to show the importance of education and socioeconomic status, arenas in which Black Mississippians face discrimination, to shaping the racial gap in voter turnout. Due to the problems with reliance on CPS discussed above, for this report, I seek to reinforce and corroborate my conclusions regarding the effects of educational discrimination on Black voter turnout by deploying multiple regression analysis on the CES to examine the relationship between race and validated voter turnout while holding educational attainment constant. Multiple regression allows us to begin to compare apples to apples—for instance, comparing turnout between Black and White people with the same educational level. As I note earlier, there is a large and statistically significant gap in voter turnout overall between Black and White Mississippi residents: White turnout in the 2020 General Election is estimated to be 60%, while Black turnout is estimated to be 46%.

Further analysis shows that this large, 14 percentage point gap in turnout mostly comes from the distribution of racial groups across educational levels, rather than from differential voter turnout within each educational level. In other words, the racial gap comes less from the fact that Black people with college degrees vote less than White people with college degrees, but rather from the fact that there are proportionally fewer Black people in Mississippi with college degrees than White people.

We can see this phenomenon in Figure 2, which calculates the probability of having a validated vote for men born in 1972 by race and education among CES respondents in Mississippi using the regression coefficients reported in the second column of Appendix Table 2. In the figure, the probability of voting increases with educational attainment for both racial groups. Within each educational level, there is a small racial disparity in turnout, such that White respondents appear more likely to vote than Black respondents. However, in this multivariate analysis, the Black-White racial disparity is not statistically significant while educational attainment is, again pointing to the large racial disparity across educational levels as the driver of the overall gap in Black and White voter turnout in Mississippi. If education were not operating through race to affect validated voter turnout, including educational attainment in the regression would not have such a big effect on the size or statistical significance of the coefficient on race and turnout as shown in Appendix Table 2.²³

²³ King, Gary, Robert O. Keohane, and Sidney Verba. *Designing social inquiry: Scientific inference in qualitative research*. Princeton university press, 2021.

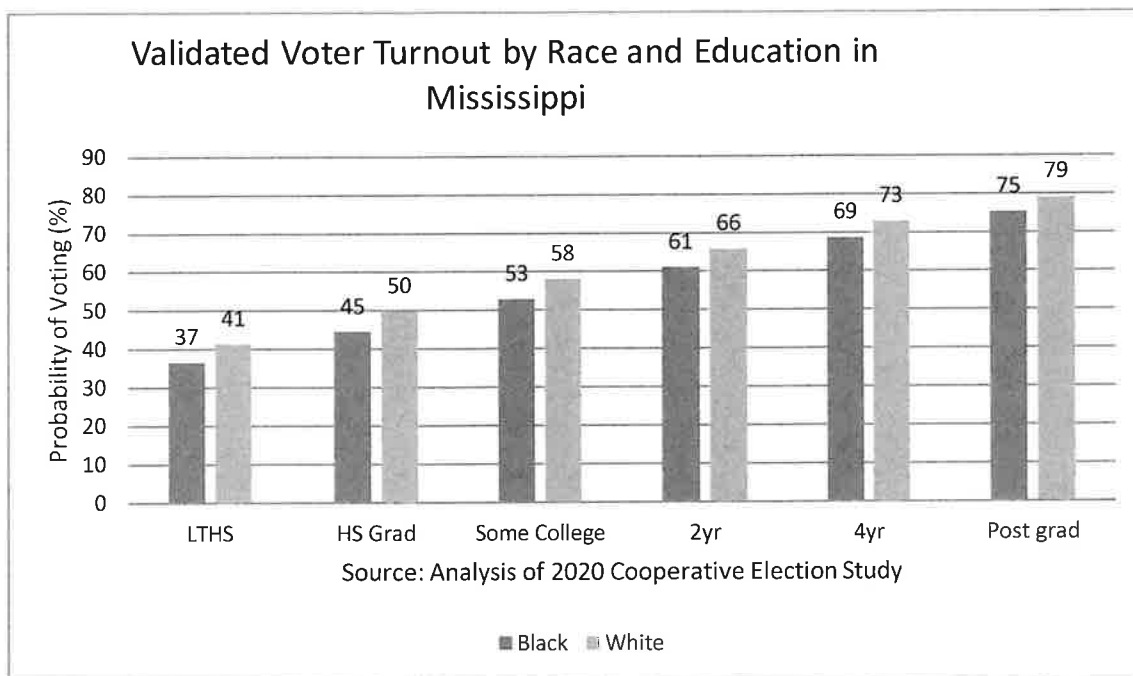
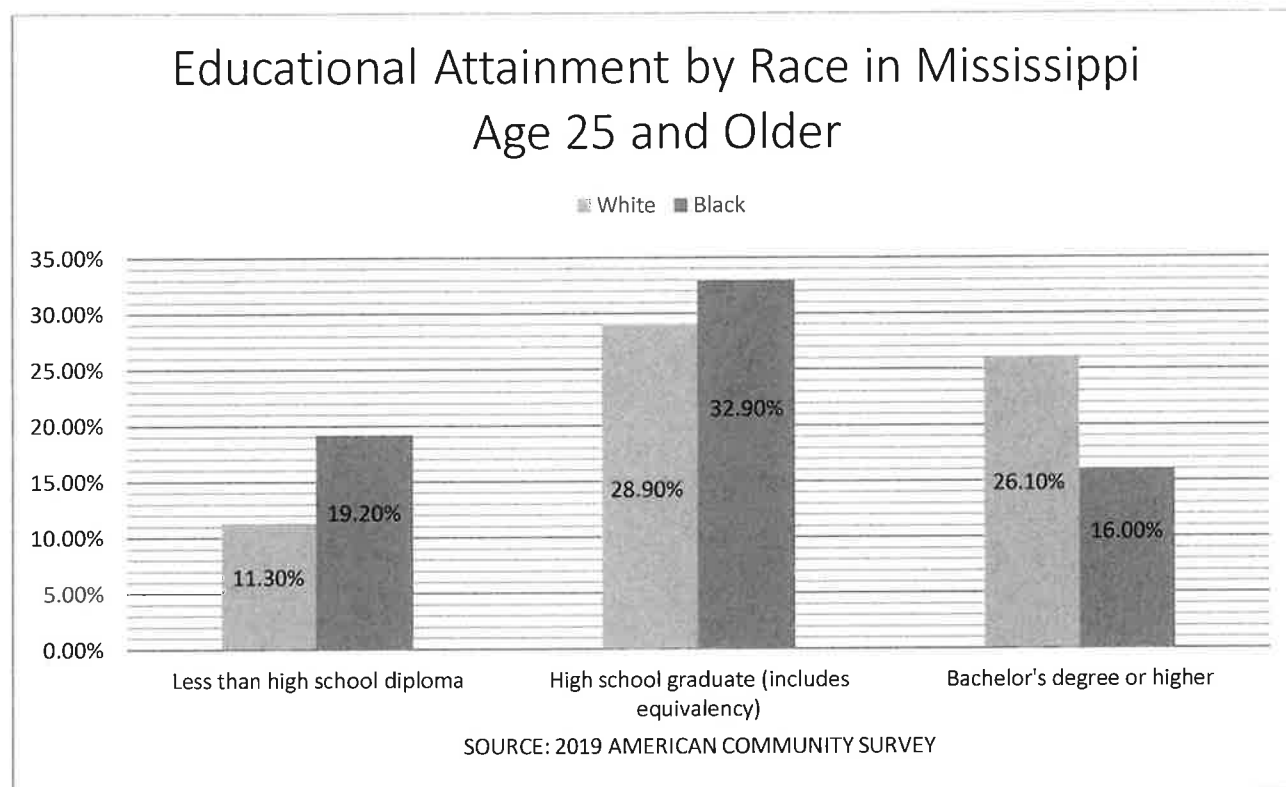


Figure 2 Probability of voting by race and education in Mississippi. Estimated probability of voting calculated for men born in 1972 by race and educational attainment. Source: Author's analysis of 2020 CES included in column 2 of table 2 in the appendix.

Dr. Swanson's conclusion that differences in educational attainment do not disadvantage Black Mississippians is based on a fundamental misunderstanding: he argues (based on faulty data) that because Black people and White people in Mississippi with similar educational levels vote similarly, that race does not matter for voter turnout. This logic ignores my original conclusion, which is borne out by the analysis here, that Black Mississippians have faced and are facing educational discrimination throughout the state. The state has maintained many aspects of educational segregation and under-investment in public education for Black students in both the historical and the contemporary period, as I note in my initial report.

This educational discrimination has led to gaps in literacy and educational attainment, with Black Mississippi residents having lower literacy and educational attainment than White Mississippi residents. This discrimination has allowed and continues to allow fewer Black Mississippians to reach educational parity with White Mississippians. As I have shown above, in line with decades of political science research, educational attainment has a strong, positive relationship to voter turnout. People with higher educational attainment are more likely to vote. Educational attainment in Mississippi thus is shaped by race in the ways that I highlight in my original report. I include those data from my original report again here as Figure 3 to clearly show the differences in educational attainment by race in Mississippi.

Figure 3: Educational Attainment by Race in Mississippi. Source: 2019 American Community Survey 1-Year Estimates



To summarize the discussion, analyzing validated voter turnout from the Mississippi sample of the CES clearly shows that White Mississippians were more likely to turn out in the 2020 General Election than Black Mississippians. This large racial gap is statistically significant. My analysis shows that educational attainment is an important factor in shaping this racial gap: accounting for educational attainment and other factors shows that while Black and White people with similar educational backgrounds vote similarly, people with lower educational attainment vote at lower rates overall than people with higher educational attainment. Because of the historical and contemporary discrimination in education faced by Black people that I highlight in my report, Black Mississippians are more likely to have lower educational attainment, and thus lower voter turnout, than White Mississippians.

Methodology and Analysis of Voter File Turnout: Ecological Inference

To further bolster the CES analysis, I turn to a second method of estimating the racial gap in turnout that avoids overreporting bias: ecological inference (EI). EI is a method of “inferring individual behavior from aggregate data”²⁴ that has been used as a standard statistical tool to estimate voting behavior in vote dilution cases.²⁵ Lewis describes “inferring the rate of voter

²⁴ King, Gary and Margaret Roberts. “EI: A(n R) Program for Ecological Inference.” Available from <https://github.com/iqss-research/eir>. Accessed 20 Jan 2023.

²⁵ Lewis, Jeffrey B. “Extending King’s Ecological Inference Model to Multiple Elections Using Markov Chain Monte Carlo.” In *Ecological Inference: New Methodological Strategies*. King,

turnout among two racial groups in a set of electoral precincts from observations on the racial composition and total voter turnout in each precinct” as I will do here, as “the canonical ecological inference problem.”²⁶ EI takes information on vote totals and racial demographics in geographic units and uses Bayesian statistical methods to estimate voting behavior—in this case, turnout by race.

EI requires data on the percent of each racial group in the geographic area and data on the overall voter turnout in the geographic area. I calculate block group voter turnout by geocoding²⁷ the Mississippi voter registration file to census block groups,²⁸ then aggregating up to produce counts of votes from each block group for the November 2020 General election. I use census block group data on the citizen voting age population by race, distinguishing non-Hispanic white population from the non-White population.²⁹ I also break out the data for the block groups in the counties of the Supreme Court District 1 (Central District)³⁰ and perform EI separately.

The estimates obtained using ecological inference show that there is a statistically significant racial gap in turnout in Mississippi: White Mississippi citizens are far more likely to vote than non-White Mississippi citizens. Based on the statewide EI analysis shown in Figure 4, the weighted mean of the proportion of non-White people who voted is 42%, while the weighted mean of the proportion of White people who voted is 58%. In the Central District, where turnout was slightly higher than the state overall, the weighted mean proportion of non-White people

Gary, Ori Rosen and Martin A. Tanner, eds. Cambridge: Cambridge University Press, 2004; 97-122.

²⁶ Lewis 2004: 97.

²⁷ Prener, Christopher, Branson Fox and Christopher Kenny. “Censusxy: Access the U.S. Census Bureau’s Geocoding API System.” Available from <https://chris-prener.github.io/censusxy/>. Accessed 20 Jan 2023. I used benchmarks and vintages from the 2020 Census.

²⁸ See Lewis 2004: 97: EI may be performed for any “aggregate groupings of votes for which the racial composition is known.” I was unable to match 240,527 registered voters to 2020 census block groups, and an additional 8,991 were not matched because they did not have a state listed in the voter file. 144,175 (60%) of the unmatched people voted statewide. 78,898 of the unmatched were from the Central District, of which 46,418 (59%) voted in the 2020 General election. I deleted some block groups with 0 population.

²⁹ U.S. Census Bureau. “Citizen Voting Age Population by Race and Ethnicity.” Available online from <https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/cvap.html>. Accessed 20 Jan 2023. The final sample size was 2,438 block groups for the statewide analysis and 773 for the Central District analysis.

³⁰ Bolivar, Claiborne, Copiah, Hinds, Holmes, Humphreys, Issaquena, Jefferson, Kemper, Lauderdale, Leake, Madison, Neshoba, Newton, Noxubee, Rankin, Scott, Sharkey, Sunflower, Warren, Washington, and Yazoo Counties. State of Mississippi Judiciary. “Mississippi Supreme Court Judicial Map.” Available online from <https://courts.ms.gov/appellatecourts/sc/scdistricts.php>; accessed 20 Jan 2023.

who voted is 44%, while the weighted mean proportion of White people who voted is 62%.³¹ More importantly, the statewide and Central District estimates for each racial group produced using EI and the CES are realistic given what we know about the actual voter participation statewide and the Central District from the Mississippi Secretary of State.

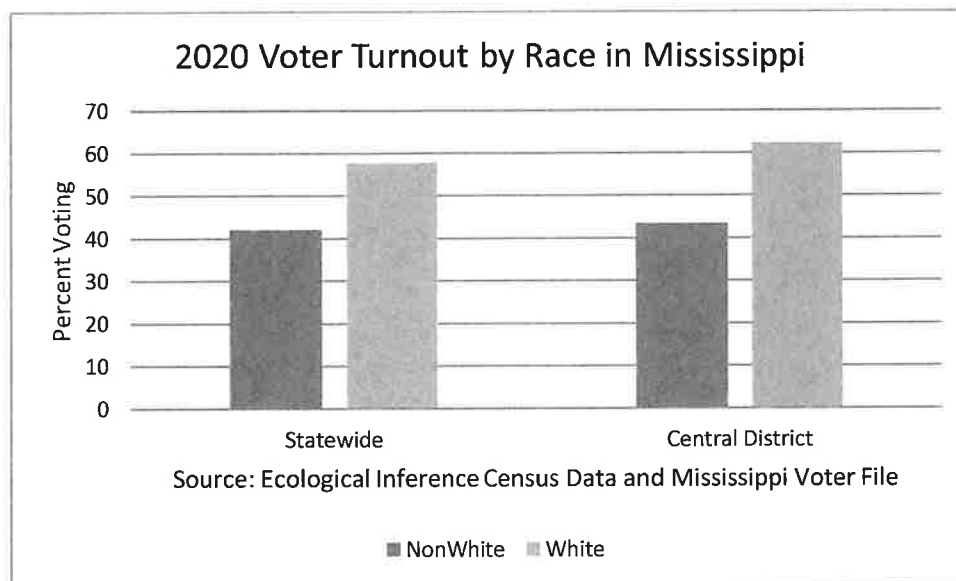


Figure 4: 2020 Voter Turnout by Race in Mississippi. Turnout by race estimated using EI on block group data from the census bureau on citizen voting age population by race, merged with turnout data from the Mississippi voter file. Results also reported in Table 1 below.

To summarize, all methods of estimating voter turnout by race in Mississippi that are not biased by racialized differential overreporting of turnout show that White people have a statistically significant advantage in voter turnout. Table 1 summarizes all the estimates of statewide voter turnout and voter turnout by race obtained from the different methods that I have discussed here. As shown in the table, the estimates of White and non-White voter turnout produced by EI are remarkably similar to those produced by my regression analysis of Black and White turnout in the CES, even though these estimates come from two different methods and sources of data. Both the regression analysis of the CES and the EI analysis using the Mississippi voter file, both of which avoid issues of differential over-reporting of voting, show large turnout gaps of between 13 to 15 percentage points statewide, and the EI analysis predicts a turnout gap of 18 points in the Central District. Both the regression analysis and the EI analysis predict White voter turnout at a rate close to 60 percent. In contrast, the CES predicts Black

³¹ Performing the analysis with non-Hispanic Black alone or in combination and non-Black as the reference categories also produces estimates of lower Black voter turnout relative to non-Black residents both statewide and in the Central District. Statewide, Black turnout was estimated to be 42% (41% to 43%), while non-Black turnout was 57% (50% to 64%). In the Central District, Black turnout was estimated to be 43% (42% to 44%) while non-Black turnout was estimated to be 63% (41% to 85%).

turnout in the mid-forty percent range statewide, while the EI analysis similarly predicts non-White turnout in the low forty percent range statewide. The estimates of turnout by race, and of turnout overall, that are based on my CES and EI analysis also are closer to the benchmark turnout rates that are based on vote counts from the Mississippi Secretary of State. Dr. Swanson fails to account for differential overreporting of turnout by race, and overreporting of turnout generally, which is why his estimates of turnout are unreasonable.

Black Voter Suppression and Experiences with In-Person Voting

There are many factors that affect voter turnout generally, and Black voter turnout in particular. However, in his report, Dr. Swanson says that he looks for Black voter suppression efforts along just one “causal” dimension: polling place distance. He hypothesizes:

My hypothesis for this question was that if the Black voting age population were being systematically disenfranchised by the state of Mississippi, a symptomatic indicator of that would be seeing fewer of them close to polling places, and more of them a great distance from polling places.³²

Dr. Swanson provides no literature or studies to support this supposition. Meanwhile, my examination of the literature on polling place distance finds that distance overall has a small effect on turnout, but that effect primarily has to do with access to transportation.³³ For instance, Haspel and Knotts (2005) find that voters with cars are relatively insensitive to polling place distance, while voters without cars are more sensitive. Hence, as Haspel and Knotts show, with respect to polling place distance, the actual distance from the polling place overall matters less than the availability of a car. As I show in Figure 6 of my initial report, 3.5% of White Mississippi households have no access to a car, compared to 11.3% of Black Mississippi households.³⁴ Considering polling place distance without accounting for racial differences in access to transportation, as Dr. Swanson does in his report, is inconsistent with published scholarly research in this area that controls for access to vehicles.

It is also important to note that Dr. Swanson ignores other aspects of the in-person voting experience that also affect turnout. For instance, long wait times at polling places may discourage voters.³⁵ Further analysis of the CES, which I report in Figure 5, shows that among validated Mississippi voters, 18.9% of white voters report that they waited more than 30 minutes to vote in the 2020 General Election, compared with 40.7% of black voters.³⁶ Consistent with

³² Swanson Report, p. 43.

³³ Haspel, Moshe, and H. Gibbs Knotts. "Location, location, location: Precinct placement and the costs of voting." *The Journal of Politics* 67.2 (2005): 560-573. See also Bagwe, Gaurav, Juan Margitic, and Allison Stashko. *Polling Place Location and the Costs of Voting*. Working Paper, 2020, which finds that transportation affects the relationship between distance to the polls and turnout as well.

³⁴ Source: 2019 American Community Survey 1 Year Estimates.

³⁵ Chen, M. Keith, et al. "Racial disparities in voting wait times: evidence from smartphone data." *Review of Economics and Statistics* 104.6 (2022): 1341-1350.

³⁶ Here, I switch to using the post weight for validated voters.

these estimates from the CES, an analysis of cell phone data also shows a racial disparity in wait times in Mississippi's 2nd congressional district.³⁷

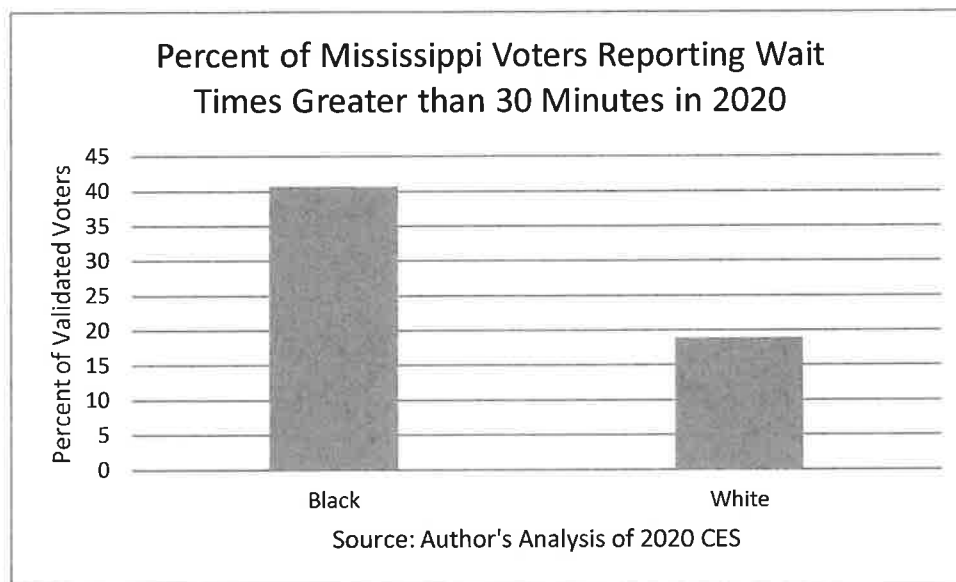


Figure 5: Percent of Mississippi Voters Reporting Wait Times Greater than 30 Minutes in 2020. Source: author's analysis of 2020 CES. Data on wait times reported for validated voters only.

Conclusion

Dr. Swanson's report does not rebut my conclusion or change my opinion that Black Mississippians' ability to participate effectively in the political process is hindered because of the discrimination they face. As I show conclusively here through the analysis of several different data sets using different methods, in Mississippi, White people vote at higher rates than Black people. This difference is partly the result of racial differences in educational attainment, which I already have shown is the result of years of racial discrimination by state actors.

Dr. Swanson points out that more White people in Mississippi live more than a mile from their polling place than Black people as further evidence that Black people do not face discrimination in voting; as I have shown, this argument ignores the fact that polling place distance really matters only for people who lack access to transportation, another arena in which Black people are disadvantaged in Mississippi relative to White people. Finally, when we consider additional aspects of the in-person voting experience in Mississippi, such as wait times, there is clear evidence that Black people are disadvantaged relative to White people.

³⁷ Chen et al. 2022.

Table 1 Estimates of Mississippi Voter Turnout, by Race, 2020 General Election. Estimates of voter turnout from different sources. Confidence intervals in parentheses.

Universe	Method/Source	White Turnout:	69.8% to 73.9%	Black Turnout:	72.8% to 77.7%	Total Turnout:	70.3% to 73.5%
Statewide (Benchmark)	Current Population Survey 2020 (Dr. Swanson) ³⁸	N/A		N/A			
Statewide	MS Secretary of State (2020 Presidential General) ³⁹	White Turnout:	59.6%	Black Turnout:	46.1%	Total Turnout:	53.3%
Statewide	CES 2020 ⁴⁰	White Turnout:	58% (57% to 59%)	Non-White Turnout:	42% (33% to 51%)	Total Turnout:	58% ⁴¹
Central District (Benchmark)	MS Secretary of State (2020 Presidential General) ⁴²	N/A		N/A		Total Turnout:	59.4%
Central District	Ecological Inference (MS Voter File)	White Turnout:	62% (61% to 64%)	Non-White Turnout:	44% (29% to 58%)	Total Turnout:	58% ⁴³

³⁸ Swanson Report, p. 70.

³⁹ Mississippi Secretary of State. “Official Results” and U.S. Census Bureau. “Citizen Voting Age Population by Race and Ethnicity.”

⁴⁰ Calculated based on Model 1 of Appendix Table 2.

⁴¹ Total votes/citizen voting age population from the statewide block group data (after excluding people who were unmatched to block groups as discussed in Note 28). This estimated turnout rate is close to the actual turnout rate because the turnout rate among the missing voters is 59.9%. For EI estimates that decrease the total block group CVAP by 11% to account for missing data, see the appendix.

⁴² Mississippi Secretary of State. “Official Results” and U.S. Census Bureau. “Citizen Voting Age Population by Race and Ethnicity.”

⁴³ Total votes/citizen voting age population from the Central District block group data (after subtracting the people who were unmatched to block groups as discussed in Note 28). For EI estimates that decrease the total block group CVAP by 11% to account for missing data, see the appendix.

Appendix

Table 1: Custom CPS 2020 Voting Supplement Table

Source: CPS Voting Supplement 202011								
Weight used: PWSSWGT								
Universe: selected geographies: Mississippi; Demographics- hispanic/non-hispanic origin (PEHSPNON): Non-Hispanic; Demographics-United States citizenship group (PRCITSHP): all except: Foreign Born, Not a US Citizen								
Did you vote? (PE1)								
Demographics-highest level of school completed (PEEDUCA)	Total	No Response	Refused	Don't Know	Not in Universe	Yes	No	
-> Total	2774805	172861	7147	24141	650643	1507298	412715	
-> Total -> Total Mississippi	2774805	172861	7147	24141	650643	1507298	412715	
-> Total -> Total Mississippi -> Total White only	1611060	107149	4526	16587	315946	904127	262725	
Not in Universe	260453	0	0	0	260453	0	0	
3 Less Than 1st Grade	1296	0	0	0	0	0	1296	
1 1st,2nd,3rd Or 4th Grade	1359	0	0	0	0	1359	0	
2 5th Or 6th Grade	5796	0	0	0	0	1929	3867	
3 7th Or 8th Grade	19291	2120	0	0	5103	2193	9875	
4 9th Grade	38123	1057	0	0	20698	8713	7655	
5 10th Grade	41388	2330	0	0	15130	11163	12765	
5 11th Grade	34188	1225	0	0	9311	9201	14451	
7 12th Grade No Diploma	12228	0	0	0	3955	5529	2744	
3 High School Grad-Diploma Or Equiv (ged)	396970	44463	1286	3504	0	230459	117258	
3 Some College But No Degree	309419	24141	2252	7224	0	227594	48208	
2 Associate Degree-Occupational/Vocational	55762	1061	988	1342	0	46716	5655	
1 Associate Deg.-Academic Program	112454	7645	0	3294	1296	87056	13163	
2 Bachelor's Degree(ex:ba,ab,bs)	220121	20764	0	1223	0	178044	20090	
3 MASTER'S DEGREE(EX:MA,MS,MEng,MEd,MSW)	78556	967	0	0	0	74974	2615	
4 Professional School Deg(ex:md,dds,dvm)	13229	0	0	0	0	11570	1659	
3 DOCTORATE DEGREE(EX:PhD,EdD)	10427	1376	0	0	0	7627	1424	
5 -> Total -> Total Mississippi -> Total Black only	1075788	61543	2621	7554	292828	571129	140113	
7 Not in Universe	234761	0	0	0	234761	0	0	
3 Less Than 1st Grade	1530	0	0	0	0	0	1530	
3 1st,2nd,3rd Or 4th Grade	0	0	0	0	0	0	0	
2 5th Or 6th Grade	0	0	0	0	0	0	0	
1 7th Or 8th Grade	12822	1078	0	0	3961	5253	2530	
2 9th Grade	29850	0	0	0	17705	8395	3750	
3 10th Grade	50697	0	1276	0	22663	16887	9871	
4 11th Grade	57132	5652	0	0	7168	25110	19202	
5 12th Grade No Diploma	38961	4442	0	0	4308	22282	7929	
5 High School Grad-Diploma Or Equiv (ged)	303873	25778	0	5939	2262	202663	67231	
7 Some College But No Degree	143532	10315	0	0	0	121912	11305	
3 Associate Degree-Occupational/Vocational	27863	1425	0	0	0	23122	3316	
3 Associate Deg.-Academic Program	43020	2597	0	1615	0	32800	6008	
2 Bachelor's Degree(ex:ba,ab,bs)	84496	4673	0	0	0	73818	6005	
1 MASTER'S DEGREE(EX:MA,MS,MEng,MEd,MSW)	38343	5583	0	0	0	31324	1436	
2 Professional School Deg(ex:md,dds,dvm)	1119	0	0	0	0	1119	0	
3 DOCTORATE DEGREE(EX:PhD,EdD)	7789	0	1345	0	0	6444	0	
4 -> Total -> Total Mississippi -> Total American Indian, Alaskan, &	6550	0	0	0	1554	5096	0	

Table 2 Estimates of Mississippi Voter Turnout, by Race, 2020 General Election. Models estimated using Logistic Regression. Data from 2020 Cooperative Election Survey. Validated vote in 2020 General Election is the dependent variable. White is the reference racial category. * $P < .001$, ** $P < .01$, * $P < .05$. Standard errors below in parentheses.**

	Model 1	Model 2
Black	-0.545**	-0.207
	(0.180)	(0.200)
Other Race	-1.246	-0.757
	(0.649)	(0.697)
Education		0.334***
		(0.069)
Birth Year		-0.040***
		(0.006)
Gender		0.167
		(0.196)
Constant	0.388***	77.210***
	(0.118)	(11.740)

Table 3: EI Estimates of Voter Turnout in Mississippi in the 2020 General Election. Analysis adjusts the block group data for unmatched registered voters by decreasing the total citizen voting age population of each block group by 11%.

	White Turnout	Non-White Turnout
Statewide	64% (63% to 65%)	52% (36% to 69%)
Central District	70% (68% to 71%)	53% (23% to 83%)

**IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF MISSISSIPPI
GREENVILLE DIVISION**

DYAMONE WHITE, et al.,

Plaintiffs,

v.

STATE BOARD OF ELECTION
COMMISSIONERS, et al.,

Defendant.

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No. 4:22-cv-00062-SA-JMV

Declaration of Traci Burch

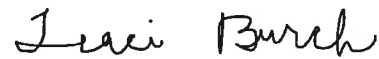
DECLARATION OF TRACI BURCH

I, Traci Burch, make the following declaration based on personal knowledge:

I have been retained by the Plaintiffs in the above referenced matter as an expert. I submit that the foregoing report from me is a true and accurate copy of the report I provided to Plaintiffs in this matter. I declare that the information and opinions contained in the report are true and correct to the best of my knowledge.

I declare under penalty of perjury that the foregoing is true and correct. 28 U.S.C. § 1746.

Dated: 2/6/2023



Traci Burch

Responsive Report of Byron D'Andra Orey, Ph.D.

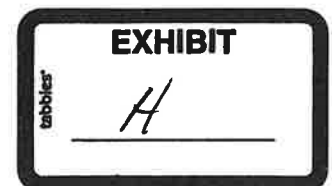
February 6, 2023

1. My name is Byron D'Andra Orey. My initial report for this case, dated October 3, 2022, was submitted previously. The attorneys for the plaintiff have asked me to provide a rebuttal report that responds to the report of Dr. Christopher Bonneau.
2. My findings for the report submitted on October 3, 2022, reveal that racially polarized voting exists in Mississippi and in Supreme Court District 1, and that white bloc voting usually prevents black-preferred candidates from winning elections in Supreme Court District 1, in accordance with the *Gingles* prong 2 and 3 tests.¹ On average, blacks were found to vote as a cohesive bloc and whites voted as a bloc to usually defeat black preferred candidates. As explained below, nothing in Dr. Bonneau's report leads me to alter my conclusions that voting in elections in Mississippi is racially polarized and that white bloc voting usually defeats black-preferred candidates in the jurisdiction of interest.

Dr. Bonneau Does Not Substantiate His Claims Regarding the Role of Political Party in Explaining Racial Polarization

3. Dr. Bonneau does not appear to contest my empirical analysis demonstrating the existence of racially polarized voting. Rather, he contends that the observed polarization is "largely on the basis of political party" (paragraph 56).
4. In drawing his conclusions about the role of political party, Dr. Bonneau fails to provide systematic evidence to substantiate his claims. For example, in paragraph 40, he writes,

¹ *Thornburg v. Gingles*. 478 U.S. 30, 50-51 (1986).



“However, Bonneau and Cann (2015) found that there are high levels of partisan voting even in nonpartisan elections. That is, voters registered as Democrats vote for the Democratic candidate (and the same for Republicans) even if the partisan identification of the candidates is not on the ballot.” But in Mississippi, voters do not register by party. Moreover, Dr. Bonneau does not provide any empirical evidence to substantiate that this claim applies specifically to Mississippi. Additionally, in paragraph 41, Dr. Bonneau cites Salter (2017), “Folks who tend to vote Republican have found a way to learn the identity of judicial candidates favored by Republicans and the same has been true for Democrat [sic] voters seeking to back Democrat [sic] judicial candidates.” Dr. Bonneau does not provide any data based on Mississippi’s elections to support this claim.

5. In response to Dr. Bonneau’s position that voters make their decisions “largely on the basis of political party” (paragraph 56), it should be noted that the State Supreme Court contests in Mississippi are non-partisan (that is, no party affiliations appear on the ballot). Hence, in the absence of survey data (which Dr. Bonneau does not offer), there is no empirical basis for the claim that partisan considerations drove the observed patterns of polarization in these non-partisan contests. Indeed, the fact that racial polarization is observed in these non-partisan contests is significant evidence that party is *not* the reason for the polarization.
6. In addition to the existing set of endogenous and quasi-endogenous District 1 contests, I have conducted additional EI analyses on two other endogenous/quasi-endogenous contests that are from the recent time period, but are not biracial. While not as salient as biracial contests, these contests (2016 Supreme Court and 2015 Public Service Commission) also exhibit polarization along racial lines, as set forth in Table 1. Thus,

racial polarization is observed in 3 endogenous non-partisan contests (2012 Supreme Court, 2016 Supreme Court, 2020 Supreme Court).

7. To further refute Dr. Bonneau's conclusion that party rather than race explains racially polarized voting in Mississippi, I have also conducted an empirical analysis to provide evidence that blacks and whites prefer different candidates, even in primary elections (i.e., where party necessarily cannot be the explanation of any observed racial polarization).
8. Consistent with my previous report submitted on October 3, 2022, I conduct an EI analysis of the 2011 primary election, which featured a head-to-head, competitive, biracial contest for the Democratic nomination for Governor in Mississippi. Based on Table 1, blacks supported the black candidate (DuPree) with 92% of the vote, while whites supported the white candidate (Lockett) with 92% of the vote.

Table 1.

Election	Black Preferred Candidate	Black Vote for the Black Preferred Candidate	White Vote for the Black Preferred Candidate	Black Preferred Candidate Won	Racial Polarization?
2011 Dem. Gubernatorial Primary	DuPree	92.3 (91.6-93.0)	7.68 (7.06-8.4)	Yes	Yes
2015 Public Service Commission	Brown	94.7 (94.3-96.5)	16 (15.6-16.4)	Yes	Yes
2016 Supreme Court	Kitchens	68.3 (67.8-68.9)	40.36 (39.7-41.0)	Yes	Yes

9. In paragraph 46, Dr. Bonneau cites an expert witness report that I previously prepared for another court case. He concludes in paragraph 47, “Based on Justice Diaz’s and Dr. Orey’s reports, we would expect black voters to choose candidates based on *party* and not based on race.” The conclusions drawn in that report are based on analyses where blacks voted against a black candidate who ran as a Republican. These conclusions in no way relate to the analyses conducted for my report submitted on October 3, 2022.

Dr. Bonneau Overstates the Success of Black Candidates in Supreme Court District 1 and Fails to Account for the Observed Levels of White Bloc Voting

10. Relevant to *Gingles* 3, throughout Dr. Bonneau’s report, he overstates the success of black candidates in Supreme Court District 1. In paragraph 24, for example, he writes, “Since 2000, African-Americans have won 3 elections to the Mississippi Supreme Court

from District 1 and lost 3 elections. In Districts 2 and 3, African Americans have won 0 races and lost 1 race.” The 2004 contest that he alludes to is dated and is thus less probative in assessing the existence of polarization in the present day. And in the case of the other two contests to which Dr. Bonneau refers, Justice Leslie King ran unopposed in both elections. It is impossible to use an uncontested election to make any assessment of whether white bloc voting was sufficient to defeat black voters’ candidates of choice.

11. In paragraph 28, Dr. Bonneau infers, “Thus, incumbent justices—both white and African-American— overwhelmingly win their bids to retain their seats.” Again, to say that African Americans “overwhelmingly win their bids” overstates the results because Justice King ran unopposed in two elections.

12. Dr. Bonneau continues in paragraph 30, concluding, “Thus, in District 1, the results of these elections do not support a finding of racial discrimination: African-American justices invariably win their bids for reelection (and, indeed, since 2000, are never challenged), and when an African-American judge challenges an incumbent, their elections are relatively close.” To be sure, some of the elections under discussion are close. (The 2012 Banks election was not especially close as he received only 44.4 percent of the vote, but the 2020 Westbrook election was close.) However, these elections are close because blacks vote as a cohesive bloc. The black preferred candidate usually loses however, because whites also vote as a bloc. That is the essence of the *Gingles* dynamic.

13. Dr. Bonneau writes in paragraphs 31 and 32, “[I]n District 1, African-American state supreme court candidates who challenge incumbents receive an average of 46.5%, while white candidates who challenge incumbents receive an average of 42.5% of the vote” and

that “[c]omparing the vote of similarly-situated African-American candidates to white candidates in these elections shows no evidence of racial bias in voting.” The results of my analysis as set forth in my October 3, 2022 report reveal that black candidates only received, on average, 6 percent of the white vote, thereby impeding black voters from electing the candidate of their choice.

14. In paragraph 34, Dr. Bonneau writes, “In 2012, in the counties that comprise District 1, President Obama (an African-American) received 229,978 votes. Albert Gore, Jr. (a white candidate for the U.S. Senate, but not the former Vice-President) received 198,285 votes, significantly fewer than President Obama. Earle Banks, an African American candidate (a Democrat) for the state supreme court, received only 170,513. William Waller, Jr. (the white Republican incumbent) received 213,375 votes. Had Banks performed as well as President Obama, he would have easily won election.” Dr. Bonneau goes on to suggest that “Banks’ race was not the reason he lost; rather, he lost because voters, the same voters who supported President Obama, determined that he was not the best candidate.” This conclusion is mere speculation. Dr. Bonneau fails to take into consideration roll-off voting and white bloc voting. Indeed, in paragraph 7, based on his research, Dr. Bonneau writes, “[n]onpartisan elections for state supreme courts have less voter participation (higher levels of ballot roll-off) than partisan elections.” In this case, turnout for the Presidential race was 409,949, compared to 383,888 for the Supreme Court race.

15. In any event, the issue here is racial polarized voting and the level of white bloc voting.

In 2012, whites supported Obama with 12% of the vote but provided Banks with only 5%

of the vote. Hence, roll-off, in tandem with racial polarized voting, impeded blacks from electing the candidate of their choice (blacks overwhelmingly supported Banks).

16. Similarly, in paragraph 35, Dr. Bonneau writes, “More recently, in 2020, President Biden received 220,405 votes in the counties that comprise District 1. Mike Espy, an African-American candidate for the U.S. Senate, outperformed President Biden and received 229,498 votes in these counties. Once again, Justice King ran unopposed for his seat. Latrice Westbrooks, an African-American challenger to Justice Kenny Griffis, received only 190,455 votes; Justice Griffis was reelected with 202,530 votes, so had Westbrooks not underperformed Espy by close to 40,000 votes, she would have won her election.” Dr. Bonneau again fails to take into consideration roll-off and white bloc voting. In the presidential race, 419,323 people turned out to vote. Whereas, only 390,285 people turned out for the Supreme Court race. There was very little roll-off in the Senate race, with 419,094 people turning out to vote. As it relates to white racial bloc voting, Espy received 13.5% of the white vote. In the non-partisan Supreme Court race, however, Westbrooks received only 6% of the white vote.

17. In paragraph 37, Dr. Bonneau writes, “Examining the 2012 and 2020 elections does not lead to the conclusion that the nonincumbent African-American candidates for the state supreme court lost because of their race. They may have lost because the election was nonpartisan and so it was more difficult for voters to identify their preferred candidate. They may have lost because they were not incumbents. They may have lost because voters did not think they were the best candidate for the job. But, given the vote patterns described above and the performance of other African-American candidates in the same counties on the same ballot, it is highly unlikely these candidates lost because they are

African-American.” In each of these elections, it is extremely clear that whites voted as a cohesive bloc to defeat the black preferred candidate, providing only 6 percent of their vote to black candidates.

18. A systemic analysis reveals that *Gingles* 3 is satisfied here. The results of my previous empirical analysis, which Dr. Bonneau has failed to rebut, reveal that in the two endogenous biracial contests, black candidates were defeated in both contests due to very high degrees of white bloc voting. Similarly, black candidates were defeated in four out of five quasi-endogenous biracial contests. Thus, over the last decades, black candidates running for office in District 1 have been defeated by white bloc voting in six out of seven contests (85%).

Dr. Bonneau Over-relies on Exogenous Elections to Draw Conclusions

19. In paragraph 50, Dr. Bonneau writes, “While an African-American candidate has not won a statewide election in Mississippi, this is not true for elections in District 1. In 2012, President Obama won 53.9% of the vote in District 1, outpacing state supreme court candidate Earle Banks by almost 10 percentage points. In 2020, Mike Espy received 54.8% of the vote in District 1, outpacing state supreme court candidate Latrice Westbrooks by 6 percentage points. Indeed, Espy even outperformed President Biden in District 1.” However, exogenous elections are less salient when compared to endogenous elections. In both the Obama and Espy races, one can apply the incumbency argument advanced by Dr. Bonneau. President Obama was an incumbent and former Representative Espy once served in Congress. Also, Dr. Bonneau does not take into

account racial polarized voting, whereby whites voted as a bloc to defeat the preferred black candidate.

20. In paragraph 51, Dr. Bonneau writes, “The evidence strongly suggests that African-American candidates are able to win elections in District 1 (for statewide offices as well as state supreme court) under its current boundaries.” Again: When conducting a systematic analysis, the results reveal that blacks were only able to win one election out of seven endogenous and quasi-endogenous contests. Overall, when including exogenous statewide biracial elections, blacks were successful in only six of 17 contests that took place in District 1 over the last decade.

21. In paragraph 52, Dr. Bonneau writes, “Indeed, the plaintiff’s examination of the 2019 elections for other offices using the same geographic boundaries as District 1 illustrates this: an African-American Democrat won an open seat on the Transportation Commission while another African-American candidate barely lost a seat to an incumbent on the Public Service Commission. This, once again, shows the power of incumbency. The winning African-American candidate for the Transportation Commission had a larger margin of victory than the white candidate for the Public Service Commission. Race cannot be the determinant of these elections since one African-American candidate won and the other lost.” To be sure, an African American was successful in winning the Transportation Commission election. However, based on the empirical evidence, whites voted as a bloc to usually defeat the black candidate of choice in 11 of the 17 contests analyzed in my October 3, 2022 report, including 6 of the 7 endogenous and quasi-endogenous contests.

22. In paragraph 53, Dr. Bonneau writes, “This does not support the third precondition of *Thornburg v. Gingles* (1986): the majority group does not vote as a bloc such that it will usually defeat the minority group’s preferred candidate. In fact, the mixed success of African American candidates in District 1 elections strongly suggests that voters (both white and black) are making decisions based on the suitability of the candidates themselves.” The data examined for this report reveals that whites usually voted as a racial bloc; and in an overwhelming 65 percent of all biracial elections (and 85 percent of endogenous and quasi-endogenous biracial elections, which are the most salient contests), blacks were unable to elect the candidate of their choice due to white bloc voting.

Conclusion

23. First, voting in recent Mississippi elections has been racially polarized. Blacks and whites vote differently, and that pattern is not simply a function of partisanship. Racial polarization has been found in non-partisan contests and within Democratic primaries when black candidates run against white candidates in head-to-head contests. This conclusion refutes Dr. Bonneau’s contention that “voters in Mississippi make decisions for the state supreme court largely on the basis of political party” (paragraph 56).

24. Second, white bloc voting usually defeats black voters’ candidates of choice in District 1. In an overwhelming 65 percent of all biracial elections and 85 percent of endogenous and quasi-endogenous biracial elections, blacks were unable to elect the candidate of their choice due to the persistence of white bloc voting.

25. I reserve the right to amend, modify, or supplement my analysis and opinions. Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the information and opinions contained in this report are true and correct to the best of my knowledge.

February 6, 2023

Byron D'Andra Orey, Ph.D

Appendix 1: EI RAW RESULTS AND SCRIPT**Brown v. Bailey**

```

> # Plot out Results -----
> plot(iter, rxc)
> ## Ecological Inference Analyses
> ##USE this one
> # Outline:
> # Loading libraries & importing data
> # King's iterative EI
> # Row by Columns (RxC) EI
> # Summarizing results
> # DataVis
>
> # Data files:
> # PracticeData-ReCoded.csv
>
>
> # Libraries and Data -----
> #library(ei)
> library(eiCompare) # Use from latest release, which was summer 2020
> ###dat <- read.csv("C:/Users/J00584364/Downloads/PracticeData-ReCoded.csv", sep=",")###
> dat <- read.csv("C:/Users/J00584364/Downloads/Brown_2015.csv", sep=",")
>
> summary(dat$Espy)
Length Class Mode
 0 NULL NULL
>
> dat$pVoteA <- dat$pVoteA/100
> dat$pVoteB <- dat$pVoteB/100
> dat$pBlackVAP <- dat$pBlackVAP/100
> dat$pWhiteVAP <- dat$pWhiteVAP/100
> #dat$pOtherVAP <- dat$pOtherVAP/100
> #dat$WhiteOtherVAP <- dat$WhiteOtherVAP
>
> # Iterative EI (King's EI) -----
> iter <- ei_iter(
+ data = dat,
+ #cand_cols = c("pVoteA", "pVoteB"),
+ cand_cols = c("pVoteA", "pVoteB"),
+ race_cols = c("pBlackVAP", "pWhiteVAP"),
+ #race_cols = c("pBlackVAP", "pWhiteVAP", "pOtherVAP"),
+ totals_col = "total_votes",
+ name = "Iterative EI"
+ )
|=====| 100%
>
> # Rows by Columns (RxC) -----
> rxc <- ei_rxc(
+ data = dat,
+ cand_cols = c("pVoteA", "pVoteB"),

```

```

+ race_cols = c("pBlackVAP", "pWhiteVAP"),
+ totals_col = "total_votes",
+ name = "RxC EI",
+ )
>
> # Summary Table -----
> summary(iter, rxc)
$BlackVAP
  mean_iterative.EI sd_iterative.EI ci_95_lower_iterative.EI
pVoteA      94.73      0.2      94.34
pVoteB       5.28      0.2       4.93
  ci_95_upper_iterative.EI mean_RxC.EI sd_RxC.EI ci_95_lower_RxC.EI
pVoteA      95.10      96  0.28      95.39
pVoteB       5.71      4  0.28      3.47
  ci_95_upper_RxC.EI
pVoteA      96.53
pVoteB       4.61

$WhiteVAP
  mean_iterative.EI sd_iterative.EI ci_95_lower_iterative.EI
pVoteA      15.98      0.22      15.57
pVoteB      84.00      0.19      83.65
  ci_95_upper_iterative.EI mean_RxC.EI sd_RxC.EI ci_95_lower_RxC.EI
pVoteA      16.43      14.82  0.29      14.27
pVoteB      84.36      85.18  0.29      84.56
  ci_95_upper_RxC.EI
pVoteA      15.44
pVoteB      85.73

Kitchens v. Griffis

> # Plot out Results -----
> plot(iter, rxc)
> ## Ecological Inference Analyses
> ##USE this one
> # Outline:
> #   Loading libraries & importing data
> #   King's iterative EI
> #   Row by Columns (RxC) EI
> #   Summarizing results
> #   DataVis
>
> # Data files:
> # PracticeData-ReCoded.csv
>
>
> # Libraries and Data -----
> #library(ei)
> library(eiCompare) # Use from latest release, which was summer 2020
> ###dat <- read.csv("C:/Users/J00584364/Downloads/PracticeData-ReCoded.csv", sep=",")###
> dat <- read.csv("C:/Users/J00584364/Downloads/Kitchens_2016.csv", sep=",")
>

```

```

> summary(dat$Espy)
Length Class Mode
  0 NULL NULL
>
> dat$pVoteA <- dat$pVoteA/100
> dat$pVoteB <- dat$pVoteB/100
> dat$pBlackVAP <- dat$pBlackVAP/100
> dat$pWhiteVAP <- dat$pWhiteVAP/100
> #dat$pOtherVAP <- dat$pOtherVAP/100
> #dat$WhiteOtherVAP <- dat$WhiteOtherVAP
>
> # Iterative EI (King's EI) -----
> iter <- ei_iter(
+ data = dat,
+ #cand_cols = c("pVoteA", "pVoteB"),
+ cand_cols = c("pVoteA", "pVoteB"),
+ race_cols = c("pBlackVAP", "pWhiteVAP"),
+ #race_cols = c("pBlackVAP", "pWhiteVAP", "pOtherVAP"),
+ totals_col = "total_votes",
+ name = "Iterative EI"
+ )
|=====| 100%
>
> # Rows by Columns (RxC) -----
> rxc <- ei_rxc(
+ data = dat,
+ cand_cols = c("pVoteA", "pVoteB"),
+ race_cols = c("pBlackVAP", "pWhiteVAP"),
+ totals_col = "total_votes",
+ name = "RxC EI",
+ )
>
> # Summary Table -----
> summary(iter, rxc)

$pBlackVAP
  mean_iterative.EI sd_iterative.EI ci_95_lower_iterative.EI
pVoteA      68.30      0.28      67.79
pVoteB      31.64      0.30      31.04
  ci_95_upper_iterative.EI mean_RxC.EI sd_RxC.EI ci_95_lower_RxC.EI
pVoteA      68.87      68.26      0.49      67.26
pVoteB      32.21      31.74      0.49      30.78
  ci_95_upper_RxC.EI
pVoteA      69.22
pVoteB      32.74

$pWhiteVAP
  mean_iterative.EI sd_iterative.EI ci_95_lower_iterative.EI
pVoteA      40.36      0.32      39.70
pVoteB      59.58      0.27      59.06
  ci_95_upper_iterative.EI mean_RxC.EI sd_RxC.EI ci_95_lower_RxC.EI
pVoteA      41.03      40.45      0.46      39.54
pVoteB      60.09      59.55      0.46      58.60

```



```

ci_95_upper_RxC.EI
pVoteA      41.40
pVoteB      60.46

```

DuPree v. Lockett

```

> # Plot out Results -----
> plot(iter, rxc)
> ## Ecological Inference Analyses
> ##USE this one
> # Outline:
> #   Loading libraries & importing data
> #   King's iterative EI
> #   Row by Columns (RxC) EI
> #   Summarizing results
> #   DataVis
>
> # Data files:
> #   PracticeData-ReCoded.csv
>
>
> # Libraries and Data -----
> #library(ei)
> library(eiCompare) # Use from latest release, which was summer 2020
> ###dat <- read.csv("C:/Users/J00584364/DownBoads/PracticeData-ReCoded.csv", sep=",")###
> dat <- read.csv("C:/Users/J00584364/Downloads/DuPree_2011_Runoff.csv", sep=",")
>
> summary(dat$Espy)
Length Class Mode
  0 NULL NULL
>
> dat$pVoteA <- dat$pVoteA/100
> dat$pVoteB <- dat$pVoteB/100
> dat$pBlackVAP <- dat$pBlackVAP/100
> dat$pWhiteVAP <- dat$pWhiteVAP/100
> #dat$pOtherVAP <- dat$pOtherVAP/100
> #dat$WhiteOtherVAP <- dat$WhiteOtherVAP
>
> # Iterative EI (King's EI) -----
> iter <- ei_iter(
+   data = dat,
+   #cand_cols = c("pVoteA", "pVoteB"),
+   cand_cols = c("pVoteA", "pVoteB"),
+   race_cols = c("pBlackVAP", "pWhiteVAP"),
+   #race_cols = c("pBlackVAP", "pWhiteVAP", "pOtherVAP"),
+   totals_col = "total_votes",
+   name = "Iterative EI"
+ )
|=====| 100%
>
> # Rows by Columns (RxC) -----
> rxc <- ei_rxc(

```

```

+ data = dat,
+ cand_cols = c("pVoteA", "pVoteB"),
+ race_cols = c("pBlackVAP", "pWhiteVAP"),
+ totals_col = "total_votes",
+ name = "RxC EI",
+ )
>
> # Summary Table -----
> summary(iter, rxc)

```

DuPree v. Lockett
Runoff 2011

\$pBlackVAP

	mean_iterative.EI	sd_iterative.EI	ci_95_lower_iterative.EI	ci_95_upper_iterative.EI
pVoteA	92.3	0.37	91.61	
pVoteB	7.7	0.30	7.20	
	mean_RxC.EI	sd_RxC.EI	ci_95_lower_RxC.EI	ci_95_upper_RxC.EI
pVoteA	93.03	97.99	0.25	97.42
pVoteB	8.37	2.01	0.25	1.55
	ci_95_upper_RxC.EI			
pVoteA	98.45			
pVoteB	2.58			

\$pWhiteVAP

	mean_iterative.EI	sd_iterative.EI	ci_95_lower_iterative.EI	ci_95_upper_iterative.EI
pVoteA	7.68	0.36	7.06	
pVoteB	92.28	0.32	91.71	
	mean_RxC.EI	sd_RxC.EI	ci_95_lower_RxC.EI	ci_95_upper_RxC.EI
pVoteA	8.44	11.06	0.33	10.42
pVoteB	92.96	88.94	0.33	88.24
	ci_95_upper_RxC.EI			
pVoteA	11.76			
pVoteB	89.58			

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF MISSISSIPPI
GREENVILLE DIVISION**

DYAMONE WHITE, et al.,

Plaintiffs,

vs.

STATE BOARD OF ELECTION
COMMISSIONERS et al.,

Defendants.

No. 4:22cv62-SA-JMV

RESPONSIVE DECLARATION OF BYRON D'ANDRA OREY

I, Byron D'Andra Orey, make the following declaration based on personal knowledge:

1. I have been retained by the Plaintiffs in the above referenced matter as expert.
2. I filed a declaration in this lawsuit on October 3, 2022. I submit that the foregoing report dated February 6, 2023 in response to the report of Dr. Christopher Bonneau is a true and accurate copy of the report I provided to Plaintiffs in this matter. I declare that the information and opinions contained in the report are true and correct to the best of my knowledge.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

February 3, 2023


BYRON D'ANDRA OREY



CIVIL LITIGATION DIVISION

February 14, 2023

VIA E-MAIL ONLY

Joshua F. Tom, Esq.
ACLU of Mississippi
JTom@aclu-ms.org

RE: *Dyamone White, et al. v. State Board of Election Commissioners, et al.*; in the United States District Court for the Northern District of Mississippi (Greenville Division); Civil Action No. 4:22-cv-00062-SA-JMV

Dear Josh:

We received Plaintiffs' rebuttal expert reports served on February 6, 2023. I write in good faith to request that Plaintiffs immediately withdraw improper rebuttal expert disclosures that fail to comport with FRCP 26(a)(2)(D)(ii).

FRCP 26(a)(2)(D)(ii) allows an expert to supplement his or her existing opinions to rebut or contradict evidence presented in the opposing party's initial expert reports. The rule does not permit "rebuttal" reports that in fact contain new opinions and analyses not previously disclosed. The rebuttal report of Traci Burch and Paragraphs 6-8 and Table 1 of the rebuttal report of Byron D'Andra Orey contain wholly new opinions and analyses that exceed the scope of proper rebuttal permissible under FRCP 26(a)(2)(D)(ii). Additionally, Burch's rebuttal report fails to provide supporting facts and data as required by FRCP 26(a)(2)(B)(ii). All of the aforementioned improper rebuttal disclosures should be withdrawn.

In an effort to avoid addressing this matter with the Court, Defendants hereby request that Plaintiffs file a stipulation or notice withdrawing the above-listed improper rebuttal disclosures no later than seven (7) days from the date of this letter.

Very truly yours,

MISSISSIPPI ATTORNEY GENERAL'S OFFICE

A handwritten signature in black ink, appearing to read "Rex M. Shannon III", is written over a horizontal line.

Rex M. Shannon III
Special Assistant Attorney General
Deputy Director, Civil Litigation Division

WALTER SILLERS BUILDING * POST OFFICE BOX 220 * JACKSON, MISSISSIPPI 39205-0220
TELEPHONE (601) 359-3680



Joshua F. Tom, Esq.
White, et al. v. SBEC, et al.
Civil Action No. 4:22-cv-00062-SA-JMV
February 14, 2023
Page 2

Office: 601-359-4184
E-mail: rex.shannon@ago.ms.gov

cc: All Counsel of Record (via e-mail only)

Rex Shannon

From: Joshua Tom <JTom@aclu-ms.org>
Sent: Thursday, February 16, 2023 3:02 PM
To: Rex Shannon
Cc: Ari Savitzky; bradley.heard@splcenter.org; Rethy, Isaac; jade.morgan@splcenter.org; jyoungwood@stblaw.com; kmiller1@aclu.org; leslie.jones@splcenter.org; mcheung@aclu.org; Patricia Yan; Sophia Lakin; ahmed.soussi@splcenter.org; Gerald Kucia; mbw@wisecarter.com
Subject: White v. SBEC - Dr. Burch Data
Attachments: neweicentraldist.txt; spss syntax for CES analysis.sps; spss syntax for CES text.txt; dataforEI2.txt; final ei syntax for burch report.txt

Importance: Low

Hi Rex,

Confirming receipt of your letter dated February 14, 2023 re: Plaintiffs' rebuttal expert reports. We will get back to you soon.

Find attached the data underlying Dr. Burch's rebuttal expert report.

All the best,
Josh

Joshua F. Tom

Pronouns: he, him, his

Legal Director

ACLU of Mississippi

P.O. Box 2242, Jackson, MS 39225

■ t 601.354.3408 Ext. 112 ■ f 601.355.6465

■ jtom@aclu-ms.org ■ www.aclu-ms.org



This message may contain information that is confidential or legally privileged. If you are not the intended recipient, please immediately advise the sender and delete this e-mail from your system.



Rex Shannon

From: Ahmed K. Soussi <ahmed.soussi@splcenter.org>
Sent: Monday, February 27, 2023 6:53 PM
To: Rex Shannon; mbw@wisecarter.com; Gerald Kucia; Lindsay Dowdle
Cc: Ari Savitzky; Bradley Heard; Isaac Rethy; Jade Morgan; jyoungwood@stblaw.com; kmiller1@aclu.org; Lakyn Collier; Leslie Faith Jones; Ming Cheung; Patricia Yan; Sophia Lakin; Vara Lyons; Joshua Tom; Sabrina Khan
Subject: RE: White, et al. v. SBEC, et al.

Hello Counsel,

Thank you for taking the time to speak with us. As discussed, we are providing citations to authorities that support our positions that the portions of our expert reports you seek to strike are not untimely or otherwise improper, and that in any event the proper remedy is for defendants to file a supplemental report. We do not believe the submission of such a report would necessitate material, if any, changes to the pretrial schedule, or any changes to the trial date, nor do we believe cost-shifting is required.

Please see the below citations. In the event Defendants file a motion, we reserve the right to rely on additional or different arguments and authorities.

1. *Hercules Tire & Rubber Co., Inc. v. Robison Tire Co.*, No. 2:16-CV-27-KS-MTP, 2019 WL 12059352, at *1 (S.D. Miss. June 10, 2019)
2. *Foradori v. Captain D's LLC*, No. CIV.A. 1:03CV669-M-D, 2005 WL 5976559, at *1 (N.D. Miss. Aug. 3, 2005)
3. *Hostetler v. Dillard*, No. 3:13CV351-WHB-RHW, 2014 WL 11514964, at *2 (S.D. Miss. Aug. 29, 2014)
4. *Jagneaux v. United Rentals (N. Am.), Inc.*, No. 1:18CV186-LG-RHW, 2020 WL 1821256, at *5 (S.D. Miss. Apr. 10, 2020)

We remain available to discuss, but believe based on our call we may be at impasse. You may represent that any applicable meet and confer requirement has been satisfied if you determine to file a motion.

Thank you,

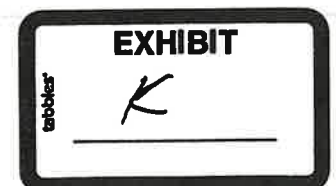
Ahmed



Ahmed Soussi
Staff Attorney | Voting Rights
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Admitted in Arizona, Louisiana, and New York

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From: Rex Shannon <Rex.Shannon@ago.ms.gov>
Sent: Tuesday, February 21, 2023 3:47 PM



To: Joshua Tom <JTom@aclu-ms.org>

Cc: Ari Savitzky <asavitzky@aclu.org>; Bradley Heard <bradley.heard@splcenter.org>; Isaac Rethy <irethy@stblaw.com>; Jade Morgan <jade.morgan@splcenter.org>; jyoungwood@stblaw.com; kmiller1@aclu.org; Lakyn Collier <LCollier@aclu-ms.org>; Leslie Faith Jones <leslie.jones@splcenter.org>; Ming Cheung <mcheung@aclu.org>; Patricia Yan <pyan@aclu.org>; Sophia Lakin <slakin@aclu.org>; Vara Lyons <VLyons@aclu-ms.org>; Ahmed K. Soussi <ahmed.soussi@splcenter.org>; Gerald Kucia <Gerald.Kucia@ago.ms.gov>; mbw@wisecarter.com

Subject: RE: White, et al. v. SBEC, et al.

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Josh,

Thanks for your e-mail. We can be available for a call at 3:00 p.m. Central on Thursday, Feb. 23, 2023. Do y'all want to circulate a call-in number?

Thanks,
Rex

Rex M. Shannon III
Special Assistant Attorney General
Deputy Director, Civil Litigation Division
Mississippi Attorney General's Office
550 High Street, Suite 1100
Post Office Box 220
Jackson, Mississippi 39205-0220
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From: Joshua Tom <JTom@aclu-ms.org>

Sent: Tuesday, February 21, 2023 3:36 PM

To: Rex Shannon <Rex.Shannon@ago.ms.gov>

Cc: Ari Savitzky <asavitzky@aclu.org>; bradley.heard@splcenter.org; Rethy, Isaac <irethy@stblaw.com>; jade.morgan@splcenter.org; jyoungwood@stblaw.com; kmiller1@aclu.org; Lakyn Collier <LCollier@aclu-ms.org>; leslie.jones@splcenter.org; mcheung@aclu.org; Patricia Yan <pyan@aclu.org>; Sophia Lakin <slakin@aclu.org>; Vara

Lyons <VLyons@aclu-ms.org>; ahmed.soussi@splcenter.org; Gerald Kucia <Gerald.Kucia@ago.ms.gov>;
mbw@wisecarter.com

Subject: RE: White, et al. v. SBEC, et al.

Hi Rex,

In response to your February 14, 2023 letter regarding Plaintiffs' rebuttal expert reports, are you available for a meet and confer this Thursday, February 23 at 1 or 3 pm; Friday, February 24 at 11 am; or next Monday, February 27 at 11 am or 1 pm?

All the best,

Josh

From: Rex Shannon <Rex.Shannon@ago.ms.gov>

Sent: Tuesday, February 14, 2023 4:27 PM

To: Joshua Tom <JTom@aclu-ms.org>

Cc: Ari Savitzky <asavitzky@aclu.org>; bradley.heard@splcenter.org; Rethy, Isaac <irethy@stblaw.com>;
jade.morgan@splcenter.org; jyoungwood@stblaw.com; kmiller1@aclu.org; Lakyn Collier <LCollier@aclu-ms.org>;
leslie.jones@splcenter.org; mcheung@aclu.org; Patricia Yan <pyan@aclu.org>; Sophia Lakin <slakin@aclu.org>; Vara
Lyons <VLyons@aclu-ms.org>; ahmed.soussi@splcenter.org; Gerald Kucia <Gerald.Kucia@ago.ms.gov>;
mbw@wisecarter.com

Subject: White, et al. v. SBEC, et al.

Dear Josh,

Good afternoon. Attached is correspondence for your attention in the above-referenced matter.

Regards,

Rex

Rex M. Shannon III
Special Assistant Attorney General
Deputy Director, Civil Litigation Division
Mississippi Attorney General's Office
550 High Street, Suite 1100
Post Office Box 220
Jackson, Mississippi 39205-0220
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Rex Shannon

From: Judge-Virden MSND <Judge_Virden@msnd.uscourts.gov>
Sent: Tuesday, February 28, 2023 2:36 PM
To: Rex Shannon; Judge-Virden MSND; Brittany Frankel
Cc: Ari Savitzky; bradley.heard@splcenter.org; jade.morgan@splcenter.org; jyoungwood@stblaw.com; Joshua Tom; kmiller1@aclu.org; Lakyn Collier; leslie.jones@splcenter.org; mcheung@aclu.org; Patricia Yan; Sophia Lakin; External - Vara Lyons; ahmed.soussi@splcenter.org; Gerald Kucia; Lindsay Dowdle; mbw@wisecarter.com
Subject: RE: White, et al. v. SBEC, et al.; Civil Action No. 4:22-cv-00062-SA-JMV

Good afternoon, Mr. Shannon:

Due to the nature of the issue presented below, Judge Virden has advised that a motion will need to be filed.

Thank you,

Brittany

Brittany Brooks Frankel
 Law Clerk to U.S. Magistrate Judge Jane M. Virden

From: Rex Shannon <Rex.Shannon@ago.ms.gov>
Sent: Tuesday, February 28, 2023 11:44 AM
To: Judge-Virden MSND <Judge_Virden@msnd.uscourts.gov>
Cc: Ari Savitzky <asavitzky@aclu.org>; bradley.heard@splcenter.org; jade.morgan@splcenter.org; jyoungwood@stblaw.com; Joshua Tom <jtom@aclu-ms.org>; kmiller1@aclu.org; Lakyn Collier <lcollier@aclu-ms.org>; leslie.jones@splcenter.org; mcheung@aclu.org; Patricia Yan <pyan@aclu.org>; Sophia Lakin <slakin@aclu.org>; External - Vara Lyons <vlyons@aclu-ms.org>; ahmed.soussi@splcenter.org; Gerald Kucia <Gerald.Kucia@ago.ms.gov>; Lindsay Dowdle <Lindsay.Dowdle@ago.ms.gov>; mbw@wisecarter.com
Subject: White, et al. v. SBEC, et al.; Civil Action No. 4:22-cv-00062-SA-JMV

CAUTION - EXTERNAL:

Dear Judge Virden:

I write to request the Court's guidance in connection with a dispute that has arisen between the parties in the above-referenced matter in connection with expert witness disclosures.

This is a Section 2 Voting Rights Act case involving a challenge to Mississippi's current Supreme Court districts.

Both parties served expert witness reports by the deadlines set forth in the governing Case Management Order, as extended by the Court. Plaintiffs thereafter served "rebuttal" reports in connection with three of their designated experts. Defendants contend that disclosures contained in two of these rebuttal reports constitute improper expert rebuttal and should be withdrawn. Plaintiffs disagree and decline to withdraw the disputed disclosures.

Counsel for the parties have conferred in good faith via Zoom and have reached an impasse. To the extent that Section 6.F.4. of the CMO may require the parties to confer with the Court in connection with this matter, we stand ready to do

so at Your Honor's convenience. However, given the nature of the issue presented and the parties' respective positions, please let us know if the Court would prefer that we proceed to place the issue before the Court via motion.

All counsel of record are copied on this e-mail.

We appreciate the Court's consideration of this matter and will await Your Honor's instructions.

Regards,

Rex

Rex M. Shannon III

Special Assistant Attorney General
Deputy Director, Civil Litigation Division

Mississippi Attorney General's Office

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Jackson, Mississippi 39205-0220

Telephone: (601) 359-4184

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**THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF MISSISSIPPI
GREENVILLE DIVISION**

**DYAMONE WHITE; DERRICK
SIMMONS; TY PINKINS;
CONSTANCE OLIVIA SLAUGHTER
HARVEY-BURWELL**

PLAINTIFFS

VS.

CIVIL ACTION NO. 4:22-cv-00062-SA-JMV

**STATE BOARD OF ELECTION
COMMISSIONERS; TATE REEVES
*in his official capacity as Governor of
Mississippi; LYNN FITCH in her
official capacity as Attorney General of
Mississippi; MICHAEL WATSON in
his official capacity as Secretary of
State of Mississippi***

DEFENDANTS

DECLARATION OF DAVID A. SWANSON, PH.D.

I, David A. Swanson, Ph.D., do hereby declare as follows:

1. My name is David A. Swanson. I am an adult resident citizen of Whatcom County, Washington. I have personal knowledge of the facts and matters set forth herein and am otherwise fully competent to offer the testimony hereafter stated.

2. I was retained by defendants to analyze reports submitted by plaintiffs' experts in this litigation, including that of Traci Burch, Ph.D. I was asked to check the accuracy of her use of data in supporting her opinions and, if necessary, to collect and examine data tending to support opinions to the contrary. I did so, and defendants served my report on plaintiffs on January 6, 2023.



3. My qualifications to offer the opinions presented in my report and in this declaration are stated in ¶¶ 1-11 of my report.

4. At page 10 of her initial expert report, Dr. Burch offered the following opinion:

“Black people in Mississippi have had less access to quality education and therefore have lower educational attainment for the reasons discussed in this section; this lower educational attainment leads to lower voter turnout.”

The data supporting this opinion was her calculation on page 10 of her expert report that:

“56.1% of white Mississippi citizens voted in the 2020 general election, compared with 53.0% of Black Mississippi citizens.”

5. Figure 4, found on page 10 of Dr. Burch’s expert report, shows that the calculation supporting this opinion relied upon the 2020 Current Population Survey (“CPS”) Voting Supplement, official data collected by the United States Census Bureau. In conducting a “quality control” assessment of this calculation by Dr. Burch, I first examined historical CPS data provided by the Census Bureau and found, as stated in ¶ 128 of my expert report, that Black voter turnout exceeded White voter turnout in Mississippi every year since 2012. Moreover, as stated in ¶ 137 of my expert report, I found that the official 2020 CPS data claimed to have been used by Dr. Burch in generating her calculation contradicted the opinion she formed from this calculation. Instead of showing that 2020 voter turnout by White Mississippians exceeded the 2020 voter turnout by Black Mississippians, it showed that the turnout by the latter exceeded the turnout by the former.

6. As stated in ¶ 149 of my expert report, I found that in using the official 2020 CPS data to come to her opinion, Dr. Burch neglected to use the correct age filters so that only those 18 years and over who are eligible to vote would be included in her calculations. These errors led, in turn, to her erroneous opinion that White voter turnout was higher than Black voter

turnout in Mississippi. When the correct age filters are applied, the same CPS data used by Dr. Burch show that Black voter turnout is higher than White voter turnout in Mississippi, which contradicts not only the opinion found in her expert report, but also to the adherence of this erroneous opinion found in her rebuttal.

7. This analysis of CPS information necessarily took a great deal of time and effort, approximately 40 person-hours.

8. In a further effort to substantiate my finding that Black voter turnout currently exceeds White voter turnout in Mississippi while simultaneously examining Dr. Burch's opinion that an "overall gap in turnout between Black and white Mississippians exists," also found on page 10 of her report, I examined a second set of data. The Social Science Research Center at Mississippi State University has conducted annual statewide surveys of registration and voting frequency from 2015 to 2021. In ¶¶ 148-151 of my report, I determined that these additional data also indicated that Black voter turnout generally exceeds White voter turnout in Mississippi.

9. It took a substantial amount of time and effort to locate and examine this additional source of data, approximately 24 person-hours.

10. On February 6, 2023, Dr. Burch submitted a rebuttal report. She admits at page 3 of her rebuttal report that she miscalculated White and Black voter turnout in Mississippi's 2020 general election because she failed to use the correct age filters in her analysis. The CPS educational question is only asked of persons aged 15 years and over and she erroneously included those under 18 in the portion of her analysis related to educational attainment (i.e., she included those aged 15, 16, and 17, who are not eligible to vote). In providing her estimate of overall voter turnout, Dr. Burch compounds this error by including even more of those who are not eligible to vote, namely all of those under the age of 18, to include infants. Overlooking her

errors for the moment, I find that, in spite of the fact that she relied on CPS data in her expert report, she now states at page 4 of her rebuttal that she has now determined, without any evidence, that “turnout estimates in the CPS are unreliable.” Unsupported by any evidence, this statement repudiates not only her own expert report, but disregards the fact that the CPS represents a nationally recognized source of record, on which, like Dr. Burch, I relied in my expert report.

11. In attempting to salvage the erroneous opinion in her expert report that White voter turnout exceeds Black voter turnout in Mississippi, Dr. Burch reveals on page 4 of her rebuttal report that she now relies upon for the first time the “2020 Cooperative Election Study” (CES). She deploys it mathematically to conclude, at page 6 of her rebuttal report, “that 60% of White respondents voted in the 2020 General Election, compared with 46% of Black Mississippi respondents.” On the basis of this new analysis of a single election, she adheres to the erroneous opinion found in her expert report, as restated on page 11 of her rebuttal report, “that White people have a statistically significant advantage in voter turnout.”

12. In my work as a demographic expert, and consistent with the standards employed in my field of applied demography, I am required to implement a rigorous quality control process for both the data I use and the work by others that I review. While time-consuming and resource-intensive, it is this effort that uncovers errors and inconsistencies such as what I found in Dr. Burch's initial expert report. Because these errors and inconsistencies led Dr. Burch to an erroneous opinion, I must undertake no less than a detailed examination of this new CES data set and the calculations, conclusions and opinions offered by her. Acquisition and the analysis of this entirely new source of data, together with quality checking Dr. Burch's use of these data, will take a substantial amount of time and effort, as will writing up the results of this critical

examination of her rebuttal. In this process, I will start with a critical examination of the two logistic regression models that she uses for the first time and displays in Table 2 of her rebuttal to determine if they are: (1) inadequate models affected by violations of one or more of the critical assumptions underlying the development of an adequate logistic regression model (NCSS, no date); and/or (2) flawed because of data input, data transference, and other errors she made in constructing either or both of these two logistic regression models. I estimate that this process would take 60 person-hours of work, to include acquiring the data set, becoming familiar with it, attempting to replicate her logistic models using the variables shown in Table 2 of Dr. Burch's rebuttal, and writing up the results. This critical examination is needed because Dr. Burch does not provide the results of any residual and other important diagnostics in regard to either of her two logistic regression models, which means, as I stated earlier, that they need to be examined for adequacy (NCSS, no date). If, either of the two, but especially, her multiple logistic regression model, is found to be either inadequate or flawed, it would render her results invalid. This step would also involve the construction of alternative logit regression models that are adequate and not flawed in order to compare them to Dr. Burch's, which I estimate would add 16 person-hours to this assessment, yielding an estimated total of 76 person-hours, to include a write-up.

13. On page 10 of her rebuttal, Dr. Burch states that she uses Bayesian statistical methods as the basis for the "EI" (Ecological Inference) approach she employed by applying the CES data along with the percent of each racial group of voting age ("CVAP" data, per footnote 29 in Dr. Burch's rebuttal) and voter turnout data (MS voter registration file) to census block groups in Mississippi and then aggregating these units to produce counts of votes from each block group for the November, 2020, general election for the state as a whole and for Supreme

Court District 1. She fails to provide a description of the steps that were used to merge these data sets and how anomalies, if any, were resolved, an oversight of no little importance. She also fails to describe the process involved in constructing her Bayesian EI model, an oversight of considerable importance because, among other oversights, she fails to follow a prescribed Bayesian practice in that she does not describe the “prior distribution” she uses and exactly how this was combined with her three “observational data” sets (CES, CVAP, and Voter Registration) to create a “likelihood function” to determine the “posterior distribution,” which presumably she uses to generate her estimates (Etz, 2015; van de Shoot et al., 2021). This is a major problem because without this information, it will take considerable time to attempt an “ex post facto” construction of these elements using the new observational data she employs to develop her “EI” model. Moreover, an assessment of the Bayesian approach in general is called for here because as pointed out by Goodwin (2015), the application of a Bayesian approach can be difficult, effortful, opaque, and even counter-intuitive. In addition, I am concerned because those who employ Bayesian Statistics do not use the term “statistically significant” in their inferential analyses. Instead, those who follow the Bayesian approach use the term “likelihood” in their inferential analysis (Etz, 2015). Those who use the term “statistically significant” (as Dr. Burch does in her logistic regression analysis) follow the “frequentist” approach to inferential analyses, one that is very different than the Bayesian path (Lee, 2010; <https://towardsdatascience.com/statistics-are-you-bayesian-or-frequentist-4943f953f21b>). The fact that Dr. Burch uses the term “statistically significant” twice in conjunction with her “Bayesian” EI analysis (on page 11 as previously described and also on page 10 of her report, where she states “there is a statistically significant racial gap in turnout in Mississippi ...”), is troubling because it suggests she does not fully grasp the Bayesian approach. This shortcoming on her part is important because it may have resulted in

erroneous findings and opinions. Adding weight to this possibility is the fact that Dr. Burch made, as she acknowledges in her rebuttal, a major substantive error in her expert report that formed the basis of her erroneous opinion that White voter turnout is higher than Black voter turnout in Mississippi. This makes it difficult for me to accept the results and opinions found in her rebuttal at face value, especially given its lack of appropriate documentation, a shortcoming I note throughout this declaration.

14. Another issue with Dr. Burch's rebuttal is the fact that the source of "Citizen Voting Age Population by Race and Ethnicity" (according to footnote 29 on page 10 of Dr. Burch's rebuttal, a site she accessed on January 20, 2023, found at <https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/cvap.html>), turns out to be a "broken link" in that going to this URL on February 4, 2023, yielded, "404: Page Not Found. Sorry, the page you requested has either been moved or is no longer available." Given this, it is not clear which of two likely "CVAP" files she uses (see, <https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/cvap.html> , where one can see that there are, in addition to CVAP files for 2019 and earlier, a 2020 file CVAP file and a 2021 CVAP file, the latter two of which would in my opinion be the most likely). Whichever CVAP file she uses would require the allocation/assignment of the CES and Voter turnout data to the same block groups holding the CVAP data. Assessing which CVAP file she uses along with assessing the allocation/assignment of the CES and voter turnout data to the same block groups, and the assessment of her "Bayesian" analysis will take considerable time, which I estimate to be no less than 88 person-hours and possibly as many as 104 person-hours.

15. While the reliability of CPS voting statistics is a source of discussion (see, e.g., <https://elections-blog.mit.edu/articles/using-census> and "The Current Population Survey Voting

and Registration Supplement Overstates Minority Turnout,” *The Journal of Politics: Vol 84, No 3*), the fact remains that the CPS is a nationally recognized statistical standard, produced by the U.S. Census Bureau, that Dr. Burch relied on in her expert report, a choice she made on her own. Dr. Burch’s rebuttal suggests that she sought out a different data set, the CES, for her rebuttal, because the correct use of the CPS data did not support her opinion that White voter turnout in Mississippi is higher than Black voter turnout. If, as her rebuttal indicates, the CES data are “better” for reporting voting turnout by race in Mississippi than the CPS, the question is why did she not use the CES data in the first place – in her expert report? The fact that I employed a second, state-specific survey in my expert report that reinforces the CPS data is strong evidence that Black voter turnout is currently higher than White voter turnout and has been for some years.

16. In total, I estimate that it would take between 164 and 180 person-hours to critically examine the results found in Dr. Burch’s rebuttal and write up the results. This would be added to the eight person-hours it has already taken in reading her rebuttal, assessing it, and writing up this declaration.

17. If I am required to do additional research, I will not be able to drop everything else and devote between 164 and 180 continuous person-hours to this project. I will have to attend to other duties while fitting in the new work as best I can. It is my best estimate that, after I am told to begin work, it will take eight to ten weeks to complete the project.

References

Etz, A. (2015). Understanding Bayes: Looking at the Likelihood. The Etz-files: Data Science, statistics, and Psychology
(<https://alexanderetz.com/2015/04/15/understanding-bayes-a-look-at-the-likelihood/#:~:text=Bayes%20factors%20are%20simple%20extensions.equivalent%20to%20the%20likelihood%20ratio.>)

Goodwin, P. (2015). When simple alternatives to Bayes formula work well: reducing the cognitive load when updating probability forecasts. *Journal of Business Research* 68, 1686–1691. (<https://doi.org/10.1016/j.jbusres.2015.03.027>).

Lee, J. (2011). ,Demystify Statistical Significance—Time to Move on From the P Value to Bayesian Analysis. *Journal of the National Cancer Institute* 103 (1): 2–3 (<https://doi.org/10.1093/jnci/djq493>).

NCSS (no date). Logistic Regression. NCSS Statistical Software. (https://www.ncss.com/wp-content/themes/ncss/pdf/Procedures/NCSS/Logistic_Regression.pdf)

van de Schoot, R., S. Depaoli, S., R. King, R. et al. (2021). Bayesian statistics and modelling. *Nature Review Methods Primers* 1 (<https://doi.org/10.1038/s43586-020-00001-2>).

Pursuant to 28 U.S.C. § 1746, I, David A. Swanson, Ph.D., hereby certify under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge, information, and belief at the time of making this declaration.

Executed this the 8th day of March, 2023.


DAVID A. SWANSON, PH.D.